

ICI PAKISTAN

"Sustainability amongst Adversity"

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EXECUTIVE SUMMARY

This case study is centered upon "an organization's journey towards the attainment and incorporation of corporate sustainability." Through this piece of literature, we will relive and reflect upon how an organization embarked, traveled upon, progressed and adapted itself during its journey to the challenging yet the greatly rewarding path towards sustainable development. The organization in the case study was chosen upon the basis of the following filters:

- 1. The company is recognized and verified as a sustainability leader in the geographic region in which it is operating; having a proof of third-party verification (mentionable awards or certifications in the field of corporate sustainability).
- 2. The company has been pursuing significant initiatives in addressing and contributing to resolving important societal and environmental issues while successfully fulfilling its economic objectives.

Placing these filters in the search process ICI Pakistan Limited was chosen as the partner company for this case study. The data for this case study were gathered from qualitative research. The researcher relied on a number of information sources for all key elements of the case write up. The sources of data used in this case study were:

- 1. Archive (all secondary information, including website, internal documents, video, articles, research papers, etc.)
- 2. Interviews (with current employees and external stakeholders)
- 3. The "Sustainable Culture and Leadership Assessment (SCALA)" survey; a patented research instrument developed by Miller Consultants Inc.

This case study is divided into three major sections. The first section explores the historical timeline of the company using a sustainability lens in order to study how much the company has progressed in the adoption of true business sustainability. The next section will analyze the results from the SCALA survey providing the readers with an employee perspective about the company's sustainability culture and leadership. Synergizing the data provided in the first two sections the third section will place the company on the "Dyllick/Muff typology of business sustainability." The story of ICI Pakistan's sustainability journey is a journey of sustainability amongst adversities. One of the ten key messages by which the "World Business Council for Sustainable Development' operates is "business cannot succeed in societies that fail. There is no future for successful business if the societies that surround it are not working" (WBCSD, 2015). We will start by understanding the society in which ICI Pakistan is operating.

INTRODUCTION

Pakistan is a developing country as categorized by the World Bank in its 2015 list of developing nations. The countries are categorized based on their Gross National Income (GNI) per capita per annum. Countries with a GNI of US \$11,905/- and less are defined as developing nations (Developing Countries, 2015). Pakistan falls under this category with a GNI of \$ 1, 360/ as reported by the World Bank (2013). However, this categorization does not display the whole picture. According to the CIA World Fact Book (2014):

Decades of internal political disputes and low levels of foreign investment have led to slow growth and underdevelopment in Pakistan. Agriculture accounts for more than one-fifth of output and two-fifths of employment. Textiles account for most of Pakistan's export earnings, and Pakistan's failure to expand a viable export base for other manufacturers has left the country vulnerable to shifts in world demand. Official unemployment was 6.6% in 2013, but this fails to capture the true picture, because much of the economy is informal and underemployment remains high. Over the past few years, low growth and high inflation have led to a spurt in food prices. As a result of political and economic instability; the Pakistani rupee has depreciated more than 40% since 2007. Pakistan remains stuck in a low-income, low-growth trap, with growth averaging about 3.5% per annum from 2008 to 2013.

In order to put the country on the path of sustainable growth the government of Pakistan adopted 16 targets and 41 indicators, to achieve the "Millennium Development Goals" (MDGs), against which the sustainable growth of the country would be measured. The Millennium Development Goals (MDGs) are eight international development goals, committed to be achieved until 2015 by all 189 "United Nations" member states and at least 23 international organizations (UNDP, 2015). These include:

- 1. To eradicate extreme poverty and hunger
- 2. To achieve universal primary education
- 3. To promote gender equality and empower women
- 4. To reduce child mortality
- 5. To improve maternal health
- 6. To combat HIV/AIDS, malaria, and other diseases
- 7. To ensure environmental sustainability
- 8. To develop a global partnership for development

Each goal has specific targets and deadlines to achieve those targets. Out of the total 41 indicators adopted by the government of Pakistan, time-series data is available for only 33 of these indicators. It reveals that out of a total of 33 indicators, Pakistan is on track to achieve the targets on nine indicators, whereas its progress on 24 indicators is off track. The reasons for missing most of the indicators include internal and external economic and non-economic challenges as stated by the country's Planning and Development Minister.

The data paint a very bleak picture of the country. Pakistan as a nation is not sustainable or even heading down the path of sustainable development. Pakistan must address serious issues related to government revenues and energy production in order to increase the amount of economic growth that is vital for its survival in the long term. Other long-term challenges include escalating investment in the fields of education and healthcare, building the competencies to adapt to the effects of climate change and natural disasters, and reducing dependence on foreign donors. The country also faces serious concerns about rising demand for energy inputs and the volume of greenhouse gas (GHG) emissions. (Pakistan Economy, 2014).

In such circumstances, it is very hard for the businesses to grow and develop sustainably. The adversities faced by the businesses in Pakistan, include: almost no support from the government, a prevailing mindset in the country's culture that does not give any importance to the concept of well being, an extremely challenging economic environment, and virtually no precedence of any organization that has adopted the concept of business sustainability in its true spirit. However, an organization's and the country's sustainable development are dependent on each other. In the words of the former United Nations Secretary General, Mr. Kofi Annan:

In today's world, the private sector is the dominant engine of growth the principal creator of value and managerial resources. If the private sector does not deliver economic growth and economic opportunity equitably and sustainably – around the world, then peace will remain fragile and social justice a distant dream (Annan, 1997).

ICI PAKISTAN: FROM CORPORATE PHILANTHROPY TO CORPORATE SUSTAINABILITY

ICI Pakistan Limited is a manufacturer and trader of a diversified range of products. It has been operating in this geographic area for nearly 70 years. It is a leading chemical company supplying products to almost every industry in Pakistan. It is employing approx. 1100 people; the company is headquartered in Karachi whereas operations are spread all across Pakistan. The company is currently owned by the "Yunus Brothers Group (YBG)." YBG is a conglomerate with diversified interests in textile, cement and power generation. The Yunus Brothers Group is the first Pakistani national company to own ICI Pakistan; before them, the ownership of the company was passed on between international organizations. (ICI, 2014).

The four main businesses of ICI Pakistan include:

- 1. Polyester,
- 2. Soda Ash,
- 3. Chemicals and
- 4. Life Sciences

The four businesses produce the following products:

- 1. Polyester Staple Fibers
- 2. POY Chips
- 3. Light and Dense Soda Ash
- 4. Sodium Bicarbonate
- 5. Specialty Chemicals
- 6. Polyurethanes
- 7. Adhesives
- 8. Pharmaceutical
- 9. Animal Health products manufactured
- 10. Agricultural Products including Field Crop Seeds and Vegetable Seeds

Total Company Turnover 2014 = 42.7 Billion Rupees (approx. 0.37 Billion Euros), with each business contributing the following share to the total turnover:

Polyester 46%
 Soda Ash 26%
 Life Sciences 17%

4. Chemicals 11%

(ICI, 2014)

The history of ICI Pakistan can be traced back to the "Imperial Chemical Industry (ICI)" which was a British chemical company and was among the largest manufacturers of chemicals in Britain for many years. Imperial Chemical Industry was formed in Britain in 1926 by the merger of four British corporations (Brunner Mond, Nobel Explosives, the United Alkali Company, and British Dyestuffs Corporation). Its head quarter was in Millbank, London (Imperial Chemical Industries, 2015).

In the late 1920s, Lord McGowan, who was the founding Chairman of ICI in Britain, sent Richard Banks (an employee of ICI) to the subcontinent (the part of South-East Asia containing India, Pakistan, and Bangladesh jointly under British rule at that time) to explore new business opportunities. ICI decided to set up a Soda Ash factory in Khewra (Pakistan) since it was the heart of a large salt range, which could supply limestone and rock, the two major raw materials for the upcoming industries of glass, soap, textile, leather and general chemicals in the subcontinent. The plant started commercial production around the mid 1940s as part of the "Alkali Chemical Corporation of India (ACCI)" which was controlled by the British headquarters of ICI.

The history of ICI Pakistan's sustainability journey can be divided into three parts based on the three phases the company went through. ICI Pakistan's journey of corporate sustainability is one that has much resemblance to the development of the concept of sustainable development in the business world. ICI Pakistan started off with the practice of "corporate philanthropy" and steadily moved towards embracing the idea of "corporate social responsibility," and ultimately to the concept of "corporate sustainability." "Mix sustainable development, corporate social responsibility, stakeholder theory and accountability, and you have the four pillars of corporate sustainability. It's an evolving concept that managers are adopting as an alternative to the traditional growth and profit-maximization model" (Wilson, 2003).

1939-1990s: Corporate Philanthropy

In 1947 when the subcontinent was given independence from the British rule and divided into two separate independent countries, i.e. Pakistan and India, the control of the Soda Ash factory was vested to the head office of the new "ICI Pakistan." Throughout the 1950s and early half of the 1960s, ICI Pakistan functioned as a small soda ash business and a large trading business importing ICI manufactured chemicals, dyes and other allied chemicals from over 100 overseas suppliers to Pakistan. In 1965, a major development in the history of ICI Pakistan occurred when Mr. Yusuf M. Khan was made the Chairman of ICI Pakistan by the International headquarters. He was the first Pakistani to be entrusted with the leadership of the company.

In the second half of the 1960s the company went on a large-scale expansion with the addition of a textile auxiliary plant, a pharmaceutical factory, the acquisition of the Fuller Paints Factory (an already established paint business in Pakistan) and the expansion of the soda ash factory in Khewra. At this time, ICI Pakistan established two additional companies under the parent brand of ICI Pakistan (ICI P), "ICI Pakistan Manufacturers Ltd (ICI PML)" which consisted of the soda ash business and the new textile auxiliaries' business and "Paintex Ltd," was the newly acquired paint business. In the late 1980s the company expanded further with the start of ICI's polyester business, which was set up to cater to the growing textile industry of Pakistan at that time. In addition to this, ICI Pakistan also diversified into the areas of pharmaceuticals, agrochemicals and some general chemical like polyurethanes, trioxide, and water treatment chemicals (Hamid, 2012).

Along with the growth in business activities, the philanthropic activities of the company can be traced back to the start of its operations when the company first broke ground in Khewra for the construction of the soda ash plant in 1939 (ICI, 2014). Most of the activities fell under the umbrella of corporate philanthropy, which is defined in the business dictionary as "the charitable donations of profits and resources given by corporations to nonprofit organizations. Corporate philanthropy generally consists of cash donations, but can also be in the form of use of their facilities or volunteer time offered by the company's employees. The donations are generally handled directly by the corporation or by a foundation created by the firm." Some examples of the company's philanthropic work at that time are:

- ICI's Winnington Hospital, which was founded in 1943 and is located on-site at the Soda Ash plant in Khewra, Pakistan. The hospital is equipped with a well-established operation theater and serves as a hub of medical activity for the benefit of the Khewra community. The hospital is used to conduct regular immunization for all community children against infectious diseases. The hospital team also conducts weekly medical camps in the nearby vicinity (ICI, 2009).
- In 1944 (approx.) the company installed water taps for facilitating community access to 24 hours clean and running water for domestic use. Before that the community had no access to domestically usable running water (ICI, 2008).
- The "ICI Pakistan Foundation" was created under a trust in 1991 to channel the company's support of various social development initiatives in the health care and education sectors. The foundation allocates a percentage of the company's profit every year for philanthropic activities (ICI, 2008). Various members of the company's top management are part of the ICI Foundation's board of directors. Any employee in the organization can highlight a particular cause and suggest it for support. This is then investigated, analyzed and judged for genuineness and worth by the foundation's board of directors (Z. Farid, personal communication, October 28, 2014).
- ICI Pakistan continued helping the Khewra community, where it's Soda Ash plant was situated, with their various basic needs, including health care. In 1991, the company started its 2-day monthly eye clinic program. This program was offered free of cost to the Khewra community in the ICI Winnington hospital with the assistance of "Layton Rahmatulla Benevolent Trust (LRBT)" doctors. The services include OPD consultation and surgeries. An Intraocular Lens (IOL) bank has also been established, carrying 50 IOLs at any given point for cataract patients (ICI, 2008)
- ICI initiated a project in Khewra called "Project Green" in 1992. This was basically an initiative to bring greenery to the dried-up lime beds of Khewra (ICI, 2008). As the Vice President of ICI's Soda Ash division, said:

In Khewra, the land is very barren because of a huge quantity of salt in the water. Back in 1992 we decided to plant trees in the dry trenches present over there. Everyone thought it to be an impossible task; however, we had hope. We filled the dry trenches with river soil and planted trees in them. Then we used the recycled water, obtained after treating the waste water from the manufacturing of soda ash, to water the trees. Now we have a nice green patch of land that is welcoming for both humans and animals. It stands there as a proof that if you have the will to do something good you will ultimately succeed (S.A. Khan, personal communication, November 6, 2014).

The land spread over 152 acres with a total of 300,000 trees planted having a survival rate of 85%. The major water sources are the rain and recycled water from the company's soda ash plant (ICI, 2008). However, corporate philanthropy practices usually are not sustainable. Anything a business does out of

goodwill alone will not last, because there is no true link between an organization's strategy and its philanthropic activities. The practice is observed greatly in Pakistan as it was found in a research conducted by the "Pakistan Center for Philanthropy" that almost 50% of the country's publicly listed companies donate 1% of their profits to charitable causes. But, what the companies do not realize is that corporate philanthropy often becomes a means to ease the corporate conscience instead of an established part of business strategy (Balkhi, 2015). According to research, the concept of corporate philanthropy is popular in Islamic countries like Pakistan, because philanthropy is derived from religious beliefs, according to which philanthropy should not be conducted to reap the reputation rewards from the society, but to serve God. So the donor does not close the loop by reporting the good that he did, he just leaves it to God to judge (Siddiqui, 2009). This analysis is reinforced by a survey done by "Pakistan's Center for Philanthropy (PCP)" which shows that despite challenging economic conditions in Pakistan, the country's businesses contributed Rs3.8 billion (approx. \$ 0.037 billion) towards philanthropic activities in 2011 (The News, 2011). This is a large amount for an economically challenged developing nation since for the same year a survey conducted by the "Committee Encouraging Corporate Philanthropy" (CECP), 214 leading companies, including 62 of the top 100 companies in the FORTUNE 500 donated \$20 billion to various charities (CECP, 2012).

By the early 1990s, ICI Pakistan became a large, broad-based and profitable organization. At this time, the international holding company, ICI PLC, has merged the previously formed three groups, i.e. ICI P, ICI PML, and Paintex into a single entity called ICI Pakistan. Because of its tremendous growth and future potential, ICI PLC, decided to make its largest investment yet in Pakistan. In 1995, a plant was set up with an investment of Rs.450 million to produce Pure Tperethalic Acid (PTA) in Pakistan. It was planned that this business would derive commercial and technological support from a very strong global ICI PLC business in PTA. Along with the rapid expansion in the company's business portfolio the management also focused on developing, the company's in-house capabilities in the areas of utility service, corporate services and communication, technology acquisition and development, project construction and management, and safety, health and environment management (Hamid, 2012).

Health, Safety, Environment & Security (HSE&S)

According to the G.M. Technical of ICI Pakistan:

I joined ICI back in 1980. At that time, there was no concept of "Safety" far less of "Sustainability." We took our first sustainable steps in the smaller playing field of workplace safety. Actually, the impact of "safety" is felt immediately; the impact of "health" is felt over a person's lifetime, but the impact of "sustainability" is felt over generations (I. Haider, personal communication, October 28, 2014).

According to a research done by the Sustainable Development Policy Institute in 2012, 20% of the registered industries in Pakistan are considered highly polluting with 23 industrial sectors falling under the category of "most hazardous" on the basis of industrial effluents and 11 industrial sectors reported as "most hazardous" on the basis of their gaseous discharge (Khwaja, 2012). In 1988, ICI Pakistan attained a compliance certification from the "European Chemical Industry Council (CEFIC)" which is one of the main trade associations within the chemical industry in Europe (About CEFIC, 2015). The CEFIC compliance project in ICI Pakistan was a 36-month effort that the company's Health, Safety, and the Environment Department undertook. The company also helped two of its partners develop the technical expertise and systems required to meet the rigorous CEFIC road safety guidelines for chemical transportation and handling. (ICI, 2008). ICI Pakistan took up the initiative of Health, Safety, Environment, and Security

(HSE&S) management at the time when it was not a legal obligation of the government of the country, nor considered a moral or social obligation by the majority of the organizations operating in Pakistan. In Pakistan, there was no "Environmental Protection Act" before 1997 and the government of Pakistan developed "National Environmental Quality Standards (NEQs)" through the self-monitoring and reporting/SMART program in 2001 for all industrial sectors across the country. Under such external conditions, the company also created a Health, Safety, Environment and Security (HSE&S) department and a yellow book of rules was formed containing rules, regulations and policies for all operational levels and areas as part of their internal development program.

Even today the concept of workplace safety or safe handling of precarious materials is not commonly being implemented very seriously by the government nor is it being practiced in its true spirit by the businesses. The chemical industry generates huge quantities of hazardous waste, and no proper chemical waste disposal facilities exist in the larger setups as well. As a result, chemical wastes spread all over the country with adverse implications for all the stakeholders. Furthermore, no central database has been created by the government concerning the chemical waste sites. Most often hazardous waste is handed over to contractors by the manufacturers, who then release the waste in broken ground close to roads and residential areas, cultivable lands or water bodies generating irreparable damage. In the cities of Pakistan, flammable and toxic chemicals are sold just like everyday grocery items. The tanneries discharge huge amount of untreated chemical waste into the environment. For example, the toxic industrial waste discharged by tanneries in the city of Sialkot is causing serious diseases such as cancer and diverse lung diseases (Jaspal & Haider, 2014). In a study done on the drinking water of the Sheikhupura industrial estate (Pakistan), where the ICI's Polyester factory is present and which houses more than 190 industrial units of various business groups, it was found that the drinking water had bacterial contamination, high level of TDS (Total Dissolved Solids), elevated chromium level (0.6 mg/L), and increased levels of arsenic and manganese concentration all of which are greatly hazardous to human health (Gilani et al., 2013).

HSE&S Policy

According to its HSE&S Policy (ICI, 2014) ICI Pakistan's core values are:

- Protecting the health and safety of employees, contractors, customers and neighbors.
- Maintaining the security of people and assets.
- Protecting the environment and working in close cooperation with customers, suppliers and distributors to do the same;
- Complying with all relevant laws and regulatory requirements.
- Ensuring that all activities are conducted in a manner consistent with ICI Pakistan health, safety, environmental and security standards and guidelines.
- Ensuring that business activities are conducted to prevent harm to customers, employees, contractors and the public, other stakeholders and the environment.
- Developing, manufacturing and marketing products with full regard of HSE&S aspects as well as
 ensuring compliance with the ICI Pakistan product stewardship management system and sell only
 those products that can be transported, stored, used and disposed off safely.
- Protecting peoples, assets, intellectual property and critical information from accidental or deliberate harm, damage or loss.
- Openly communicating on the nature of activities, encourage dialogue and report progress on health, safety and environmental performance.
- Regularly monitoring the application of this policy.

HSE&S Management System

The HSE&S policy is implemented on an organization-wide level through ICI's health, safety, environment & security management system. The key elements are the policy, standards, guidelines, localized management system (procedures), and training management, self-assessment & audit, performance reporting and policy review. The line management was made responsible for HSE&S performance, the implementation of local regulatory requirements and ICI Pakistan's HSE&S policy, standards and guidelines.

The implementation is based on:

- 1. Equipment: Designed and maintained "fit for purpose",
- 2. Procedures/System: Locally developed and documented "robust",
- 3. **People**: Trained and involved, contributing to HSE&S improvement.

(ICI, 2014)

2000-2005: Corporate Social Responsibility (CSR)

In 2000, Pakistan had just 59 industrial units that had any type of ISO certification, only 37 IEE/EIA reports were submitted to the Environmental Protection Agency (EPA) and the investment in environmental sustainability measures by the industrial sector in 1996 was Rs.7,570 millions (Khwaja, 2012) which was extremely small as compared to the revenue being generated by the industrial sector of the country at that time with a GDP of \$75 billion (Economy of Pakistan, 2014). In a survey done by the Financial Daily newspaper of Pakistan it was observed that:

About 40 per cent of the corporate companies in Pakistan think CSR means merely paying taxes. 30 per cent believe CSR is contributing to community welfare or donating to organizations for social development purposes and community development, while 15 per cent think that CSR equates employee welfare, and 10 per cent think CSR means working in areas where the company's interests lie. Only five per cent clearly understand CSR means directly implementing social development activities and projects (Arifeen, 2013).

Research from the "Global Reporting Initiative" (GRI), a leading organization in the sustainability reporting field, shows that in Pakistan with 73% of the country's population living on or below US\$1 a day (UNDP), the sustainability performance of the companies operating in their country is not the primary concern of the majority of the country's population (Hils, 2011). The same perspective was shared by an Ex-CEO of ICI when he said that "the sustainability-related expectations in Pakistan's emerging market environment can be generous and forgiving" (ICI, 2008). In such an external environment ICI Pakistan in-addition to internal audits conducted external audits of its HSE&S programs and entered into a "Self-Monitoring and Reporting Program" (SMART). It was a voluntary program, in which the organizations worked along with the National Environmental Protection Agency (I. Haider, personal communication, October 28, 2014) and reported their environmental footprints, audited by a third party (Z. Farid, personal communication, October 28, 2014). This was done purely on a voluntary basis as there was no legal or regulatory requirement for SMART reporting by the government of Pakistan until 2001.

Continuing with its focus on environmental responsibility ICI Pakistan started working with World Wide Fund for Nature (WWF) in 1999 on "Save the Marine Turtle" program in Karachi, where the company's life sciences business was located. This was part of ICI's collaboration with WWF, to educate the local community about the importance of the marine turtles in the local ecology and factors causing their

extinction. Many of the company employees took place in the activity on a voluntary basis and participated in cleaning the nesting place of the turtles. The corporate communication and public affairs department started publishing an internal magazine by the name of "Engage" in which various corporate social responsibility initiatives taken by the company were published for the internal stakeholders of the company (Z. Farid, personal communication, October 28, 2014). Various societal and environmental projects pursued by the company through active and voluntary employee participation during this time period were (ICI, 2008):

- ICI financially supported the ABSA School, which caters to the hearing impaired students.
- The company's polyester business supported a local primary school in an underdeveloped area of the country through both financial and qualified personnel assistance.
- The company's paints business supported the SOS village in Lahore through monetary donations as well as voluntary work done by the company's employees.
- The company continued to serve the society through its monthly eye-camps, donations to a charitable cancer hospital, free kidney dialysis center and through the provision of clean water in an underdeveloped area of the country.

During this time period ICI Pakistan's parent company ICI PLC was struggling to manage its international portfolio. ICI PLC categorized its businesses into two groups, the "heavy end" business, comprising of its traditional basic chemicals and other high capital structures where profitability was heavily dependent on the cost of manufacturing, and the "light end" business, consisting of low capital but high research and development cost businesses that produced high value-added products, which could earn high margins in the market. In addition to the parent company's categorization, ICI Pakistan was itself struggling with its own categories of businesses, including the "regional business" that catered to national markets and were bounded by local heavy tariff barriers and the "international business" that was capable of achieving a major global market share. ICI Pakistan felt that the heavy end regional businesses were slowing down the more profitable light end businesses. The parent company also preferred the light end businesses based on shareholder value maximization. So it demerged its most promising light end businesses, i.e. pharmaceuticals, agrochemicals and seeds into Zeneca PLC, a separate entity, and it also acquired a group of light end businesses from Unilever to reposition the company internationally. ICI PLC also divested the Pure Tperethalic Acid (PTA) business to DuPont and a large part of its heavy end portfolio to Huntsman Corporation of USA. Thus internationally the company was only left with Paints as its strong heavy end business. Unfortunately, the newly acquired light end business did not prove to be as successful as expected. All this greatly impacted ICI Pakistan since investment from the international parent company became scarce. Also, the regional soda ash and the polyester business had no attraction to the parent company which had already divested its international soda ash and fiber business. In addition to this, it was becoming increasingly difficult to sustain the now regional PTA business since it had lost the support of ICI PLC, which had divested the international PTA business to DuPont. ICI Pakistan, nevertheless, continued to acquire whatever investment it could get from ICI PLC and also managed to get some external non-ICI funding for expansion, restructuring and improvement of the company both technically and organizationally (Hamid, 2012).

Among this strategic turmoil, the company did not derail from its journey towards the adoption of corporate sustainability. Rather, it progressed from the "social responsibility" mindset towards thinking sustainably. Evidence of this is the initiatives taken by the company during the following years.

2005- 2015: Corporate Sustainability

I have been working in ICI Pakistan for the last 14 years and I myself learned about sustainability when we as an organization moved from the various paths of health, safety, environment, caring for our people and community to the enchanting path of sustainability. I immediately fell in love with the concept and regretted all the time we had lost not knowing and following corporate sustainability in its true spirit (S.A. Khan, personal communication, November 6, 2014).

ICI Pakistan adopted the concept of corporate sustainability under the leadership of its international holding company ICI PLC. A company database was developed for the collection, analysis, sharing and reporting of various critical data in the early 2000s. A Sustainability Council was formed, which was part of the International Sustainability Council of the parent company. The formal start of corporate sustainability was marked by the development of a sustainability framework for the company.

<u>Sustainability Framework</u>

The company's sustainability framework is based on the triple bottom-line concept of economic, social and environmental parameters against which they measure their sustainability performance (ICI, 2014). The parameters to measure the company's performance in the three dimensions were laid down as:

Economic Performance	Social Performance	Environmental Performance
Integrity Management	Health, Safety & Security	Emissions Control
Sourcing	Employment Practices	Water Usage
	Community Investment	Waste Management
		Product Stewardship
		Energy Efficiency

Figure 2.1: ICI Pakistan's Sustainability Framework

These were the major areas identified by the company's top management as critical to the sustainable development of the organization. After the framework was in place the management started to align all the other operational and administrative procedures. In 2005, the company started its "Chairman and CEO's Leadership Award for Sustainability." This was an internal company award that was granted based on the best sustainability initiative and output produced by a business. Five years sustained improvement based target programs were rolled out in 2000 and again in 2005 by the name of "Challenge 2005" and "Challenge 2010" respectively. In 2007, a global audit was conducted in the area of corporate sustainability under the supervision of Mr. Richard Moss, the then global representative of ICI Pakistan's international holding company in ICI Pakistan's Sustainability Council (Z. Farid, personal communication, October 28, 2014).

At this point in time, the company was in the first stages of business sustainability in which sustainability concerns are being considered in decision making and actions, but the business objectives remain focused on creating shareholder value (Dyllick & Muff, 2015). In the international arena ICI PLC's post Zeneca demerger strategy was not going as planned and the company was weakening both financially and strategically in the global market. Because of this AkzoNobel, a leading coating company in the world

acquired ICI PLC globally in 2008 primarily to gain a stronger position in its core business of paints (Hamid, 2012). The current chief executive of ICI Pakistan, Mr. Asif Jooma states, "the attraction of Akzo Nobel to acquire ICI PLC was its coatings and paint business, which were highly synergistic to Akzo's strategic portfolio" (Baig, 2013).

ICI Pakistan as Part of AkzoNobel Group

AkzoNobel is a Fortune 500 company dealing with paints, coatings and specialty chemicals. It is listed on the Euronext Amsterdam Stock Exchange. It is among the Chemical Industry leaders in the Dow Jones Sustainability Indexes, and it is included in the FTSE4Good Index (ICI, 2008). AkzoNobel is a company that takes its commitment towards sustainable development very seriously. In AkzoNobel 50% of the CEO's annual incentive are directly linked with the company's performance in the Dow Jones Sustainability Index. The Dow Jones Sustainability Indexes (DJSI) are a family of indexes evaluating the sustainability performance of the largest 2,500 companies listed in the Dow Jones Global Total Stock Market Index. They are the longest-running global sustainability benchmarks worldwide (Dow Jones Sustainability Index, 2014). AkzoNobel has been ranked number one, out of more than 350 companies in the Materials industry group, in the Dow Jones Sustainability Index (DJSI) for the third consecutive year in 2014 (ICI, 2014). One of the biggest steps that ICI Pakistan took on the path of sustainable development was the start of "Sustainability Reporting" in 2008. In 2008, ICI Pakistan released its first "Annual Sustainability Report" as part of its annual report.

This was a big step in the country's business environment at that time as a report on the "Asian Sustainability" in 2009 stated:

Disclosure in Pakistan (with regard to sustainability) is generally poor with only three companies making it into the top of the overall ASR (Asian Sustainability Report). What little disclosure there is in Pakistan seems to revolve around the provision of information about general policies, codes and governance issues. Less than one in five companies provideS any information on the environment, supply chains and community and development, all issues that are particularly important in the context of Pakistan. There is a great opportunity for companies to take a lead in engaging with sustainable development in a country like Pakistan. Our Research tends to demonstrate that in most cases that is not the case, however (Siddiqui, 2009).

ICI is, however, an exception to this as is evident from the comprehensive sustainability Key Performance Indicators reported upon by the company and externally audited by third parties. In 2010, the company formulated the first sustainability report, which was separate from the company's annual report. The company used the G3 Reporting Framework issued by the Global Reporting Initiative (GRI). An independent sustainability audit was conducted by Ernst &Young, the results of which were incorporated into the improvement plans (ICI, 2010). For this report, ICI won the "Best Sustainability Report" Award and the Runners-up award for its 2011 Sustainability Report. This award was introduced by the Institute of Chartered Accountant of Pakistan (ICAP) based on the internationally recognized framework: G3 Guidelines of Global Reporting Initiative (GRI) (ICI, 2011). In 2010, ICI developed its "Key Performance Indicators (KPIS) for Sustainability Reporting" for each segment in alignment with the basic parameters defined by AkzoNobel (ICI, 2010).

The various initiatives taken by the company, as part of the AkzoNobel group, demonstrate the sustainability concerns of the company. We will explore the sustainability related developments through the triple bottom line approach:

Economic Performance

Under the leadership of AkzoNobel, the company continued to prosper economically. In 2008, the company's profit after tax crossed the Rs.2 billion mark for the first time in the company's history showing an increase of 16% from the last year (ICI, 2008). The positive economic performance of the company continued in the coming years with a 10% increase in the company's profit after taxes in 2009; furthermore the company paid the shareholders the highest ever dividend per share in the company's history (ICI, 2009). In 2011, however, the impact of severe gas shortage in the country adversely impacted ICI Pakistan's bottom line through an increase in the operating results by Rs.825 million. This lowered the company's profitability as compared to the previous year (ICI, 2011). In April 2011, ICI Pakistan's Board of Directors received a proposal from its international holding company AkzoNobel to demerge the paint business into a separate listed entity. This was approved in May 2011 by the Board of Directors of ICI Pakistan, and two distinct companies were formed: AkzoNobel Pakistan and ICI Pakistan, though at the time, both were owned by AkzoNobel (Tirmizi, 2012).

Social Performance

In the area of "Employee Productivity," the company invested in the training of its 901 employees in 2008 (ICI, 2008), with four executives attending "leadership programs" in INSEAD and Oxford university. A new "Code of Conduct" was approved by the ICI Board in October 2008; which stressed the values of sustainable development upon every single level of management and front-line workers. "Speak Up" program was initiated, a whistle blowing system to report corrupt, un-ethical or illegal behavior – if employees do not feel able to use the normal management routes. In 2008, it was accessed eight times by the employees. Each instance, was investigated by the senior executives of the group with actions taken to resolve the situation (ICI, 2008). ICI Pakistan launched an "Employee Engagement" program in early 2009. It was a voluntary program in which many employees enthusiastically contributed their time and efforts for a variety of community welfare initiatives (ICI, 2009).

Since the start of its operations, ICI Pakistan has been engaged in, supporting the development of its value chain partners and the community. Shakoor and Company, a local transportation company state:

We started off with four 10-ton Bradford vehicles with a carrying capacity of 280 tons. Now it has increased up to 7,800 tons and 485 employees. We have grown with and through ICI Pakistan. In 1998, ICI worked with us to help us become CEFIC (European Chemical Industry Council) compliant. It was a 36-month long effort that ICI's HSE&S department helped define. ICI helped us develop the technical expertise and systems required for the safe transportation and handling of chemicals. We now have professional management, which is still far from the norm in our industry. Even our Human-Resource system is modeled after ICI. My father always says 'Whatever we are now; almost all of it is because of ICI' (A. Shakoor, personal communication, 6 November 2014).

Environmental Performance

In Pakistan, the chemical industry has been one of the major contributors to the country's economy since the start. However, the issue of environmental pollution has always been associated with this industry. Even after having anti-pollution laws, the environmental protection authorities are taking little action to handle the adverse environmental situation developed as a result of the hazardous emissions from these units (Rehman, 2010). A report released by the World Bank states that the air quality in Pakistan will

further worsen over the time and a strong need for proper government intervention is required to tackle the problem. According to a World Bank study:

Ambient concentrations of health-damaging particulate matters in Pakistan are, on average, more than four times above levels recommended in World Health Organization (WHO) guidelines. The harm caused by air pollution in Pakistan's urban areas is the highest in the South Asian region and exceeds most other high profile causes of mortality and morbidity in the country (Ahmed, 2014).

The report further highlights significant implementation gaps in the environmental protection policies of the country. In Pakistan, only 1% of waste being generated by the various industries is being treated before discharging it into the rivers and drains In Pakistan, a meager 0.003 per cent (Rs. 763 million) was allocated towards Environmental Protection, in the Federal Budget of 2012-2013 (Dawn, 2012). Even in such conditions ICI Pakistan always remained committed to its vision of environmental sustainability. By 2008, the finishing machines at the soda Ash plant had become old, and the sealing arrangement of these machines contained hazardous asbestos. These machines were replaced with steam cleaners, thus significantly lowering the generation of hazardous, Non-Product Output (NPO). "Project Salvage" was initiated during 2008 at the polyester plant for the reduction of non-hazardous NPOs generated during the production of polyester. The waste generated was recycled, significantly reducing NPOs. In the past the treated water used at the Paints plant was disposed of as waste. In 2008, the company started storing the water and processing it through an effluent treatment plant at-site. This water is then used for washing purposes. With 100% recycled water being used for washing purposes, the site's total water usage was reduced by 45% as compared to the baseline year 2005 (ICI, 2008). Energy has been a major problem in Pakistan for the last many years (Kazmi, 2014), and it had proven a challenge for ICI Pakistan also (I. Haider, personal communication, October 28, 2014). However, in 2008 the company acted in a sustainable manner and in order to produce more electricity, gas turbines operating on natural gas were substituted for dual fuel engines operating on furnace oil and natural gas. This reduced energy-related emissions of CO2 in the Polyester business by 23% compared to 2005.

ICI's steps to conserve natural resources were vital in a country where water availability is decreasing at an alarming rate. The 1951 per-capita availability of water in Pakistan was 5300 cubic meters, and it has now decreased to 1200 cubic meters, which is just touching the water scarcity level of 1000 cubic meters. Less than 50% of the population have access to safe drinking water and adequate sanitation (Environment and Sustainable Development, 2014) and no national plan for disaster risk management to cater to environmental hazards, climate change and ozone-depleting substances impacts exist. The soda ash business commissioned its Reverse Osmosis (RO) water purification plant in 2010. This new plant accomplished 100% water reduction, which meant that every single drop of water processed through the plant was being utilized in one process stream or another and not a single drop of water was being wasted during the soda ash production cycle (ICI, 2010). For the sustainable development of the society as whole initiatives were taken in all of ICI's businesses, which included an internal company awareness campaign to save water wastage by the soda ash team which resulted in saving 240 million liters of water. The paint business experimented by utilizing rainwater directly in water-based paint manufacturing and as a result saving 5000 liters of water. The polyester plant invented a system of recycling waste to greatly reduce its harmful effect on the environment and additionally save the company millions on treatment and raw material costs. In 2011, a total of 135 drums of waste were recycled completely and converted into valuable and consumable 39 tons of chips, ensuring zero inventories (ICI, 2011).

One innovative initiative taken by the company was the use of "Oxo-biodegradable technology," which is a "green" technology that degrades like natural minerals and helps reduce chemical impact on the

environment. ICI decided to test this technology and as a start replaced the paper envelopes used in the everyday mailing with oxo-biodegradable bags. Little did they know that what was experimental technology for them at that point in time, would make such a breakthrough in the market and the vendor with whom they had developed the bags started receiving successive orders from other corporations and who followed ICI's lead and decided to adopt the technology in their operations; because at that point in time virtually no other company had adopted such a technology in their daily operations. ICI used 75,000 biodegradable bags with paper savings worth an estimated thirty one trees. The company is now introducing this technology for packaging their products as well.

From a strategic point of view, AkzoNobel's main interest in ICI Pakistan was the paint business. The ownership had plans to set up a state-of-the-art paint manufacturing facility in Pakistan, which would serve the needs of not only the local markets, but also the Middle East and possibly the European market in the future. So after the demerger of the paint business into a separate entity in May 2011, the process to find a buyer for ICI Pakistan (soda ash, polyester and life sciences) began on June 13, 2012. Initially, three parties bid for ICI Pakistan: the Yunus Brothers Group, the Nishat Group (the largest private sector conglomerate in Pakistan), and a consortium of ICI Pakistan's employees backed by a Dubai-based private-equity firm Fajr Capital. In the end, the "Yunus Brothers Group (YBG)" bought out a 75.8% stake in ICI Pakistan from AkzoNobel for Rs14.4 billion in July 2012 (\$152.5 million) (Tirmizi, 2012).

ICI Pakistan as Part of Yunus Brothers Group (YBG)

This was the first time in the history of the company that ICI Pakistan was owned by a Pakistani company. As discussed in the previous sections the attitude of most of the local businesses towards corporate sustainability was not very proactive in Pakistan; making the employees at ICI a little doubtful about the importance the new leaders will place on business sustainability. A report on Pakistani organization's behavior regarding business sustainability stated:

It is somewhat surprising that Standard Chartered, Royal Bank of Scotland and GlaxoSmithKline; all find themselves in the bottom quartile of the Asian Sustainability Report. This reflects an often cited accusation that multinational corporations sometimes have sophisticated policies and systems relating to sustainability in their home countries, but that does not adequately translate into the same types of activities in developing countries where stakeholder pressure is not as significant (Siddiqui, 2009).

However, the company's performance after acquisition by YBG demonstrated a continued commitment towards business sustainability. It was communicated to the employees that the performance appraisal criterion of the Chief Executive Officer (CEO) would be the achievement of a number of quantitative and qualitative value driven objectives. The quantitative objectives were related to the growth and financial performance of the business, and the qualitative objectives were related to the company's performance on sustainability parameters. This gave a strong message to the employees about the new ownership's attitude towards adopting business sustainability (ICI, 2013). We will study the journey of ICI Pakistan's under the YBG ownership through the performance of the company on the triple bottom line parameters.

Economic Performance

The new management changed the accounting period from January-December to July-June in order to align ICI Pakistan with the YBG's other businesses. ICI Pakistan posted net sales of PKR 18.3 billion for the first half of 2013; which were 9% higher as compared to the same period in the previous year and profit

after tax was also reported to be 37% higher. In the first half of 2014 the company achieved a 5% growth in net sales. The company also signed an agreement with Unibrands Pvt. Ltd, an international concern, for the import, marketing, and distribution of nutrition products of Morinaga Milk Industry Co. Limited in Pakistan. The current CEO of ICI Pakistan stated: "Sustainability is integral to us, and we believe in actively participating with our internal and external stakeholders to build a cleaner environment and efficient and safe operating procedures." (ICI, 2013).

Social Performance

ICI Pakistan continued serving the communities, in which they were operating, through various social development programs. The life sciences business, along with some external stakeholders, ran a breast cancer awareness campaign for the females living in under privileged conditions and having little or no knowledge of the disease. According to the Pink Ribbon foundation in Pakistan, almost 40,000 females die because of breast cancer, every year and one of the major reasons of this high death rate is low female literacy rates and lack of preventive health awareness among the public (A. Malik, personal communication, November 6, 2014). The new ownership adopted a participative approach for the development of social sustainability in communities. In 2013, ICI Pakistan discussed with the residents of the Kakapir village (Pakistan) what developmental programs would be most beneficial for their sustainable growth. The participants of the discussion highlighted the high level of illiteracy as a critical area, and a large number of females expressed the desire to be educated so that they can teach their children and support their families. As a response to this feedback, ICI Pakistan launched an adult literacy program in collaboration with a non-profit organization. The program was run for women of all ages living in under-privileged conditions. In May 2014, 28 women from the Kakapir village graduated from this program, and a parallel program was started in Lyari (Karachi, Pakistan) in which 22 students were enrolled. The employees of the Polyester business started a "basic household electric wiring" course of 6months duration for the underprivileged youth near the polyester plant. The purpose of this free training course was to impart the uneducated youth with technical skills through which they can earn a livelihood.

The employees of ICI Pakistan continued demonstrating the spirit of social sustainability under the new ownership. A group of employees visited the far-flung rain effected area of Nagarparkar (Pakistan). The area is usually associated with long draughts so when heavy rain fell in this area, in 2013, it resulted in complete destruction of the homes and livelihoods of the residents. ICI Employees voluntarily took time off from their work and started a rehabilitation program for the people of Nagarparkar. This included monetary donations and building permanent houses for the community, which would protect them from future rains. They used some of the company's old banners and flex (outdoor promotional material) to rainproof the newly built houses. The company also built a computer facility for the residents of the undeveloped Bhit islands (a small fishing community at the coast of Karachi, Pakistan). Over 800 students benefit from this facility every day. In 2013, the company donated paint worth Rs. 0.74 Million (approx. \$7,265/-) to a government hospital in Karachi. A hygienic drinking water program was started in the province of Sind (Pakistan) in 2013, which provides access to safe and clean drinking water to over 20,000 people every day. The project is being developed further with the installation of water purification plants in the underdeveloped areas of the province (ICI, 2013).

In 2013, the company conducted HSE&S awareness sessions for a number of its customers along with arranging a customer conference in Istanbul (Turkey) for the better understanding of customer needs through an interactive session. The YBG group understood that the employees of the company had gone through a strategic transition, with the new ownership taking over, and to help them cope with this

change; a series of CEO sessions were arranged throughout the company in March 2013. In these sessions, the CEO met with all the company's staff (managerial and non-managerial) and shared the top management's vision for the company's future and also listened to issues being faced by various employees after the takeover.

Environmental Performance

2013 continued with the company getting external recognition for its sustainability initiatives in the form of the "Best Sustainability Report" award at the ACCA-WWF Pakistan Environmental Reporting Awards. The company's internal 2012 "Chief Executive HSE&S Trophy" was awarded to the chemical business based upon the health, safety, and environmental performance and the award of "Best HSE initiative" was given to the soda ash, polyester and chemical businesses. This best award is based upon a yearly competition held between the company's business units. In this competition, each business, identifies significant hazards and actions taken to remove those hazards.

The development of a database was started, for measuring the company's performance in the areas of health, safety, energy, and environment. Earlier, this data was monitored globally by AkzoNobel. The new database will help ICI Pakistan monitor and track the company's impact on the environment. ICI participated in the "Earth Hour" global initiative and managed to save 2.063 Mega Watts of electricity at five of the company's work sites by switching off unnecessary lights, and the "Earth Day" was celebrated on the 22nd of April 2013 when employees voluntarily planted trees in various areas. The Polyester business converted 250,000 wrappers of its packaging (bale wrappers) to bio-degradable packaging, and the life sciences business also started the use of biodegradable bags for the packaging of one of its products, i.e. sunflower seeds. These biodegradable bags were especially designed for a customer of ICI Pakistan, i.e. the Food and Agriculture Organization (FAO) of the United Nations (UN). (ICI, 2013).

In 2014, two of the company's head offices were converted to LED (Light-Emitting Diodes) tubes in place of the usual light tubes. LED is very energy-efficient and consume up to 90% less power than the regular incandescent bulbs. The new LED tubes are being run through solar panels thereby further reducing energy usage and cost. Because of the severe shortage of natural gas in the country, ICI Pakistan installed HTM heaters and power & steam generation plants, which are specialized equipments for the efficient running the polyester manufacturing plant. These machines are using coal-fired boilers instead of the formerly used natural gas. Before commencing the project the HSE department of the polyester business arranged a public hearing of the "Environmental Impact Assessment" (EIA) department. The EIA procedure is a legal requirement in Pakistan, according to which the potential impacts of proposed projects on the physical, chemical, biological, cultural and socioeconomic components of the total environment must be assessed. The project was passed by the respective authority, but ICI Pakistan without any legal requirement, ensured that the desulfurization technology was incorporated in the project's scope. This technology would adequately mitigate the adverse impacts of any hazardous gaseous emissions from the coal-fired boilers. This greatly increased the cost of the project; making it a 2 billion rupees (approx. \$19.63 million) project. The technology removes sulfur dioxide from the boiler and furnace exhaust gases and is thus termed as a "clean-coal technology." (ICI, 2014).

SUSTAINABLE CULTURE AND LEADERSHIP DEVELOPMENT (SCALA) SURVEY

The next step in the case study was observing and analyzing the employee's perceptions about the role of leadership and different dimensions of culture in the company's approach towards sustainability. For this,

a survey developed by the Miller Consultants Inc. was administered in the various work sites of the company. The SCALA™ survey "is an assessment instrument composed of items pertaining to culture and leadership. The assessment contains both sustainability-specific content and general organizational climate content that has been demonstrated or asserted in other research to impact the execution of sustainability strategies."(SCALA, 2014)

In ICI Pakistan, SCALA was administered in August 2014 under the new leadership; on a total sample of 40 respondents across the company. The respondents were selected through the process of "cluster sampling" in which managerial level employees were selected randomly out of three clusters, i.e. the three major company work sites. The mode of administration was "paper based." The survey was administered in three major work sites of the company by the researcher:

- 1. ICI's Polyester Plant (Sheikhupura City)
- 2. ICI's Head Office (Lahore City)
- 3. ICI's Soda Ash Plant (Khewra City)

A total sample of 40 employees was taken, and the survey had a 100% response rate. The respondents belonged to senior level, middle level and first-line level managers from the different business units. Out of the total 100% respondents, 20% were senior managers; 63% were middle managers, and 17% were first-line managers. 95% of the respondents were male, and the remaining 5% were females. 30% of the respondents belonged to the age group of 20-30 years; 30% were about 31-40 years of age; 33% were within the 41-50-year age bracket, and 7% were between the ages of 51-60 years; thereby having representation from all the age groups. The survey instrument consisted of 30 questions pertaining to the following sections:

- 1. Organizational leadership
- 2. Organizational systems
- 3. Organizational climate
- 4. Change readiness
- 5. Internal stakeholders
- 6. External stakeholders

Ten questions were added to the survey by Business School Lausanne, tailored towards answering the case study's research questions and two questions were included by the researcher in order to gain greater understanding about the employee's perspective of the organization's sustainability. The questionnaire was in English, and the questions were a blend of open and close-ended questions. Close-ended questions were answered on a five-point likert scale with responses ranging from "Strongly Agree" to "Strongly Disagree."

We will analyze the employee's responses with respect to the six sections of the SCALA survey in order to assess ICI's employee's perception about the sustainability performance of the new leadership.

Organizational leadership

Organizational leadership plays a key role in the adoption and development of business sustainability. Successful leaders optimize employee well-being, social responsibility, job commitment, and financial performance all at the same time (Fry & Jr., 2008). In the words of Hargreaves & Fink (2003):

Sustainable leadership matters, spreads and lasts. It is a shared responsibility, that does not unduly deplete human or financial resources, and that cares for and avoids exerting negative damage on the surrounding educational and community environment. Sustainable leadership has

an activist engagement with the forces that affect it, and builds an educational environment of organizational diversity that promotes cross-fertilization of good ideas and successful practices in communities of shared learning and development.

The employees in ICI Pakistan had a very positive perception about the role of their leadership in the adoption and development of business sustainability within their organization. A greater percentage of the employees "strongly agreed" or "agreed" to the view point that the new leadership is fulfilling its role in the area of sustainability leadership. This is evident through the following observed response rates.

63% of the employees surveyed strongly agreed, and 35% agreed that the current leaders of the company had a clear vision for business sustainability. Further elaborating their viewpoint 45% of the employees strongly agreed and 53% agreed to the statement that the leaders integrate sustainability into their decision making as well. 30% strongly agreed, and 58% agreed that the leaders of the company are able to inspire others about sustainability focused issues. When asked whether the leadership is willing to take measured risks in pursuit of sustainability 20% strongly agreed and 68% agreed to this statement. 43% of the employees were in strong agreement along with 55% and 48% agreeing with the statements that the leadership is knowledgeable about sustainability issues and were personally committed to sustainability issues respectively. 60% of the respondents thought that the leaders of the company are "much better" as compared to the leaders of other companies with respect to their commitment towards sustainability, and 35% of the respondents termed the leadership as "better" than the others.

<u>Organizational systems</u>

The employees were surveyed about how much the company has embedded sustainability in the organizational systems. The responses showed a high degree of awareness among the organization's managerial staff regarding the organizational incorporation of business sustainability. 53% of the employees surveyed strongly agreed, and 45% agreed that ICI Pakistan has embedded sustainability into the operational procedures and policies. 95% of the respondents were aware of the company's enterprise wide management system for sustainability; the high rate depicting their direct or indirect involvement in the system during their job performance. 28% strongly agreed, and 55% of the respondents agreed that the company had integrated sustainability related goals into its performance management system. 15% of the employees surveyed strongly agreed, and 53% agreed that the rewards and compensations are clearly linked with company's sustainability goals.

The positive feedback about the integration of sustainability objectives into the organization's systems was further strengthened by the responses generated through the open-ended question; in which the respondents were asked to briefly speak about any sustainability initiative in which they had been involved. All the 40 respondents narrated a number of sustainability projects; they were a part of during their time in ICI Pakistan. One of the respondents said:

I was actively involved in the introduction of biodegradable packaging for our finished goods along with the introduction of paper-free invoice, packing list and order delivery report for our customers. It is a great feeling playing a positive role in reducing the burden on our environment.

Another respondent shared:

I am an active part of the free eye camp project at our soda ash work site This program is so famous in the community that people recognize ICI Pakistan because of this program. I am proud of this initiative of my company.

Organizational climate

A positive organizational climate was portrayed by the respondents with 43% of the employees strongly agreeing while 45% agreeing that the level of trust within ICI Pakistan is high. 38% strongly agreed, and 50% of the employees agreed that continual learning is a core focus of the organization under the new leadership, and 38% strongly agreed and 53% agreed that the new leadership rewards innovation. 13% of the employees showed strong agreement, and 49% agreed that the company encourages its employees to learn about business sustainability from external sources. The high percentage of positive responses showed that the employees perceived that the new leadership had developed a supportive climate for the adoption and facilitation of sustainability within the organization.

Change readiness

Change has been an integral part of the company's history; with the company going through several changes in its product portfolio along with changes in the corporate ownership. Many of the employees have witnessed these changes throughout their careers in the company. An employee working in the soda ash business says:

One look around ICI, and you will find people who have been working here for 10, 20, or 30 years. That is something extraordinary and rarely found anywhere else. If you delve deeper, you will know that ICI Pakistan has been a second home for many.

The company's ability to manage change positively is shown in the responses of the employees surveyed, 38% strongly agreed and 52% agreed that ICI Pakistan has a strong track record for implementing both large-scale and incremental (small, continuous) change successfully and 15% strongly agreed whereas 63% of the respondents agreed that the company actively challenges the status quo.

Internal stakeholders

With respect to the company's internal stakeholders 38% of the respondents strongly agreed, and 64% agreed that the company has a clear strategy for engaging all internal stakeholders in its sustainability efforts. While 35% strongly agreed and 58% agreed that, by and large, people are engaged in work that is in some way connected to sustainability goals of the company. 35% of the employees strongly agreed that the employees feel valued in ICI Pakistan, and 48% agreed to this statement. When the respondents were asked what they thought the company was trying to achieve by addressing sustainability issues 83% of the respondents opted for "creating economic, social and environmental value." 70% of the respondents rated ICI Pakistan as "much better" than the other companies in the same industry while 53% thought the company's approach towards sustainability to be "proactive" and 45% thought it to be "active."

External stakeholders

20% of the respondents strongly agreed, and 60% agreed that the company has a mechanism in place to actively engage with external stakeholders about sustainability efforts and that the company encourages sustainability in its supply chain. The survey results reveal a very positive assessment of the employees with respect to the company's sustainability leadership and culture. The respondents gave a favorable assessment of the new ownership with regard to its role in integrating sustainability within the organization's culture and actively involving all the stakeholders in their sustainability vision. The survey results are supported by the evidences of the new leadership's sustainability initiatives, discussed in the previous section. The employees were told about the company's sustainability vision by the new

CEO himself. They were communicated that the performance appraisal of the CEO would also be based on the company's performance on the sustainability KPIs. This highlighted the importance of business sustainability for the leadership.

Up until this point in the case study, it has been studied what the company has done in the adoption and incorporation of business sustainability, but we also need to gauge how far the company has traveled upon the path of embracing true business sustainability. For this purpose, we place another filter on ICI Pakistan in the shape of the "Dyllick/Muff Business Sustainability Typology."

REDEFINED SHAREHOLDER VALUE MANAGEMENT

According to Dyllick & Muff (2015) a huge disconnect exists between the intentions of organizations with respect to business sustainability (BST) and the actual significant improvements being made on a global level. This disconnect has been linked to the lack of understanding regarding the true meaning of business sustainability both in the academic and the corporate world. Thus a new typology of business sustainability has been developed that defines three levels of business sustainability:

- 1. Business Sustainability 1.0 (Redefined Shareholder Value Management)
- 2. Business Sustainability 2.0 (Managing for the Triple Bottom Line)
- 3. Business Sustainability 3.0 (True Sustainability)

In order to place an organization in this typology the organization's approach for integrating sustainability in the business is analyzed through the "input-process-output" model. This can be clearly understood through the following framework (Dyllick & Muff, 2015):

BUSINESS SUSTAINABILITY TYPOLOGY (BST)	Concerns (What?)	Values created (What for?)	Organizational perspective (How?)
Business-as-usual	Economic concerns	Shareholder value	Inside-out
Business Sustainability 1.0	Three-dimensional concerns	Refined shareholder value	Inside-out
Business Sustainability 2.0	Three-dimensional concerns	Triple bottom line	Inside-out
Business Sustainability 3.0	Starting with sustainability challenges	Creating value for the common good	Outside-in
The key shifts involved:	1 st shift: broadening the business concern	2 nd shift: expanding the value created	3rd shift: changing the perspective

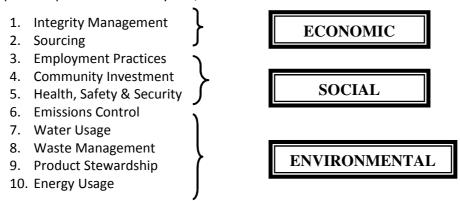
Figure 4.1: A framework for considering different approaches of business sustainability

ICI Pakistan's business sustainability position is defined on the basis of the information gathered in the previous sections of the case study. BST 1.0 has been defined as "an approach to business that creates shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments". This is considered as the first step towards the adoption of true BST by Dyllick

& Muff (2015) in which organizations recognize that new business challenges exist outside their markets and raise social and environmental concerns. ICI Pakistan is currently positioned on the BST 1.0 level.

Concerns

The BST 1.0 companies are addressing economic, ecological, and social concerns. As discussed ICI Pakistan's sustainability approach is focused on these three dimensions. The sustainability KPIs, which they reported upon in the last six years, include:



Environmental: The various initiatives being pursued by ICI Pakistan in the form of water usage reduction, production waste reduction and recycling, working on the use of alternative and sustainable energy sources in the form of solar panels and clean coal technologies, use of biodegradable materials in internal communication and packaging of some products, continuous hazardous emission reduction from all the work sites.

Social: working for the betterment and advancement of the communities in which the company operates, continuous focus on employee safety, training and career advancement and working with supply chain partners to improve sustainability of the processes are some of the examples of social sustainability. The new leadership has launched a number of projects to address the social concerns of diverse communities, in which the company is operating. They include an adult literacy program, establishment of water purification plants in places where people had no access to clean drinking water, awareness campaigns about breast cancer among the illiterate females, funding of various schools being run for the underprivileged youth of the nation and vocational training being given voluntarily by the ICI employees. ICI Pakistan has an employee engagement survey conducted each year by an outside research organization "Gallup Pakistan." In 2012, the engagement survey score was 4.35 on a 5-point scale (with 5 being the highest positive indicator on the scale); placing ICI at the 74th percentile within the Gallup global database. The company also ranked third in the 'Best Place to Work 2012' survey conducted by Engage Consulting (an international research organization).

Economic: concerns have also been the focus of the management as well, which is evident from the ownership shifts the company went through in the recent past. As explained in the company's historical timeline the underlying reason behind the acquisition by Yonus Brothers Group and the sale of the company by AkzoNobel was economic.

ICI Pakistan can be characterized as BST 1.0 in accordance with Dyllick & Muff (2015). In BST 1.0 companies "the underlying objective of all the company's activities remains economic. While introducing sustainability in the business will generate positive side effects in the environmental and social fields, business success still is evaluated from a purely economic view".

Values Created

According to Dyllick & Muff (2015) the company on the BST 1.0 level addresses the three dimensional concerns in order to create refined shareholder value. In this section ICI Pakistan is analyzed on the basis of the particular values it is creating or preserving, through the input-process-output model. In the input-process-output model "values created" is the output being delivered by the company.

When the employees were asked what the company is primarily trying to achieve by addressing sustainability initiatives, 53% chose "the desire to improve efficiency and impact the company's bottom line," 48% selected "the desire for innovation and growth" and 33% opted for "awareness of our responsibility to the environment". This reinforces the BST 1.0 positioning of the company, as the sustainability initiatives are perceived to be creating and enhancing shareholder value. The BST 1.0 value creation approach is seen in the company's definition of its value creation areas as well. The company defines the following areas as its refined shareholder value creation:

- 1. Customers Care
- 2. Supply Chain Partner management
- 3. Innovation in business operations and products
- 4. Employee wellbeing
- 5. Value creation for shareholders

ICI Pakistan has termed its customers, supply chain partners, employees, and the shareholders as the entities for which it is generating value through its business processes. This demonstrates a refined vision towards a shareholder definition in contrast to the business-as-usual definition of the typical capital investing shareholder. Along with the primary business of the company, ICI Pakistan is also creating value for its supply-chain partners, employees, community and the natural habitat that it is operating in. However, all these activities are being done in support functions of their economic sustainability, therefore, positioning the company on the BST 1.0 level. This can be further understood by looking at the "process" part of the input-process-output model; the part that clarifies the "How" company addresses the identified "concerns" for creating the "refined shareholder value"

Organizational perspectives

Two types of organizational perspective have been defined in the Dyllick/Muff business sustainability typology (2015), the "inside-out approach" and the "outside-in approach." "Usually, companies start from their existing business, strategy or product-lines and work on making them more sustainable (inside-out). This may lead them to incremental or radical improvements, depending on their cultural readiness and how far-sighted and courageous they are." This is opposite to the "outside-in" approach in which "sustainability challenges are used as the starting point to define possible contributions by a business that also makes business sense." According to the BST Typology only BST 3.0 companies are following the "outside-in" approach.

If we study the product portfolio of ICI Pakistan, we can see that the business units of the company have been pretty much the same with various additions and demergers through time. The company has not yet designed any product that addresses or offers a solution to any of the triple bottom line concerns rather it has tried to redesign or improve its production processes, supply chain and operational procedures in order to make them more sustainable. The company is also investing in the acquisition of sustainable alternatives for energy production.

This is evident through the different initiatives taken in the area of energy conservations through the use of solar panels and Light-Emitting Diodes (LEDs) in the work sites along with sustainable resource utilization (reduced water usage for the already existing production processes, water recycling, switching production to recycled raw materials for the production of existing products, using bio-degradable packaging for existing products, etc.). Furthermore, the company is incurring an additional cost to eliminate the hazardous gas emissions from its new coal fired boiler plant. This technology is being used to make a business process environmentally safe thus an "inside-out "approach in which the company takes the existing products or procedures and tries to make them more sustainable. The social sustainability initiatives of the company also focus on the areas in which the company is currently operating thereby facilitating the community that is directly or indirectly associated with the company's existing operations.

THE CHALLENGE

ICI Pakistan has started its journey on the path of business sustainability by taking the initial steps under an international ownership. Now the company is owned and managed by a local group, and the data show that the new leadership is following the footsteps of the previous owners. However, the company has not moved to a higher level of business sustainability rather it is maintaining its position as a BST 1.0 company. The management of the company attributes much of its challenges to the unsustainable external environment of the country. The new CEO of the company stated the "ongoing turbulent political condition and continued energy shortages in Pakistan" as one of the biggest challenges for the company (ICI, 2014). So the most significant question that we can ask after analyzing the sustainability journey of ICI Pakistan is: "Can a company progress on the path to true business sustainability amongst such adverse conditions?"

In the World Economic Forum's meeting held in Davos (Switzerland) in 2012 it was suggested that:

Attention needs to be given not so much to what business has to do, but what governments need to do to get a business more firmly on the sustainability track. Governments are a crucial part of the implementing front line. Much can be done at the national level, all the more so given the manifest weaknesses of today's intergovernmental processes (Zadek, 2012).

The role of governments in creating and supporting business sustainability has also been discussed in various other studies. Peck & Gibson (2000) state:

Anticipating rising world demand for sustainable products, services and systems is also an obligation and an opportunity for governments. Indeed, there is a crucial role for governments in facilitating the transition to an economy that is much more efficient, much fairer and much less damaging. Governments that lead will be in a stronger position to set the agenda and establish advanced positions in their industries and their citizens. Countries that lag behind will inevitably face increasing competitive disadvantage and lost opportunity.

Further strengthening this argument is a study done by the Institute of Southern Studies on some of the American states. The research revealed a positive relationship between a state's economic and environmental performance. The states that were ranked the lowest for their official economic performance also showed the worst environmental performance by the businesses (Bell, 2002). The situation is even more critical in developing countries as a twin need for both economic development and sustainable development and implementation exists, making the task more challenging (Lifshitz, 2010). Furthermore, the socioeconomic environment in which the company is operating, and the development

priorities in the respective region shapes the structure of a firm's sustainability efforts. In Nigeria, which, according to the international statistical institution (2015) is a developing country like Pakistan, the socially responsible activities of businesses are oriented towards the socioeconomic development challenges of the country which include poverty reduction, health care provision, infrastructure development and education. However, in the western developed part of the world, the socioeconomic activities of most of the businesses are focused on consumer protection, fair trade, green marketing, climate-change concerns, or socially responsible investments. In the developing countries, the government institutions are weak, resulting in poor political governance, so that the responsibility for socioeconomic development is often delegated to private actors, like relatives, neighborhoods, religious bodies, non-profit organizations or increasingly business (Visser, 2008). The discussion shows that business sustainability is severely limited without the support of positive external factors. The role of governments in supporting businesses to pursue sustainability is being emphasized more and more. However, in most of the developing countries' business is not getting support or motivation from the government.

Pakistan is also an example of a developing country, which is struggling for its mere survival among numerous threats like terrorism, religious intolerance, severe resource scarcity, energy shortages, corruption, low economic growth, over-population and high rates of illiteracy. In 1997, Pakistan managed to draft its Environment Protection Act and in 2011, drafted its first climate-change policy; much later than the developed part of the world. (Dawn, 2012). Naseer Memon, the chairperson of Strengthening Participatory Organization (SPO) Pakistan said:

Regrettably, there is a serious lack of political will on the part of the government to make development sustainable. Politically motivated decision-making in public sector development often compromises principals of sustainable development. Environmental sensitivities and community rights are flagrantly violated in public infrastructure projects. As a matter of fact, the recent flood disasters have exposed the country's vulnerability due to faulty development paradigms. It must be noted that although public policies make tall claims, bad governance and the absence of political will preclude meaningful actions.

At the start of the case study, we termed ICI Pakistan's journey of sustainability as "sustainability amongst adversity" because while analyzing the challenges and milestones achieved by this company we cannot ignore the external factors, which are severely restricting the company. The journey of ICI Pakistan and its current position in terms of business sustainability can only be understood when analyzed in context of the environment it is operating in. So while looking for an answer to the question raised at the start of this section we are reminded of the words of the Director General of the Pakistan Environment Protection Agency, Asif S. Khan, who in an interview with a national newspaper said:

The requirements of Agenda 21 and the Rio Convention of 1992 for the eradication of poverty in order to increase production and sustainability so that 'the needs of the majority of the people of our world' can be met, are dreams and part of a distant horizon for Pakistan. Is there any possibility of implementation of the measures discussed during the conference, in a country that has been ravaged by terrorism and whose government considers defense a greater priority than environmental protection and sustainability? And is it fair to strike parallels between Pakistan and developed nations of the world? (Dawn, 2012).

The same applies to organizations operating in Pakistan. ICI Pakistan is fighting the battle for sustainable development in an unsustainable environment. So can we expect it to travel from BST 1.0 to BST 2.0 and ultimately embody the spirit of true business sustainability among the prevailing conditions in Pakistan?

Hope prevails within the employees of ICI Pakistan regarding the future of the company in terms of the new leadership role in taking ICI Pakistan's to the next levels of business sustainability; as one employee states:

"After the change in the shareholders of the company, I wish the new local ownership will prioritize sustainability with the same passion as it was done when we were part of a large international group."

BIBLIOGRAPHY

About CEFIC (2015). Retrieved April 23, 2015, from The European Chemical Industry Council: http://www.cefic.org/About-us/Cefic/

Ahmed,A (2014, July 14). Pakistan's urban air pollution off the charts: World Bank. Retrieved May 2, 2015, from Dawn: http://www.dawn.com/news/1119031

Akhtar, R (2011). Why We're Failing to Sustain - and How Can We Succeed, Right Now. TBL Sustainability Advocacy.

Arifeen,M (2013). Need for massive CSR in Pakistan. Retrieved May 2, 2015, from The Financial Daily: http://thefinancialdaily.com/Articles/ViewArticleDetail.aspx?ArticleID=5418

Baig,M.A (2013, November 7). YBG were cognisant of the value that the ICI brand would bring, particularly for diversification under the ICI umbrella. Retrieved May 2015, from Dawn: aurora.dawn.com/.../ybg-were-cognisant-of-the-value-that-the-ici-brand-

Baloch,F (2011, December 6). Explaining the spin-off: AkzoNobel gearing up to supply Middle East paint market from Pakistan. Retrieved 2015, 5. March, from http://tribune.com.pk/story/302658/explaining-the-spin-off-akzonobel-gearing-up-to-supply-middle-east-paint-market-from-pakistan/

World Bank (2013). Pakistan. Retrieved April 23, 2015, from the World Bank: http://data.worldbank.org/country/pakistan

Bell, D.V (2002, March 27). The Role of Government in advancing corporate sustainability. Background Paper. Final draft. *Sustainable Enterprise Academy*, York University (Canada).

CECP (2012). Giving in Numbers. Retrieved June 9, 2015, from cecp: http://cecp.co/pdfs/giving in numbers/GIN2012 finalweb.pdf

CIA World Fact Book (2014). Pakistan Economy. Retrieved August 23, 2014 from:

https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html

Corporate philanthropy (2015, March 8). Retrieved from Business Dictionary:

http://www.businessdictionary.com/definition/corporate-philanthropy.html

Dawn (2012, May 27) Pakistan's sustainable development conundrum. Retrieved June 9,2015 from:

http://www.dawn.com/news/737641/pakistans-sustainable-development-conundrum

 $Dow Jones \ Sustainability \ Index \ (2014). \ Retrieved \ December \ 24, \ 2014, from \ Wikipedia:$

http://en.wikipedia.org/wiki/Dow Jones Sustainability Index

Dyllick, T.& Muff, K (2015). Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability. *Organization & Environment*, 1-9.

Fry, L.W. & Jr., J.W (2008). Maximizing the Triple Bottom Line through Spiritual Leadership. *Organizational Dynamics*, 37 (1), 86096.

Fullan, M (2005). Leadership & sustainability: System thinkers in action. Corwin Press.

Gilani, S.R., Mahmood, Z., Hussain, M., Baig, Y., Abbas, Z., & Batool, S (2013). A Study of Drinking Water of Industrial Area of Sheikhupura with Special Concern to Arsenic, Manganese and Chromium. *Pakistan Journal of Engineering & Applied Science*, 13, 118-126.

Hamid,M (2012, August 12). A history of ICI in Pakistan: Story of an Icon. Retrieved November 24, 2014, from http://www.brecorder.com/articles-a-letters/626:/1226481:a-history-of-ici-in-pakistan-story-of-anicon/?date=2012-08-12

Hargreaves, A., & Fink, D (2003). The Seven Principles of Sustainable Leadership. Educational Leadership, 2-12.

Hils,K.M (2011). The Pakistani Perspective on Sustainability Reporting. Retrieved March 2, 2015, from http://www.tbl.com.pk/the-pakistani-perspective-on-sustainability-reporting/

ICI Pakistan Limited (2008). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication & Public Affairs Department ICI.

ICI Pakistan Limited (2009). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication & Public Affairs Department ICI.

ICI Pakistan Limited (2013). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication & Public Affairs Department ICI.

ICI Pakistan Limited (2014). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication and Public Affairs Department.

ICI Pakistan Limited (2010). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication and Public Affairs Department.

ICI Pakistan Limited (2011). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication & Public Affairs Department.

ICI Pakistan Limited (2012). ICI Pakistan Limited Annual Report. Karachi: Corporate Communication & Public Affairs Department.

International Statistical Institute (2015). Developing Countries. Retrieved on March 6, 2015 from http://www.isiweb.org/component/content/article/5-root/root/81-developing

Jaspal, Z.N., & Haider, N (2014). Management of Chemicals in Pakistan: Concerns and challenges. *South Asian Studies*, 497-517.

Jensen, D (2006). Endgame. In Endgame, Vol. 1: The Problem of Civilization. Reed Business Information.

Kazmi,Z (2014, January 7). Pakistan's Energy Security. Retrieved December 8, 2014, from The Express Tribune: http://tribune.com.pk/story/655573/pakistans-energy-security/

Khwaja, M.A (2012, November). Environmental Challenges and Constraints to Policy issues for Sustainable Industrial Development in Pakistan. *Sustainable Development Policy Institute*, p. 31.

Lifshitz,I (2010, May 28). Balancing Sustainability with Economic Development in Developing Countries – The Case Study of Indonesia. *Environmental Leader*, pp. 8-9.

Ministry Of Planning, Development & Reforms (2014, March 6). Environment and Sustainable Development. Retrieved from Ministry Of Planning, Development & Reforms: pc.gov.pk/mtdf/11-Environment/11-Environment.pdf

n.a (2015, February 13). Imperial Chemical Industries. Retrieved May 2, 2015, from Wikipedia: http://en.wikipedia.org/w/index.php?title=Imperial Chemical Industries&action=history

News & Press Releases (2014, September 11). Retrieved December 24, 2014, from AkzoNobel: https://www.akzonobel.com/news_center/news/news_and_press_releases/2014/akzonobel_ranked_top_of_djsi_f or_third_year_running.aspx

Peck, S., & Gibson, R (2000). Pushing the Revolution. Alternatives Journal, 26 (1), 23-36.

Porter, M.E., & Kramer, M.R (2011). Creating Shared Value. Harvard Business Review, 63-77.

Rehman, F (2010, January 21). Industrial units causing pollution. The Nation, p. 3.

SCALA (2014). The Sustainability Culture and Leadership Assessment Survey. Louisville, KY: Miller Consultants, Inc.

Siddiqui,H (2009, December 28). Poor Disclosure/Poor Rating for Pakistan in recent Asian Sustainability Report. Retrieved from CIPE Development Blog: http://www.cipe.org/blog/2009/12/28/poor-disclosure-poor-ratings-for-pakistan-in-recent-asian-sustainability-report/#.VQEqkl65gvw

The News (2011). Corporate philanthropy increases to Rs3.8bn despite economic challenges. Retrieved on March 7, 2014 from: http://www.thenews.com.pk/Todays-News-3-148035-Corporate-philanthropy-increases-to-Rs38bn-despite-economic-challenges

Tirmizi,F (2012, July 31). Mergers and acquisitions: Lucky Cement led group buys ICI Pakistan for \$152m. Retrieved March 1, 2015, from http://tribune.com.pk/story/415097/mergers-and-acquisitions-lucky-cement-led-group-buys-ici-pakistan-for-152m/

UNDP (2015). The Millennium Development Goals. Retrieved from UNDP: http://www.pk.undp.org/content/pakistan/en/home/mdgoverview.html

Visser, W (2008). Corporate Social Responsibility in Developing Countries. Oxford: Oxford University Press.

Wilson, M (2003). Corporate Sustainability: What is it and where does it come from? Ivey Business Journal.

WBSD (world business council for sustainable development) (2015). Retrieved on June 9, 2015, from http://www.wbcsd.org/newsroom/key-messages.aspx

Zadek,S (2012, January 31). Governments need to play a key role in aligning business and sustainability. *Guardian* sustainable business.

Zeeshan, M., & Ahmed, V (2013). Energy, environment and growth nexus in South Asia. *Environ Dev Sustain*, pp.1465–1475.

APPENDIX

Interviews of the company's top management and supply chain partners were conducted to gain better understanding of the company's sustainability journey. The interviewees were selected in collaboration with the Corporate HSE&S manager of the company, based on their level of experience and engagement in the sustainability initiatives. In order to give representation to all the business units of the company, the vice presidents of all the businesses were selected as interviewees. The interview protocol was shared with the respondent a few days before the interview in order to facilitate the generation of maximum information.

Name	Title	Years of Engagement with ICI Pakistan			
INTERNAL STAKEHOLDERS					
Mr. Iqbal Haider	G.M Technical	35 Years			
Mr. Sohail A. Khan	VP Soda Ash & Polyester	29 Years			
Mr. Zafar Farid	Corporate HSE&S Manager	25 Years			
Mr. Asif Malik	VP Life Sciences	15 Years			
EXTERNAL STAKEHOLDERS					
Mr. Shakoor	Owner Shakoor & Co.	34 Years			
	Supply Chain Partners				