

**THE FACTORS OF INFLUENCING THE CLIMATE CHANGE ADAPTATION  
DISCLOSURE AMONG THE COMPANIES IN ASIA PASIFIC REGION**

**ATHIVAGAR ATHINARAYANAN**

**Research report in partial fulfilment of the requirements for the  
Degree of Master of Business Administration**

**Universiti Sains Malaysia**

**2015**

## ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my advisor, Dr Azlan Amran, for his excellent guidance, caring, patience, and providing me with an excellent atmosphere for doing research methodology proposal. I would never have been able to finish my dissertation without the guidance of my committee members, help from friends, and support from my family. I would like to thank Dr Mehran Nejati, who let me experience the research of freshwater mussels in the field and practical issues beyond the textbooks, patiently contribute many inputs for my writing and supported my research. A very special thanks goes out to Mr Lakshmanan, without whose motivation and encouragement. I would not have considered a graduate career in climate change research Dr Azlan is the one professor/teacher who truly made a difference in my life. It was under his tutelage that I developed a focus and became interested in the climate change and in CSR. He provided me with direction, technical support and became more of a mentor and friend, than a professor. It was through his, persistence, understanding and kindness that I completed my undergraduate degree and was encouraged to apply for graduate training. I doubt that I will ever be able to convey my appreciation fully, but I owe him my eternal gratitude.

I would also like to thank all the companies which has been contribute in the exchanges of knowledge, skills, and venting of frustration during my graduate program, which helped enrich the experience. In conclusion, I recognize that this research and my MBA study would not have been possible without the financial assistance by Infineon technologies.

# TABLE OF CONTENTS

Page		
1.	Introduction	
1.1	Business And Environment	1-2
1.2	Background of the Study	3
1.2.1	Climate Change	3-4
1.2.2	Significant Change of Climate Change For Past Years	4-5
1.2.3	Impacts Of Climate Change	6-7
1.3	Problem Statement	7-8
1.4	Research Questions	9
1.5	Research Objectives	10
1.6	Significance of the Study	11
1.7	Definition Of Key Terms	12-14
1.7.1	National Culture	12
1.7.2	Climate Change Adaptation	13
1.8	Organization Of Remaining Chapters	14
2.	Literature Review	
2.1	Introduction	15
2.2	Past Theories Adopted In The Climate Change Adaptation Research	15
2.2.1	Stakeholder Theory	15-17
2.2.2	Legitimacy Theory	17-19
2.2.3	Agency Theory	19-22
2.3	Sustainability Reporting And Climate Change Adaptation	22-25
2.4	Climate Change Adaptation Disclosure	25-27
2.5	External Dimension	27
2.5.1	National Culture Index	
2.5.2	Power Distance	
2.5.3	Uncertainty Avoidance	
2.5.4	Individualism	
2.5.5	Masculinity	
2.6	Internal Dimension	
2.6.1	Market Diversification	
2.6.2	Product Diversification	
2.6.3	Industries	
2.7	Governance and Climate Change Adaptation	
2.7.1	Integrated CSR Governance	
2.7.2	CSR Committee Existence	

2.7.3	Ngo Alliance	
2.7.4	Top Management Commitment	
2.8	Firm Size and Domicile	
2.9	Theoretical Framework and Hypothesis Development	
2.9.1	Theoretical Framework	
2.9.2	Hypotheses Development	
2.9.2.1	Power Distance	
2.9.2.2	Uncertainty Avoidance	
2.9.2.3	Individualism	
2.9.2.4	Masculinity	
2.9.2.5	Market Diversification	
2.9.2.6	Product Diversification	
2.9.2.7	Industries	
2.9.2.8	CSR Committee Existence	
2.9.2.9	NGO Alliance	
2.9.2.10	Top Management Commitment	
2.10	Summary	
3.	Research Methodology	
3.1	Introduction	63
3.2	Research Design	63
3.3	Type Of Study	64
3.4	Unit of Analysis	64
3.5	Population And Data Collection	65-66
3.6	Sample Size	67
3.7	Sampling Technique	68
3.8	Measurement Of Variables	69
3.9	Measurement Of Dependent Variable	69-71
3.10	Scoring System	71-72
3.11	Measurement Of Independent Variable	72-75
3.12	Measurement Of Control Variables	75-76
3.13	Data Analysis	76
3.14	Regression Analysis	77-79
3.15	Descriptive Analysis	79
3.16	Correlation Analysis	80
3.17	Summary Of The Chapter	80

4.	Data Analysis And Result	
4.1	Introduction	81
4.2	Sample Profile	81
4.3	Measurement Analysis	82
4.3.1	Descriptive Analysis	83
4.3.2	Descriptive Analysis For Continuous Variables	84-86
4.3.3	Frequency Analysis For Categorical Variables	87-90
4.4	Correlation Analysis	90
4.4.1	Pearson Correlation Analysis Without Control Variables	91-92
4.5	Multiple Regression Analysis	92-94
4.6	Hypothesis Testing	94
4.6.1	Hierarchical Multiple Regression Analysis of Direct Effect from Independent Variables towards Climate Change Adaptation	95-99
4.7	Summary	99
5.	Discussion and Conclusion	
5.1	Introduction	100
5.2	Recapitulation Of The Finding Of The Study	100
5.2.1	The Level Of Climate Change Adaptation By Sample Companies In Asia Pacific Region	100-101
5.3	Influence Factors To Climate Change Adaptation	101
5.3.1	Power Distance	101-102
5.3.2	Uncertainty Avoidance	103
5.3.3	Individualism	104
5.3.4	Masculinity	105
5.3.5	Industrialization	106
5.3.6	CSR Committee Existence	107
5.3.7	Ngo Alliance	108
5.3.8	Top Management Commitment	109
5.3.9	Firm Size And Domicile	110
5.4	Implications Of The Study	111
5.4.1	Theoretical Implications	112
5.4.2	Practical Implications	112-113
5.5	Limitation Of The Study	113
5.6	Conclusion	114
5.7	Recommendation For Future Research Studies	115-116
	References	117-125
	Appendices	126-152

## **LIST OF FIGURES**

FIGURE 1.1: CARBON DIOXIDE (CO <sub>2</sub> ) CONCENTRATIONS	04
FIGURE 1.2: GLOBAL TEMPERATURE AND CARBON DIOXIDE	05
FIGURE 2.1: THEORETICAL FRAMEWORK	50

## LIST OF TABLES

Table 3.1: Measurement of independent variables	74
Table 3.2: Measurement of control variables	76
Table 4.1: Sample size	83
Table 4.2: Descriptive analysis results of continuous variables	85
Table 4.3: The result of frequency analysis of environmental sensitivity	88
Table 4.4: The result of frequency analysis of domicile	88
Table 4.5: The result of frequency analysis of CSR committee existence	89
Table 4.6: The result of frequency analysis of NGO alliance	90
Table 4.7: The result of frequency analysis of top management commitment	90
Table 4.8: The result of correlation analysis without control variables	92
Table 4.9: The outcomes of model summary	96
Table 4.10: The results of multiple regression analysis of direct effect	97

## **Abstract**

Climate change is the major social issue that is of increasing concern to governments, the public and business especially for those industries considered as large emitters of greenhouse. The problem statement for this study is to examine the relationship of external dimension national culture such as power distance, uncertainty avoidance, individualism and masculinity, internal dimension national culture as such market diversification, product diversification and industry and governance dimension such as CSR committee existence, NGO alliances, and top management commitment towards the climate change adaptation measure or activities has been carried out by the companies in the emerging countries by disclosing climate change issues in their sustainability report. The total of 120 companies has been choosing to evaluate in this research study. The scope of research concentrates only on the Asia Pacific countries which all together 13 countries. The total of 28 climate change adaptation has been selected from various sources. The research is using the descriptive, correlation and regression analysis method to measure the variables. The outcome of the analysis will be using in the future implementation of activities which related to climate change adaptation among the corporate organization.

## **Abstrak**

Perubahan iklim merupakan isu utama sosial yang meningkatkan kebimbangan kepada kerajaan, orang awam dan perniagaan terutamanya bagi orang-orang industri dianggap sebagai pemancar besar rumah hijau. Kenyataan masalah bagi kajian ini adalah untuk mengkaji hubungan antara dimensi budaya negara luar seperti jarak kuasa, ketidakpastian mengelakkan, individualisme dan kejantanan, dimensi budaya kebangsaan dalaman kepelbagaian seperti pasaran, kepelbagaian produk dan industri dan dimensi tadbir urus seperti CSR kewujudan jawatankuasa, pakatan NGO, dan komitmen pengurusan atasan terhadap perubahan iklim langkah penyesuaian atau aktiviti telah dijalankan oleh syarikat-syarikat di negara-negara baru muncul dengan mendedahkan isu-isu perubahan iklim dalam laporan kemampuan mereka. Jumlah 120 organisasi telah memilih untuk dinilai dalam kajian penyelidikan ini. Skop penyelidikan menumpukan perhatian hanya pada negara-negara Asia Pasifik jumlahnya 13 buah negara. Jumlah 28 cliamte perubahan penyesuaian telah dipilih dari pelbagai sumber. Kajian ini menggunakan deskriptif, korelasi dan analisis regresi kaedah mengukur pembolehubah. Hasil analisis akan menggunakan dalam pelaksanaan masa depan aktiviti-aktiviti yang berkaitan dengan perubahan iklim penyesuaian di kalangan organisasi korporat.

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 BUSINESS AND ENVIROMENT**

For today's world, the word called business is commonly used in all forms and all sources of media. Business can be defined as activity performed by human being for generating or attaining wealth through goods buying and selling of goods (Lewis Henry). A business generally known as an organization or economic system which involved in trade of goods and services are exchanged for the money. In order to make profit, certain variety of investment and selling of finished goods to customers may be performed by every business. The joint venture of multiple individual to form as group called company. They were many scale of business operating in the world from the small scale until global level. Due to the world has moving faster and the technologies have been evolving very faster, businesses are growing rapidly. There are many types of business available such as traditional method of business trading goods in return for cash, providing service to the customers like customer service, and consultancy. Currently the business world has been changing the trend into E business such as cloud storage, online and many more.

Today's business world is more depending on our environment's surroundings such as water, land, animals, air, plants, and other things. Business and environment are bonded together, to maintain the balance of nature or stability in

nature. Environment is expressed in various ways according to the field of application or different group of people. For example, according to the social scientists, environment can be categorized to economic, social, organizational, and cultural. There are two types of environment which called as natural environment and manmade environment. For natural environment consist of air, soil, water, wildlife and living space. Those are the things will be called as natural resources. The second on which is manmade environment that involve human activities on environment like housing, transportation and utilities, urbanization and so on. Human beings exploit and utilize most of these environmental resources to fulfil their basic physical needs.

Thus, business plays an important part in the global ecosystem, in which business is depending on global ecosystem and vice versa. Thus, a closely-knitted relationship exists between business and environment. Corporate Governance are also playing key role on the sustaining the environment. This mainly comes from the top management until the bottom level employees. By carrying out many activities, from the CEO or top level management focus on the climate change adaptation, forming the CSR committee and having some alliances with NGO group. All this comes from the stakeholder's perspective and incentive within the organization.

## **1.2 BACKGROUND OF STUDY**

### **1.2.1 CLIMATE CHANGE**

Climate change refers to average weather condition changes, or the weather variation in time to average conditions across longer-term. Factors that cause climate change will be plate tectonics, biotic processes, volcanic eruptions, and solar radiation's variation which is received by Earth. Climate change is affecting agriculture, subsistence communities are at risk. Certain human activities which have significant impact to the climate change is often referred to as global warming (Adger and Kelly, 1990). General circulation models, which derived from physical sciences, are frequently used as theoretical approaches to analyze historical climate information, forecast future climate projections, and establish the climate changes' causes and effects.

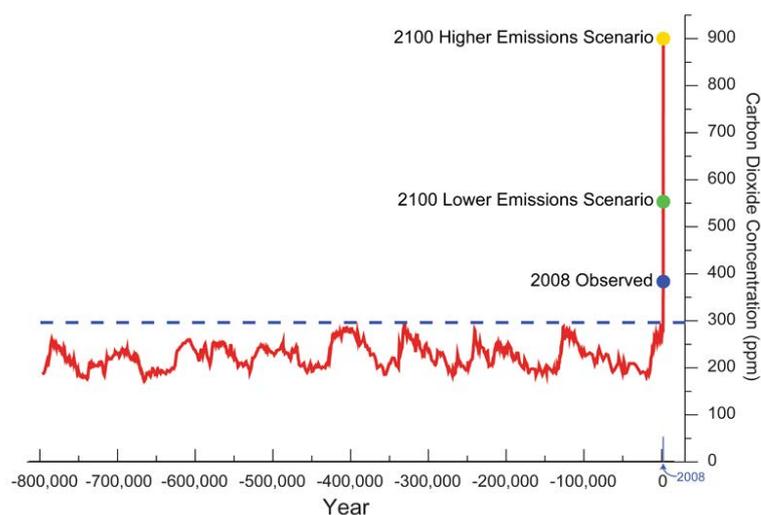
Climate change is fast becoming a major social issue. Governments, public and businesses are increasingly concerned about climate change, especially for those industries which are considered as large emitters of greenhouse (Lean-Francois, 2012). A comprehensive climate record which covers a long history of Earth's past and present, has been collected and is continuously being collected. The climate record covers geological evidence from borehole temperature profiles, cores removed from deep accumulations of ice, floral and faunal records, glacial and per glacial processes, stable-isotope and other analyses of sediment layers, and records of past sea levels. In the past, international climate change discussions are centered on the scientific causes of climate change and the extent of its impact. Increasingly,

such debates are trending towards the establishment of Greenhouse gases (GHG) reduction targets, reduction strategy to achieve these targets and the entire process's economic proposition.

### 1.2.2 SIGNIFICANT CHANGE OF CLIMATE CHANGE FOR PAST YEARS.

According to the IPCC, the planet's structure is affected by human activities during the course of energy generation for powering global mobility and commerce whereby affecting the climate system (IPCC, 2001). Greenhouse gases (GHG) are being generated and emitted into the Earth's atmosphere through rising human activities which involved the burning of fossil fuel and usage of land. One of the key elements in the greenhouse gases is Carbon dioxide (CO<sub>2</sub>). In the duration for the past 800 000 years, the CO<sub>2</sub> concentration in the atmospheric is maintained in range between 170ppm and 300ppm (NESDIS, 2010) as depicted in figure 3.

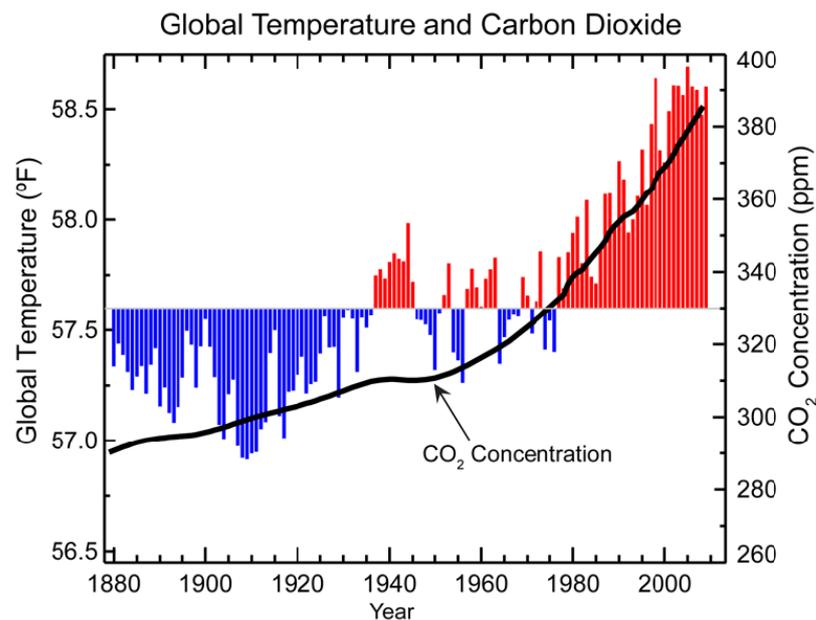
Depicted from (NESDIS, 2010)



**Figure 1.1: 800,000 Year record of Carbon Dioxide (CO<sub>2</sub>) concentrations**

Since the beginning of the industrial revolution, the CO<sub>2</sub> concentration in the Earth's atmosphere has soared by approximately thirty five (35) percent. In late 1940s, a drastic increase in greenhouse gasses in the atmospheric has directly influenced to increase of global average temperature. Figure 4 clearly shows the direct relationship between carbon dioxide concentration and global average temperature.

Depicted from (NESDIS, 2010)



**Figure 1.2: Global temperature and carbon dioxide**

Depicted from (NESDIS, 2010)

Thus, business committees should incorporate climate change policies into its corporate strategies. However, fewer businesses are considering the physical effects of climate change in their business planning and even fewer are incorporating the risks and opportunities associated with these physical effects. As climate changing trend becomes more apparent and the uncertainty surrounding future climate changes

is reduced, more businesses will want to consider and take necessary action in order to adapt to forecasted changes.

### **1.2.3 IMPACTS OF CLIMATE CHANGE**

The environment has been adversely affected by global climate. Observable effects on the environment include the shrinking of glaciers, the earlier breaking up of rivers and lakes' ice, the shift in the ranges of plant and animal and the changing flowering pattern of trees. These effects in turn resulted in the loss of sea ice, accelerated sea level rise and longer, more intense heat waves. The scientists had predicted these effects in the past as a result of global climate changes and these effects are transpiring now. Rising seas are one of the most certain effects of global warming. This is because more water is added into the ocean due to warming ocean waters expand and melting glaciers, ice caps and ice sheets.

From 1993 to 2003, melting ice caps and glaciers accounted for about 25% of sea level rise according to the estimation by the Intergovernmental Panel on Climate Change (IPCC). The melting ice caps and glaciers are some of the most visible climate change's indicator. Emission from burning fossil fuels could result in the temperature on the Earth warming from another 2 to 11.5°F this century. Deforestation will devastate human beings' livelihoods and the natural world we cherish. The year 2000 to 2009 was the hottest decade on record according to The World Meteorological Organization's report. Eight of the hottest ten years have

occurred since 2000. Scientists say that not only the heat poses threats, but the water's cycling between the ocean, land and atmosphere is escalating as a result of global warming. The increased water cycle has resulted in more extreme rainfall and droughts occurring concurrently around the world.

A warming planet is a threat to human being around the world. Even the modest rises in the planet's temperature since the 1970s are believed to be accountable for at least 150,000 extra deaths a year, according to the World Health Organization (WHO). This figure will double by 2030, according to WHO's conservative estimate. A warming planet may causes deaths, spreading of insect-borne diseases and exacerbating of respiratory illnesses. Extreme weather will also cause harms to human being.

### **1.3 PROBLEM STATEMENT**

Climate changes related issues are the most critical issues on environmental challenge that our world faces. The Stern Report on the Economics of Climate Change (Stanny & Ely, 2008; Vijn et al., 2007) stated that the global gross domestic product (GDP) will be decreased between five (5) to ten (10) percent from expected GDP if the amount of carbon emission is not decreased by at least twenty five (25) percent below the current level. According to the past research which has been conducted on the climate change adaptation on the European and America developed countries, compared to the research done in the emerging countries in the Asia

Pacific. Most of the previous studies were much concentrated on environment disclosure or also known as Corporate Social Responsibility (CSR) disclosure. CSR disclosure covers a wider range of scope, which includes social, economy, and environment activities undertaken by the companies.

Thus, insufficient study has been conducted to analyze the disclosure made especially dedicated to climate change adaptation. The increase in awareness on the significance of climate change has prompted many companies to take steps in easing the impact of their own operations on the climate change and quantifying reports on their own activities. Energy usage is being disclosed by many companies as a form of similar steps, which is also useful for assessing climate impacts. Most of the climate change reports are disclosed by well-established companies based in developed countries namely United States, Europe, Canada and Japan.

From the research conducted in developed countries, it is shown that corporate governance and firm characteristics of the company impose influences on the climate change issues disclosure in the company's sustainability report. Thus, the problem statement for this study is to examine the relationship of national culture and industrialization towards the climate change adaptation measures or activities that have been carried out by the companies in the emerging countries by disclosing climate change issues in their sustainability reports.

## **1.4 RESEARCH QUESTIONS**

This research attempts to answer the following questions:

Question 1: What is the relationship between External Dimension National Culture (power distance, uncertainty avoidance, individualism and masculinity) and climate change adaptation?

Question 2: What is the relationship between Internal Dimension Industrialization (market diversification, product diversification and industry) and climate change adaptation?

Question 3: What is the relationship between Governance Dimension (CSR Committee Existence, NGO Alliances, and Top Management Commitment) and climate change adaptation?

## **1.5 RESEARCH OBJECTIVES**

In line with this, the specific objectives are as follows:

1. To examine the relationship between External Dimensions National Culture (power distance, uncertainty avoidance, individualism and masculinity) and climate change adaptation.
2. To examine the relationship between Internal Dimensions Industrialization (Product Diversification, Market Diversification and Industry) climate change adaptation.
3. To examine the relationship between Governance Dimension (CSR Committee Existence, NGO Alliances, and Top Management Commitment) and climate change adaptation.

## **1.6 SIGNIFICANCE OF THE STUDY**

One important contribution of this study is that it helps to identify factors that influence the climate change adaptation by the companies based on the annual report and CSR report. Another contribution of this study is that it helps to clarify the relationship between internal, external factors and governance which contribute to the climate change adaptation.

A rise in greenhouse gases in the Earth's atmosphere traps the heat reflected off the Earth. The trapped heat causes a warmer surface of the Earth. A warmer surface of the Earth results in global warming. Global warming in turn effects climate change. Numerous studies been carried out mostly on western countries to understand the phenomena.

Finally, the findings of this study would benefit the owners of companies to improve their organization retention strategies towards the climate change adaptation. It will help other scholars and practitioners who are interested in the study of climate change related topics.

## **1.7 DEFINITION OF KEY TERMS**

### **1.7.1 NATIONAL CULTURE**

The national culture are the values that distinguished nations from each other grouped themselves contains four main dimensions such as power distance, uncertain avoidance, individualism versus collectivism, and masculinity versus femininity. According to the Hofstede (2001) for power distance explains as the tolerance level within a society towards the unequal power distribution.

For uncertainty avoidance are refer to where people feel unsafe and threatened by the situations. For individualism is the independent level of individual acts as differed to collectivism, where by people prefer to be in groups. Finally for masculinity represent “stress on achievement, assertiveness, heroism and material success”.

### **1.7.3 CLIMATE CHANGE ADAPTATION**

Adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimize the damage they can cause, or taking advantage of opportunities that may arise. Instead of optimizing based on the climate conditions projected by models, therefore, future infrastructure should be made more robust to possible changes in climate conditions.

This aim implies that users of climate information must also change their practices and decision-making frameworks, for instance by adapting the uncertainty-management methods they currently apply to exchange rates or R&D outcomes. It has been shown that well planned, early adaptation action saves money and lives later. Examples of adaptation measures include: using scarce water resources more efficiently; adapting building codes to future climate conditions and extreme weather events; building flood defences and raising the levels of dykes; developing drought-tolerant crops; choosing tree species and forestry practices less vulnerable to storms and fires; and setting aside land corridors to help species migrate.

## **1.8 ORGANIZATION OF REMAINING CHAPTERS**

Overall this study consists of five chapters. For the first chapter it's talked about the introduction, problem statement and research questions which related to the study. On the second chapter its covers the literature review part, where it covers the prior studies in the respective of main theories adapted in the research studies, main factor which contributing to the climate change adaptation disclosure. Then create the theoretical framework and the important hypothesis which developed during the research period. The third chapter contains of the research methodology which has been utilized in the study. On the forth chapter, the results of the research will be obtained after several type of data analysis. Finally on the fifth chapter, there will be discussion based on the results of the study, besides that there will be conclusion, limitation and recommendations for future researchers are also involved on this chapter.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This section is structured by introducing prior literature including main theory employed in the research previous study in respective factors influencing climate change adaptation disclosure and ultimately followed by the establishment of theoretical framework and also hypothesis development. The brief discussion has done on the common theories which could related to this research and well explained in detail on choosing the stakeholder theory as main theory which related to this study.

#### **2.2 PAST THEORIES ADOPTED IN THE CLIMATE CHANGE ADAPTATION RESEARCH**

##### **2.2.1 STAKEHOLDER THEORY**

Stakeholder theory explains the relationship in the middle of partners and the association administrators and top level administration what they morally and ethically want to do (Freeman, 1984). This theory has become an established framework within which to identify and examine the impact of organization action. Managers employed not can be only as the owner's agent but also as an agent of other stakeholders (Hill and Jones, 1992). It has been used to form discussion of corporate governance, business ethics, strategic management and organizational effectiveness. As a part of management theory and practice, stakeholder theory takes a number of forms and it is important to begin clarifying which aspects of

‘stakeholder theory’ are most relevant to the analysis of corporate governance. Descriptively, some research assumes that managers who wish to maximize their firm’s potential will take broader stakeholders interests into account.

According to Donaldson and Preston (1995), Stakeholder theory is a set of theories for management of stakeholders and cannot be considered as single theory, but rather. The policies are justifiable based upon the supposition that they hold legitimate interests in the company activities and related to the nature of the firm, how managers act and what they think about company strategic components. Meanwhile Mitchell, Agle and Wood (1997) argue that definitive stakeholders status determined by simultaneous presence of three factors; ‘Legitimacy’ refers to socially accepted and expected behaviors, ‘Power’ in its utilitarian sense refers to the ability to control resources and ‘Urgency’ exists when there is a pressing call for attention. For example, evidence of the legitimacy perspective at work is provided by Deegan and Gordon (1996), who found companies’ disclosure of environmental information increased in years when membership in environmental organization was also rising.

Recent literature on stakeholder theory proposes a range of refinements and improvements, or at least implicit explanatory assumptions, to enable the correct interpretation of the framework to be made (Fassin, 2008). Visual power of stakeholder model and systematic analysis very simplicity seen as contributing to the success of the stakeholder concept (Fassin, 2008). For instance, Freeman’s model can be accepted as a valuable approximation of reality; whereby the analysis

suggested the change of management representative must include CEO and the board of directors rather than the firm (Freeman, 1984).

In summary, stakeholder theory researched explained how stakeholder management particularly importance to business project taking place in institutionally demanding on environments, corporate governance, corporate social responsibility or interests among stakeholders when taking strategic business decisions.

### **2.2.2 LEGITIMACY THEORY**

The significant objective of profitable corporations, due to the increased awareness among the shareholders, is to supply acceptable returns to shareholders and also to satisfy a broader group of interested shareholders which can explain a corporation's financial, social environmental performance and its linking idea of sustainable development. This Legitimacy theory was analyzed from the perspective of management which focuses on the choices made by managers from various strategies to remain legitimate (Deegan et.al., 2000). The discrepancy of stakeholder theory adds conflict and dissension to the image and can be exploited to explain more specific information about corporate social practices.

The concept of organizational legitimacy was used to create the legitimacy theory whereby it is known as:

*“... a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When*

*the disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy (Dowling and Pfeffer, 1975, p 122)".*

Another good definition of legitimacy provides by Mathews (1993, p.350):

*"Organizations seek to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behavioral the larger social system in which they are a part. In so far as these two values systems are congruent we can speak of organizational legitimacy. When the actual or potential disparity exists between the two value systems, there will exist a threat to organizational legitimacy"*

This theory reflects that when there is a greater interest in adverse shifts in the social perceptions of an organization's behaviour, the greater is the desire to manage social perceptions, expectations or values as part of a legitimate process (Lindblom, 1994). It is generally concord, that a corporate environmental disclosure from social contract perspective, must be attached if there are any alterations or attempts to alter others perception in the activities of an organization (Deegan et.al., 2000), to instill awareness among the intended audience . In the legitimacy theory, the congruence between social values and environmental activities must be demonstrated by the companies, for example the disclosures of voluntary social environment annual report and its legitimacy motives have, or to some extent, moribund.

The relationships between the disclosure of social and environmental information must be understood well if the 'legitimacy' theory has to be developed in an attempt to explain various aspects of corporate social behaviour. In summary, organizations are using legitimating strategies to continue their economic pursuits and to vindicate their coexistence with the community, for the organization's long term persistence.

### **2.2.3 AGENCY THEORY**

In the end of the twentieth century, agency theory became the major force in the theoretical understanding of corporate governance and research is still taking place on this area (Jensen & Meckling, 1976; Fama & Jensen, 1983; Eisenhardt, 1989; Phan & Yoshikawa, 2000; Clarke, 2004; Mc Carthy & Puffer, 2008). The evolution of this theory was to acknowledge the contradictory relationships between owners and managers in large corporations (Berle and Means, 1932).

The ownership structure of an organization will have an impact on corporate governance structure. The company possessors' are unable to stop the expansion of their companies which was going beyond their management capabilities due to the development of Comparative Corporation. The agency's conflicting issues between managerial and shareholders will be affected based on the structure embraced (Claessens, 2003). The occurrence of conflict of interest between managers and shareholders is possible. In Asia alternatively businesses are merely controlled by a

few family members , thus ‘the controlling owner is often also the manager or can otherwise be assumed to be able and willing to closely monitor and discipline management’ (Claessens, 2003).

Agency theory is based on possible conflict between managerial and stockholder interests and assumptions regarding asymmetries information, for instant as discussed under corporate governance practices related to board structure.

On account of board structure, to decrease advantage and office expenses, sheets ought to comprises of a more prominent extent of outside executives. Correspondingly from organization viewpoint, the CEO and board administrator parts ought to be divided to keep an effective CEO from commanding the board (Ingley and Van Der Walt, 2001).

To maximize the stockholders’ wealth, managers’ effort need to be controlled and monitored. Other vital components in the administration of vast associations are possession structure and governing body (Eisenhardt, 1989; Fama & Jensen, 1983). An office hypothesis recommends operators are more probable than standards to accentuate corporate social execution and ecological report in light of the fact that they have no leftover claim on a company's wage (Graves and Waddock, 1994)

Importance as specialists is not spending their own cash, the enthusiasm of demonstrating concern on ecological are lesser. Moreover, specialists are more probable than principals to seek after non-benefit objectives with a specific end goal

to secure their positions, for instance ecological assurance that honed by their organization (Wang and Coffrey, 1992).

Hypothesis additionally proposes that in more diffused proprietorship environment, organization will be required to reveal more data to lessen office expense and data dispersion (Jensen and Meckling, 1976). For instance Chau and Gray (2002) found that the coefficients for proprietorship structure were exceptionally critical in Hong Kong and Singapore. Organizations with more prominent number of shareholders were found to give more data in their yearly reports. Another excellent case of organization hypothesis by Berle and Means (1932); have created current partnership which prompt the division of proprietorship and administration. Case in point, a family claimed business will have possession and control joined. However at the other hand of range is the weakening of proprietorship through extensive quantities of shareholders who separately own a little holding, yet 'who practice for all intents and purposes no power over the riches which they or their ancestors in premium have added to the endeavor'. In this way the shareholders whilst see as "proprietors" no more had "control" over the organization's activities and expert chiefs were utilized to maintain the business (Kiel and Nicholson, 2003). These divisions of possession and administration lead to the advancement of 'organization hypothesis'.

According to agency theorists the 'agency problem' cannot be solved without incurring the 'agency cost', which can be described as the sum of example; monitoring expenditure by principle, bonding expenditures by the agent and residual loss. Alternative governance structures and compensation schemes to minimize

agency costs and protect shareholder interests have been suggested in literature, for example Davis et. el., 1997. Governance structure use control and monitoring devices such as audits and performance evaluations. Financial incentives including long-term bonuses (agency costs) tied to firm performance can be used to provide rewards to managers to achieve shareholder's objectives.

Organization hypothesis has various signs. Obviously, in this sense, corporate administration must be comprehended of an a lot of more extensive scale than the center what organization hypothesis issues, it is the relationship in the middle of shareholders and chiefs. The impact of organization hypothesis has been instrumental in the advancement of administration gauges and standards. The choices making procedure is assigned by shareholders to the directors. Thus because of administrators seeking after their own advantage, sheets are included in 'observing administrative choice making and execution'.

### **2.3 SUSTAINABILITY REPORTING AND CLIMATE CHANGE ADAPTATION**

By and large Organizations are honing supportability reporting strategy to incorporate natural and social concerns in their business operations and connections with their partners. This reporting system is known as Corporate Social Responsibility (CSR) reporting. Corporate Social Responsibility is characterizes as open and straightforward business hones that are in light of moral esteem and

appreciation for the group, representatives, nature, shareholders and different partners.

The contents of the report were designed to deliver sustainable norms to society. The Tripple Bottom Line Reporting works together with CSR which focus on the economics, social and environmental bottom line wellness (KLSE, 2006). Moreover, the sustainability reporting can be described as a public disclosure activity through which an organization voluntarily disclosure the impact of its operations and products/services on society and environment (EVI, 2010).

Corporate Social Responsibility gives data to people in general in regards to organizations' exercises with group, ecological, its representatives, its purchaser and vitality use in the organizations. In a few nations it has been ordered as deliberate divulgence. CSR reporting can be characterized as the procurement of monetary and non- money related data identifying with an association's correspondence with its physical and social environment, as expressed in yearly report or separate social reports (Hackston & Milne, 1996). The reporting incorporates subtle elements of the physical environment, vitality, human asset, items and group contribution matters.

The beginning of this reporting came across in 1970s. The reporting was identified with the social and natural parts of business, which got significant scholarly and administrative interest (Kolk, 2005). In the late 1980s, writing about non-monetary reporting came into practice again with an attention on environment

issues by Eastman Kodak and Norsk Hydro which both distributed a domain report in 1989. This reporting system shows increase from 13% in 1993 until 41% in 2005 (Kolk, 2005). Japan has the highest score in practicing the sustainability reporting. Besides that, Australia, Canada, Germany, France and South Africa have shown interest on growth in the development in adopting sustainability reporting. In the year of 1999 the first Global Reporting Initiative (GRI) has been set and present with the complete reporting guideline. In the year of 2015 it's more than 7148 organization all around the world practicing the corporate social responsibility and sustainability reports based on the GRI guideline.

The GRI gives data about how associations direct their business in the setting of manageability improvement particularly on the environmental change issues. The speculators and partners urging organizations to distinguish evaluate and report freely on the money related ramifications of environmental change in the business. This is obvious in various gatherings and activities, for instance the Carbon Disclosure Project (CDP) and Institutional Investor Group on Climate Change (IIGCC), the UN and Coalition for Environmentally Responsible Economies (CERES) Investor Network on Climate Risk (INCR), the Global Framework for Climate Risk Disclosure, and activities of the World Economic Forum (WEF) (Vijn et al., 2007). The GRI plays greater role to enhance the organizations reputation and brand equity.

In this manner, there are likewise developing budgetary ramifications for organizations from new regulations and markets intended to react to environmental