Sustainable Development & Good Governance

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Abstract

The paper explores two concepts that are gaining prominence around the world: Sustainable Development (SD) and Good Governance. The paper provides a literature review on both of the two concepts and their histories. The two are then related to each other in order to explore the interrelation and integration between the two concepts. It is determined that achieving SD requires Good governance, and achieving Good Governance requires SD. This is studied using Heliopolis University for Sustainable Development as a case study in which a sample of 100 (n = 100) from both administrative and academic staff members, responded to a questionnaire on the topics of SD and Good Governance. The results showed a strong relationship between the various concepts and variables of Good Governance measured and between the applications of SD concepts. The significance of the study is that, while there is a significant research and study on the topics of SD and Good Governance, little focus has been placed on the intersection between these two critical fields. Furthermore, this study provides empirical evidence for the connect as well as the implications Good Governance has on the success of the institutionalization of SD.

Keywords: Sustainable Development; Good Governance; Corporate Governance; Millennium Development Goals MDGs

1. Introduction

Sustainable Development (SD) remains one of the most important concepts established in recent memory, as its applications and relevance stretches far beyond the eco-centric approach that is commonly attributed to it. SD continues to be integrated into more and more fields previously assumed to be irrelevant or incompatible with the ideas and pillars of SD.

It is within this concept and this understanding that new interdisciplinary approaches be taken, with SD at its core and center. This paper will serve in this direction as providing a framework and understanding of Good Governance as it relates to SD.

2. Literature Review

2.1 Sustainable Development (SD)
2.1.1 What is Sustainable Development?

Sustainable Development is a concept that has been developed, shaped, and transformed over the decades, however it reached a level of particular importance and relevance in 1983 when an urgent call from the secretary general of the United Nations

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was sent to the former prime minister of Norway, Gro Harlem Brundtland, to found and head an independent committee to formulate a long-term strategy to achieve SD by the end of the twentieth century and beyond (WCED, 1987). This committee had been working hard for four years when they finally submitted their report in 1987 entitled Our Common Future. Hence, they launched the widespread (and frequently cited) definition of Sustainable Development: "*Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*"(WCED, 1987). The two main dimensions of the definition are the limited resources available for addressing needs, and the increasing needs that must be fulfilled. In this realm of understanding, we must develop while addressing the current state of limited resources that will only become scarcer in the future.

The only aspect that was made clear in this vague definition is the focus on an intergenerational approach to development. This a kind of creative ambiguity for all environmental and developmental programs, governments, NGOs, local, global institutions, civil society organizations, and industries to understand SD in their own way as well as to redefine it according to their own unique needs and circumstances. Accordingly that gave them opportunity to express their interests, expectations, and ambitions(Kates, Parris, & Leiserowitz, 2005).

The concept has continued to develop ever since the Stockholm Conference on the Human Environment in 1972 in which the struggle between the desire for development and the desire for environmental protection appeared in prominence(Kates et al., 2005). This struggle and conflict were made clear in the section of the principles in this report, *"The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate"* (p. 4). There is a significant similarity between this perspective towards the intergenerational equity in terms of the natural resources, and between Brundtland's definition.

The scarcity of the resources, their increasing demand, and the conservation of the environment to be sustained for the coming generations necessitates the careful management of natural resources. All the stakeholders of the development process have to be aware of such challenges.

The 1992 UN Conference on Environment and Development in Rio de Janeiro promoted the call for global partnership for sustainable Development. Humanity is facing a critical moment of inequality (both among and within the countries) and the continuous deterioration of ecosystems which are the main source for our basic needs. Thus, in our journey of development, the fulfillment of the basic needs and raising the standard of living, and the protection of the ecosystems must have the priority to ensure a harmless and flourishing future. Undoubtedly, all these targets can't be achieved by only one nation, this is the time for the global partnership to achieve Sustainable Development (UNCED, 1992).

One of the results of this summit was the establishment of the Commission on Sustainable Development (CSD) and the Agenda 21 program. This commission founded many programs related to SD like *"Promoting Sustainable Development through trade Basis for action"*. This program ensured an equal distribution of the global production and non-

discrimination, as well as foreseeable and multidimensional trading systems which harmonize within the goals of Sustainable Development (UNCED, 1992).

2.1.2 What is to be sustained and what is to be developed?

This relationship between development and environment was emphasized clearly in the report of the National Academy of Science entitled Our Common Journey(National Research Council, 1999). In this report, they stated that the key to understanding the concept of SD is obvious once we clarify the conflict between the economy and the environment as well as between the present and the future. Thus, the report of the Brundtland Commission was widely accepted because of its emphasis on these relations. Within this general frame, an amazing variety of the groups and institutions have taken the concept and estimated it upon their hopes and aspirations. Accordingly, these varied perspectives towards the concept created four key differences in the approach towards SD. They are as follows:(1) What is to be sustained, (2) What is to be developed, (3) The types of links that that should hold between the entities to be sustained and the entities to be developed, and (4), The extent of the future envision. (National Research Council, 1999)

2.1.2.1 What is to be sustained?

According to (National Research Council, 1999), Three major factors must be sustained: nature, life support systems, and community. Life support systems are the most common emphasis concern. Hence, the life support systems are considered as a vital source of service for the useful life support of humankind. Another intermediate factor subsumed under the life support systems is the classical nature resources: renewable, nonrenewable, flow, or stock. Less emphasis comes on the nature and the assemblage of life forms like species and ecosystems to be sustained. Of course, not just biological species are endangered but also the cultural species. Thus, comes the emphasis on the sustainment for the cultures and communities.

2.1.2.2 What is to be developed?

Furthermore, there are three main distinctive domains to be developed: people, economy, and society (National Research Council, 1999). More emphasis comes to the economy as it facilitates the life of the human to be developed, provide jobs and wealth, as well as maintain the sufficient resources and investments to look after the environment. The people's development comes in terms of quality of life, education, and well-being. Finally, the broader conception of society was discussed to be developed by emphasizing the comfort and security of regions and states adding to more recently, calling for the social capital.

2.1.2.3 The Links Between

The links between what is to be sustained and what is to be developed is considered the core of the concept of SD. One of the strong connections was mentioned by the US presidential council on SD, as they believe in the mutually strong connection between the economic growth and the environmental protection and social equity. It saw the operational interconnection between what is to be sustained, namely the

environment, and what is to be developed, namely the economy and the society (National Research Council, 1999). This considered only as one of the perspectives towards the linkage between what is to be sustained and what is to be developed. However, some others' views emphasize more on what is to be developed and pay less attention to what is to be sustained and vice-versa.

It can thus be inferred and understood that at the heart of SD is both a conflict and a harmony. The conflict comes in the form of the intended outcomes and expectations of the concept. On the one hand is prosperity, development, material wealth, etc., while on the other hand there is conservation, sustainability, spirituality, etc. It is, perhaps, for this reason that SD remains more of a dream than a reality. SD is inherently contradictory and paradoxical (Ramirez, 2012), yet it may be the only true approach to building a better future.

2.1.2.4 For How Long?

A pure consensus initiated that SD is meaningful only when it is targeting the intergenerational goals. The word sustain in SD refers to turning development in a never-ending process of improvement and change. The challenge is how, and to what extent, we sustain versus what we consume for the sake of development. This is the core of the concept that is being tackled now and this ambiguity is considered as a positive point to remain the discussions and the arguments to reach the optimum understanding of the concept.

2.2 UN Millennium Declaration

The twenty first century was started with an exceptional declaration for the international cooperation towards the eradication of the world poverty. In the year 2000, more than 189 of the head of states gathered in the United Nations for adopting the millennium declaration. This declaration encouraged countries, both developed and developing, to do their best to eradicate poverty, promote human dignity, adding to achieve peace, democracy, and environmental sustainability. The Millennium Developments Goals (MDGs) are a group of precise, quantified, and time-bound targets on the addressing various factors of human development such as: income, poverty, hunger, health, education, gender equality, and environmental sustainability (Ghaus-Pasha, 2007).

2.3 Sustainable Development Goals (SDGs)

The heads of the states and government from all over the world gathered at the United Nations Headquarter in New York from the 25th to the 27th of September during the celebration of the seventieth anniversary of the UN where they agreed on new global SDGs. They decided to take a historic decision to assure that human beings would, through wide spread, far-reaching and ambitious goals, be able to live away from the extreme poverty which is the greatest universal challenge for any attempts at development (Assembly & Goals, 2015). These goals, which are known as Sustainable Development Goals (SDGs) were built upon the achievements of the MDGs, which were mentioned in the previous section. These goals were defined during this summit with time-bound sub-targets and indicators to be achieved by 2030.

The SDGs are comprehensive and people centered.They are integrated, undividable, and keep the balance between the three main pillars of Sustainable Development: economy, society and ecology. These ambitious goals will develop actions within the next 15 years in the critical areas facing humanity with a focus on the following:

2.3.1 People

Assuring the quality of education for all the humans, decreasing inequality and discrimination, ending poverty and hunger, and providing healthy conditions are main goals that reflect the vision of people-centered approach that the goals are targeting.

2.3.2 Planet

As the widespread definition of SD that was mentioned in Brundtland's report emphasized the right of the next generations to develop and have the natural resources as we have it now, this concept of protecting the earth to the next generations was strongly mentioned in many goals such as goal numbers 12, 13, 14, & 15. These specific goals emphasize on the sustainable consumption and how we have to be aware of the scarcity of the natural resources, how to protect the biodiversity on land and in water, and finally take serious actions towards the global warming and climate change.

2.3.3 Prosperity

Goals 6, 7, 8, & 9 emphasize on guaranteeing the wellbeing and prosperous conditions of humans within the harmony between the aspects of prosperity and environmental protection. This is mainly in terms of clean energy, which is considered a main pillar for development that has no impact on the environment.

2.3.4 Peace

There is little doubt that peace and a safe atmosphere are crucial for sustainable development. There is no SD in communities that have a lack of equality and justice, and there is no SD in world that the fear of war is existed. As such, peace and SD are inextricably linked.

2.3.5 Partnership

No one can deny the crucial need for global collaboration to achieve these goals. No single country can work individually on such multidisciplinary and interconnected goals. The need for global cooperation between the developed and the developing countries to build up the universal solidarity is a must for the achievement of these ambitious goals (Assembly & Goals, 2015).

Table 1: Millennium Development Goals & Targets

Goals	Targets
Eradicate Extreme Poverty and Hunger	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day. Halve, between 1990 and 2015, the proportion of people who suffer from hunger.
Achieve Universal Primary Education	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
Promote Gender Equality and Empower Women	Eliminate gender disparity in primary and secondary education, preferable by 2005 and at all levels of education no later than 2015.

Reduce Child Mortality	Reduce by half, between 1990 and 2015, the under-5 mortality rate.
Improve Maternal Health	Reduce by three-quarters, between 1990 and 2015, the maternal mortality rate
Combat HIV/AIDS, Malaria & Other Diseases	Have halted and begun to reverse the spread of HIV/AIDS by 2015. Have halted and begun to reverse the incidence of malaria and other major diseases by 2015
Ensure Environmental Sustainability	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water. Achieve a significant improvement in the lives of at least 100 million slum dwellers by 2020.
Develop a Global Partnership for Development	Further develop an open, rule-based, predictable, nondiscriminatory trading and financial system (including a commitment to good governance, development and poverty reduction) both nationally and internationally. Address the special needs of the least developed countries through measures including tariff-and-quota free access for exports, an enhanced programme of debt relief and a cancellation of official bilateral debt, and more generous official development assistance for countries committed to poverty reduction. Address special needs of land-locked countries and small islands developing states. Deal comprehensively with the debt problem of developing countries through national and international measures in order to make debt sustainable in the long term. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries. In cooperation with the private sector, make available the benefits of new technologies, especially information and communication technologies.

Source: Adapted from(Ghaus-Pasha, 2007)

2.4 What is Good Governance?
2.4.1 Governance

The concept of governance can be mentioned as corporate governance, national governance, international governance, and local governance (Madhu, 2005). Goal no. 16 confirmed the importance of the strong institutions that are the assurance of the real implementation of these goals on the ground. As it is stated in the indicator no. 5 of the 10 indicators, this guarantees the effective implementation and represents one of the main characteristics of the strong institutions. This indicator confirmed the importance of fighting corruption and how this is the key element of solid institutions that will support all the other goals to be accomplished. To go more in detail, we will first seek the different definitions of the governance and good governance.

The concept of governance and good governance have become increasingly employed and spread utilized in the last two decades(EDRC, 2007). In recent times, the expressions 'governance' and 'good governance' are being more and more utilized in development literature. As the concept of governance is as old as the initial human civilization and was one of the main pillars that these civilizations were built on. Governance is defined as *"the process of decision-making and the process by which decisions are implemented (or not implemented)"* (Madhu, 2005). Governance was also defined in the report of the commission on global Governance as:

"The sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and co-operative action may be taken. It includes formal institutions and regimes

empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest"(Madhu, 2005).

This holistic definition makes a more noticeable emphasis on the ways that was agreed upon to be the mean of enforcement compliance. In this regard, we notice that governance is different from government as they are totally different. The way that the government works and acts is the governance as it was mentioned in this definition. It also emphasizes the diversified approach of governance as it represented in the individual, institutional, and public levels.

In the 1992 report entitle titled Governance and Development(World Bank, 1992)governance is termed by the World Bank as *"the manner in which power is exercised in the management of a country's economic and social resources for development".* Here, we can obviously detect that relation between governance and development and the relation between managing the resources; either it is economic or human resources and the approach to the development (IFAD, 1999).

(Fukuyama, 2013) defined governance as a *"government's ability to make and enforce rules, and to deliver services, regardless of whether that government is democratic or not"*. From this perspective, the concept of good governance emerged and became the approach for the Sustainable Development. The democratic government is the only assurance for the good governance principles. Three main pillars of the good governance were mentioned by the World Bank: the political system, the policy that the country undertakes to manage and manipulate its economy, and the capability of the government to design and implement programs and planes(IFAD, 1999). In this regard, the political system is considered as one of the main components of the good governance as we will see later when we shed light on the codes of good governance.

2.4.2 Good Governance Principles

Good governance was defined in the UNDP (1997)report as *"the exercise of political, economic and administrative authority in the management of a country's affairs at all levels".* Good Governance is a complex process among all the layers of citizens and groups where they have to adopt and mediate their differences and act according to the legal rules and obligations. It is complex as it includes the three dimensions: political, economic, and administrative. It is the best outcome of the minimum input; this is the magic of the administration to make out of the available resources in certain circumstances the best results. This process requires some qualities: it requires promoting the rule of law and this is the part of the executive authority that assures the implementation of laws regardless of any influences, in this regard we go back to the point of democracy and good governance and the emerging need for it; while in the dictatorships we can't assure the rule of law(UNDP, 1997).

Participatory, transparency, and accountability are considered as the attributes of good governance. The state alone can't assure the effective implementation of all these requirements. In this regard, civil society and the private sector have an enormous role to support the state government. Promoting such participatory relation between the three major players in good governance (the government, private sector, and civil society) is a must for good governance. Each partner has strengths and weaknesses and the participatory approach helps to manipulate and organize all these strengths to build such

co-operation between the three major dimension of good governance, political, economic, and social (UNDP, 1997).

The Cotonou Partnership Agreement between Africa and the European countries defines good governance in article 9.3 as:

"The transparent and accountable management of human,natural, economic and financial resources for the purposes ofequitable and sustainable development, in the context of apolitical and institutional environment that upholds humanrights, democratic principles and the rule of law". (EC, 2004)

The emphasis of good governance as a tool to achieve SD is clear within this all-inclusive definition of good governance. Good governance has 8 major characteristics according to (Madhu, 2005). These 8 attributes will be explained in detail hereunder:

2.4.2.1 Participation

Direct and indirect participation from all sides is essential for good governance. This participation would be facilitated by freedom and by forming associations as well as through freedom of expression.

2.4.2.2 Rule of Law

Just and legal framework is obligation to the rule of law which insures the fair implementation of the law. The uncorrupted police and the fair judiciary system are a must for the rule of law.

2.4.2.3 Transparency

Those who are affected by such decision need the entire information about the decisions making process and the justification of these decisions. The availability of the information for those who will be affected is necessary to ensure transparency. Enough information away of ambiguity should be provided to the media.

2.4.2.4 Responsiveness

To obtain a reply within a reasonable time bound framework to all stakeholders is necessary for the good governance.

2.4.2.5 Consensus Oriented

Within the historical and cultural context, a broad consensus for the setting the priorities among the different stake holders of the society is essential for good governance.

2.4.2.6 Accountability

In short, the institutions and the organizations are accountable to those who are affected by their decisions. This accountability is nothing without the transparency and the rule of law.

2.4.2.7 Equity and Inclusiveness

Any kind of discrimination or feeling of excluded from the society activities will not assure the good governance. All groups of the society must have the opportunities to

learn, improve and act to develop their wellbeing.

2.4.2.8 Effectiveness and Efficiency

With limited resources and increasingly needs good governance should ensure the effective use of these scarce resources to fulfill the needs for the sustainable development. In the same time guarantee the conserving of the environment for the next generation.

3. Good Governance and SDGs

3.1 Good Governance and Ending Poverty

Ending poverty is considered the main goal from the SDGs. Most of the others goals depend on the elimination of poverty like zero hunger, good health and wellbeing, clean water and sanitation, and decent work and economic growth. Ending poverty and insuring the economic growth will provide decent jobs to people. The dilemma is how to build the strong institutions that will manage the limited resources and use it to fulfill the needs of the society members.(Durnev & Kim, 2007) confirmed, through their empirical study, the importance of good governance to promote welfare for the society when the resources are too scarce to meet the minimum expectations of the people.

Recently a broad consensus is emerging that a set of clear policies and strong institutions is essential and inevitable to the development process. To reach the optimum and effective development, which is sustainable development, most of the governments and institutions developed good governance practices to be embedded into their daily operations (IFAD, 1999).

The concept of good governance covers three of the four dimensions of sustainable development. The economic dimension emphasizes the capabilities and the effectiveness of the governments to manage the limited resources to fulfill their minimum expectations. This requires transparency and accountability for managing natural resources and protecting the environment within the private and public-sector activities. The social dimension ensures the inclusion of all the groups within society to act and work without discrimination and promote tolerance towards society. The political dimension denotes the lawfulness of the government and the accountability of the political elements of government and respect for the human rights and the rule of law(EDRC, 2007).

3.2 Zero Hunger

The goal no. 2 Zero hunger, the hunger is related to the economic growth and the availability of resources and the way of managing these resources. The accountability as a main principle of good governance assures that the government is obligated to present to the people the justifications of all the decisions that they undertake if these decisions are connected to their interests. This accountability will assure the fair distribution of the natural resources and will reduce the corruption. Kaufmann, Kraay, & Mastruzzi (2004)demonstrated the causality between good governance and economic growth. This implies that good governance indicates to the higher growth but not vice versa (Kaufmann et al., 2004).

How can we achieve goal no. 10 to reduce inequalities without the inclusion of all the groups in the society to develop and improve their conditions to reach the welfare? The fair opportunities for all the components of the society assure to reduce inequalities in all levels and domains. This inclusion is main principle of the good governance as mentioned above.

In short, good governance is essential for SDas the solid democratic institutions and the clear polices will react positively to the needs of the under privileged groups within the society as they are the target of all the SDGs. These polices will assure sufficient infrastructure which is the basis for all the economic activities that will be managed fairly according to the accountability, the transparency and the rule of law approaches.

4. Case Study

The objective of this study is to explore the link between corporate governance and sustainable development. as both concepts have taken a remarkable attention along the various global public discourse. As better university reflects a better society, the case study was tackled in this study.

Heliopolis University for Sustainable Development is the first non-profit university in the Middle East declaring sustainable development as its overall guiding principle, as a model of embedding Sustainable Development into Higher Education in Egypt(El Bedawy, 2014).

Under SEKEM initiative, which has been working in the field of sustainable development of people, society, and earth in Egypt since 1977, Heliopolis University for Sustainable Development (HU) was founded in October 2012, welcoming its first students in the areas of Pharmacy, Engineering, and Business Administration& Economics.

HU is considered the first non-profit university in the Middle East that has declared sustainable development as its overall main principle.

Prof. Dr. Ibrahim Abouleish, who founded this initiative, received the Right Livelihood Award for his work in 2003 and he has been acknowledged as an "Outstanding Social Entrepreneur" by the Schwab Foundation. Moreover, he received in 2008 the Order of Merit of the Federal Republic of Germany, adding to be honored in 2012 with the "Business for Peace Award" given to particularly business-worthy companies by the committee of Nobel laureates. All of which, it reflects the founder's orientation and ideology toward Sustainable Development(El Bedawy, 2014).

Moreover, The Heliopolis Academy HA is the research center of the Heliopolis University as it serves as a center for innovative and applied research in fields directly relevant for sustainable development. covering various disciplines such as Medicine; Pharmacy; Bio-dynamic Agriculture; Sustainable Economics; Social Sciences; Community Development and Arts (EL Bedawy, 2014; HU 2019).

Heliopolis University for Sustainable Development (HU)'s Vision and Mission striving to enhance   and support the sustainable development of individuals, communities, and nature in Egypt and the world, all of which requiring to provide a high-quality educational and research experience in which students can develop both personally and intellectually to gain a broad understanding of sustainable development

to be the champions of sustainable development, adding to incorporate the main principles of corporate governance.

The management of Heliopolis University for Sustainable Development (HU) has been also rationalized on basic 'Corporate Governance Principles' that will be highlighted as a representative model of both good corporate governance and sustainable development.

A survey was used to identify the perceptions of various stakeholders at Heliopolis University on whether there is a relationship between good corporate governance and sustainable development.

This study will provoke the perceptions of various stakeholder groups in Heliopolis University including both the administrative and academic staff members on the relationship between Corporate Governance and Sustainable Development in the university. Moreover, the study will explore the challenges to incorporate both concepts of good corporate governance and sustainable development in Heliopolis University.

5. Methodology

The methodology for conducting the case study was through an empirical analysis of the situation in Heliopolis University by measuring the attitudes of staff working in the university towards various aspects of sustainability and good corporate governance. The independent variables (IV) thus measured were related to corporate governance and are as follows: Transparency (IV1), Participation (IV2), and Equity& Inclusivity (IV3). The dependent variable (DV) measured was sustainable development practices (DV1).

A questionnaire was developed in order to measure the variables with each question using a Likert 5-point scale for measurement. The questionnaire was developed using Google Forms and was locked to only allowed members of HU from responding to the survey. The data was gathered through the use of a questionnaire which was distributed to all university staff through their email addresses.

The study used a single cross-sectional analysis of Out of the 270 members of Heliopolis University with a corporate email address, 100 responses were received (n = 100) representing a 37.04% valid response rate.

6. Analysis

The analysis if the results was conducted using a series of techniques starting with a Factor Analysis through the use of a Principles Component Analysis (PCA) and a test of reliability through the Cronbach's Alpha. The results can be seen inTable 2:

Table 2: Factor Analysis Through PCA (Varimax Rotation)

| Item | Factor | | | | Reliability |
	IV3	DV1	IV1	IV2	Cronbach's Alpha
IV3_2	0.85				
IV3_1	0.78				
IV3_5	0.70				0.90
IV3_4	0.48				
IV3_5	0.45				

DV1_2	0.86		
DV1_3	0.69		
DV1_1	0.66		0.88
DV1_5	0.58		
DV1_6	0.30		
DV1_4	0.21		
IV1_2		0.54	
IV1_1		0.52	
IV1_5		0.47	0.91
IV1_6		0.43	
IV1_4		0.41	
IV1_3		0.27	
IV2_4			0.66
IV2_2			0.61
IV2_5			0.43 0.89
IV2_1			0.25
IV2_3			0.07

As it can be seen from the previous, table, the results of the PCA show generally satisfactory validity of the model with the values of items in the questionnaire all greater than 0.2 with the exception of IV2_3. Furthermore, the reliability of the questionnaire is quite high with the Cronbach's Alpha reaching values ranging from 0.88 to 0.91, well above the typical reliability threshold of 0.7.

This is further confirmed by the Parallel Analysis Scree Plot which was conducted (see: Figure 1). Through this analysis, it can be seen that the number of factors suggested by the model (i.e. 3 IVs and 1 DV) is confirmed by the Parallel Analysis as the eigenvalue of the components and the factors both approach 1 when introducing 4 factors or components to the model.
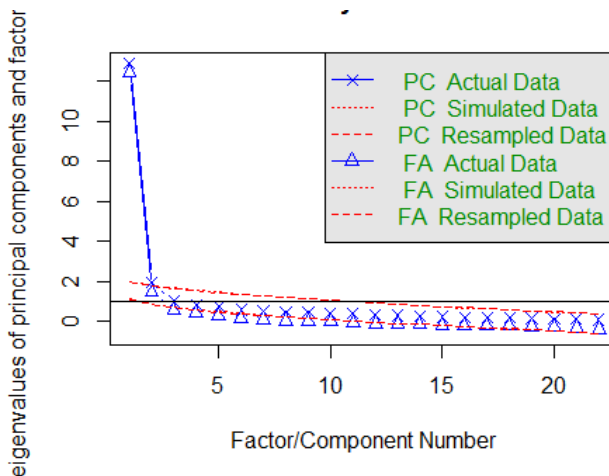

Figure 1: Parallel Analysis Scree Plot

After concluding the validity and reliability of the data collection tools and the data collected, a correlation analysis was then conducted:

Table 3: Pearson's Correlation Matrix of the Variables

	IV1	IV2	IV3	DV1
IV1	-	-	-	-
IV2	0.83**	-	-	
IV3	0.86**	0.86**	-	-
DV1	0.82**	0.75**	0.74**	-

*Significant at P<0.05, ** Significant at P<0.01

As it can be seen from

Table 3, all of the IVs have a strong correlation with the DV and this correlation is statistically significant (P<0.0). Furthermore, the correlation coefficient is greater than 0.7 for all of the correlations indicating a very strong relationship between the different variables.

Finally, a step-wise regression model was conducted to determine the final mode for the relationship between the variables. The results can be seen in Table 4.

As it can be seen in the table, there is a strong relationship between IV1 & IV2 using the multiple regression model. However, as a result of the step-wise regression, IV3 was excluded from the regression model. The final resulting model suggests the following equation which can explain up to 68% of the DV:

$$1.22 + 0.55 IV1 + 0.20 IV2 = DV1$$

Table 4: Step-Wise Regression of the Model

Coefficient	β	Std. Error	t-Value	p-value	Adjusted r^2
Intercept	1.22	0.20	6.06	0.00	
IV1	0.55	0.09	6.08	0.00	0.68
IV2	0.20	0.09	2.20	0.03	

7. Discussion & Conclusion

From the previous study, it can be determined that there is a highly significant and positive relationship between the different elements of good governance and between the application of SD principles within the institution. In fact, it can be extrapolated from this that SD and good governance are two-sides of the same coin.

The interrelation between these two fields are very significant and thus, it is understood that neither can truly be pursued without the other. As, no matter the intention in terms of achieving sustainable development, without good governance in application and practice to assure the results in a fair, equitable, and transparent manner.

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