An Assessment of Sustainable Banking Regulations in Emerging Economies

By

Adeboye Oyegunle

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Declaration

I hereby declare that I am the sole author of this thesis. This thesis consists of material all of which I authored and co-authored. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

The drive for sustainable finance practice is growing globally. This development is being driven by the growing global interest in Environmental and Social Governance (ESG) which has compelled banks to take Environmental and Social (E&S) considerations seriously in their business decisions and relationships with clients. Though this started as voluntary corporate efforts, particularly among leading players in the global financial sector, it soon became popular in leading economies, evolving into collaborations and frameworks that have helped set new standards, codes and legislations. However, this success was not replicated in developing and emerging markets due to several mitigating factors. Interestingly, in the last few years, African, Asian and Latin American financial institutions are beginning to show increasing interest in developing and embedding E&S considerations and governance into their internal system and lending processes. One remarkable deviation here is the involvement of regulators in the design and implementation of ESG standards that drive this process. This is contrary to the voluntary practices that are common among leading economies. This research is focused on assessing the development of this evolving ESG practices, by undertaking an analysis of existing regulations in emerging economies and the role of regulators in the integration of E&S considerations in the banking sector. It also takes a look at the key drivers of the practice, the state of implementation, its strengths and weaknesses, future and if this can be applied to leading global financial systems.

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1.1 Introduction

Part of this introduction section has been published i

Sustainability has been on the fringes of corporate decision making in the financial sector. Although the financial sector had hitherto managed environmental risks in their credit business (Weber, Fenchel and Scholz, 2008) and offered some niche products, such as socially responsible investment funds, banks and other financial institutions did not follow a broader sustainability strategy (Weber, 2014). Generally, banks were not forthcoming on the integration of environmental and social (E&S) risk considerations into their business and relationship with clients. To a certain degree, because of the events of the last decade, especially the global financial economic crisis of 2007-2008, the need to integrate sustainability practices into the financial sector's internal processes has become increasingly important. There was also the need to recognize that the financial sector's business relationships are exposed to environmental and social (E&S) risks (De la Cuesta-Gonzalez et al., 2006, Jo, H., Kim, H., & Park, K., 2014). Despite this need, the sector still sees financial, environmental and social sustainability as separated.

ⁱ Part of this section was culled from Oyegunle, A., & Weber, O. (2015). *Development of sustainability and green banking regulations*— *existing codes and practices* (CIGI Papers Series No. CIGI Paper No. 65). Waterloo, Ontario: CIGI. The paper was published by CIGI in April 2015.

Consequently, the connection between the financial sector and sustainable development — especially the indirect impact of the industry on society and the environment — is often neglected (ibid.). Nevertheless, E&S issues are becoming increasingly important for financial institutions as clients and other stakeholders are subjected to non-financial risk evaluations more than ever before. This development has seen more financial institutions, especially banks, joining in the sustainable development drive while adopting processes, such as sustainability reporting, and complying with best practice standards and codes, such as the Equator Principles (Weber & Acheta, 2014).

The growing adoption of sustainability practices in banks could be assumed to be connected with the strategic roles financial institutions play in the economy of a nation and internationally. It is also concerned with their capacity to foster sustainable development through various initiatives, instead of focusing on niche products and internal activities that reduces direct environmental impacts. Jeucken and Bouma (1999:21) clearly asserted this when they posited that banks, as important intermediaries, hold a unique and central position with respect to sustainable development. According to them, this intermediary role is both "quantitative and qualitative," which duly equip banks "to weigh risks and attach a price to these risks," thereby allowing banks to utilize such "price differentiation" to "foster sustainability." This expatiation on the role of banks highlights banks' capacity to enhance the implementation and integration of E&S values in contemporary business environment and consequently support a transition to a greener economy.

1.2 E&S Governance in Banks

The global environment since the financial crisis has demonstrated that the financial sector has a significant impact on the economy and society, and that an increasing number of financial products

do not serve the real economy. Hence, stakeholders are putting pressure on the financial sector to support environmental policy implementation, sustainable societies and businesses (Coulson, 2009; Dore 2008; Korslund, 2013). The reason for this is simple; individuals and organizations require finance to grow and succeed.

This places significant responsibility on banks to influence corporate environmental discipline through financial policies and guidelines that are beneficial to environmental issues, sustainable development and resources (Chang, Peng and Wang 2008). However, it seems that stakeholder pressure alone is not strong enough to have a significant impact on the financial sector, and that financial regulators have hesitated to integrate sustainability into their financial regulations.

Banks have not shown a big interest in proactive strategies with regard to the environment and sustainability because they consider themselves to be in a more environmentally friendly industry, especially concerning emissions and pollution, when compared to the other sectors (Jo, Kim, & Park, 2014; Bouma and Jeucken; 1999). Put in perspective, banks would rather work in concert with regulatory provisions of a particular industry or country. Key performance indicators of banks, however, are not traditionally designed to monitor environmental, social and governance (ESG) issues connected with financial products and services, but rather the economic performance and the financial risks without concern for the cost to the environment. As noted by A. Kern (2014: 7) "the regulatory framework that governs today's banking system is not being used to its full capacity; with some notable exceptions, systemic environmental risks appear to be in the collective blind spot of bank supervisors." Thus, Kern recommends an integration of environmental and sustainability criteria into banking regulations.

Perhaps due to the lack of respective regulations, despite potential exposure to risk, financial institutions were slow to examine the environmental performance of their clients based on the reasoning that such examination would imply "interference" with a client's activities (Richardson 2002). Events in recent years, however, demonstrate a reversal in this trend (Weber 2012). The last financial crisis revealed the importance of sustainability to the financial sector, as the crisis was linked in part to banks that lacked lending and investment discipline and did not integrate societal problems such as the over-indebtedness of homeowners that was bundled into assetbacked securities products. This, coupled with banks investing in industries linked to climate change and environmental degradation, has also come under criticism, especially from environmental groups and other stakeholders. "These combined forces have led to an emphasis on increased regulation of the banking and financial sector by state and international actors, and an emphasis on recuperation of trust by banks" (Stephens and Skinner 2013, 175-76). Therefore, a recent United Nations Environment Program (UNEP) Inquiry has asked for a solution to the "tragedy of the horizon" (UNEP Inquiry, 2014: IV) by addressing and overcoming the shorttermism of the financial sector and taking into account a longer-term sustainability view.

1.3 The Challenge

In line with these developments, to address the lack of regulatory provisions and the potential effect on the safety of bank funds, the E&S implications of clients' activities, in addition to environmental remediation legislations, banks in developed economies started developing internal voluntary environmental and social initiatives both as response to stakeholders' pressure and the need to protect their business interest (Coulson, 2009). These policies are mainly voluntary self-regulated efforts among individual banks and sometimes a combination of two or more banks (e.g. Equator Principles) to form standards, codes and frameworks that will help introduce, strengthen

and integrate sustainability issues and processes within their function and business activities (Weber and Acheta, 2014). Unfortunately, due to lack of adequate human resources and awareness the same process did not take off in emerging economies. So while a number of voluntary initiatives focusing on the financial sector and the environment such as United Nations Principle for Responsible Investment (UNPRI) and the Equator Principles have evolved in the developed economies (Grigoryeva, Morrison, Mason, and Gardiner, 2007), the same cannot be said of the emerging economies.

Surprisingly, there is a growing trend challenging this approach to sustainable finance management particularly in the banking sector of developing economies of Africa, Asia and Latin America. Towards the end of the last decade, financial institutions in emerging markets began to embrace environmental and social governance into their business decision-making processes. The interesting angle to this development is the fact that while the sustainability drive was led by individual voluntary efforts in Europe and North America with little or no compliance mechanism, regulators are leading the frontline in the formulation of sustainability approaches for the financial and banking sectors in the emerging markets of Africa, Asia, Latin America (UNEP Inquiry, 2015). Hence the questions for this research are —

- Why this new approach to sustainable finance,
- Why is there a need for sustainable finance regulation in the banking sector, and
- What relevance does this hold for the global financial sector?

To address this concern, this thesis will be looking into the existing regulations as led by regulators, banking associations, environment ministries and central banks in emerging markets and how they are taking up environmental responsibilities by establishing sustainable finance policies.

1.4 Significance and Contribution to the Study

This research is of interest as the policies' aim to enhance banks' corporate social and environmental performance, increase their capacity to strengthen the financial system and help support the real economy. It is also changing the outlook in the adoption of sustainable finance practices amongst emerging economies (Cheung, Tan, Ahn, & Zhang, 2010; Hu & Scholtens, 2012). The research is also interested in the involvement of regulators in establishing standards beyond their fiduciary duties and how this is creating a new approach to sustainable finance and standards in the banking sector.

To answer these questions one needs to understand the role banks play in the global economy and how this can influence the implementation of sustainability globally. As noted by Jeucken (2010:2) "the role of banks in the achievement of sustainable development is significant considering the intermediary role they play in the society...if sustainable business is to succeed at the macro level the attitude taken by banks will be critical....this influence is not only quantitative but can be qualitative since banks can influence the nature of economic growth."

In view of the importance of banks and their capacity to drive sustainability through their function, this research will be looking into this evolving phenomenon, its composition, drivers, state of implementation, possible influence on global sustainable finance industry and its future. This is significant as the growing adoption of regulatory-based green guidelines appears to be evolving a new sustainable banking model in developing economies, which may have an impact on future sustainable finance practices.

1.5 Research Questions

This research aims to answer the following questions:

- What are the existing sustainability regulatory policies in the financial sectors?
- Why should regulators be interested in environmental performance of banks and is there a
 need for them to include sustainability into their guidelines?
- What are the key drivers for sustainable banking evolution in emerging economies?
- How are these regulations different from the voluntary policies in developed economies and what impact will they make?
- Are there any lessons to learn in this evolving trend in emerging markets?

1.6 Limitation of the Study

- The main limitation of this research is its evolving nature hence there is a dearth of academic research into its working. Beyond this, there are also some pertinent issues some of which are listed below:
- Knowledge and access to measure the impact of the policies are limited due to little research into the practice.
- Issues with role delineation between banks and regulators in ensuring compliance and effective implementation.
- The continued role of regulators in the sustainable finance regulation development and practices is undetermined considering the prudential roles of the central banks.
- Emerging economies business environment systemic risk, which raises doubt on future practice particularly in the banking system.
- Continuity, adaptability and future impact of the process as most countries are still in the beginning stage hence success cannot be measured.

2 Literature Review

Part of this section has been publishedⁱⁱ

2.1 Introduction

Until recently, most financial institutions, especially banks, were non-committal to incorporating sustainability standards into their business decision processes and client relationship management (Jeucken, 2010). This is because banks perceived environmental and social concerns as secondary to their business, believing that such responsibilities are primarily the role of government (European Commission, 1997; Weber & Acheta, 2014).

Sustainable finance development in the banking sector was fueled by a global drive towards sustainability, the impact of global sustainability codes, increasing stakeholder pressure and the need to protect customers' funds (Mcgeachie, Kiernan, & Kirzner, 2005; OECD, 2010; Stampe, 2014). These factors have contributed to increasing the pressure on banks to incorporate environmental and social risk management into their businesses.

This section was culled from the final accepted manuscript contributed to the <u>Routledge Handbook</u> on <u>Social and Sustainable Finance</u>, Oxford University, England. The paper titled; <u>Evolving Roles of Regulators in the Implementation of ESG in Financial Institutions of Emerging Markets</u> has been peer reviewed, accepted and is currently in print with a proposed launch date of May 2016.

Events in the last few decades have also influenced this change as financial institutions come to realize that their business can be affected by the risks their clients are exposed to. Ultimately, banks are the pillar upon which the economy rests, and every client's decision has an indirect impact that exposes financial institutions to risks that could impact the safety of their funds (Bollard, Hunt, & Hodgetts, 2011). It thus became apparent to banks that they are not totally buffered from the negative impact of externalities, such as climate risks or other factors that could affect their business. This reality is increasingly becoming a source of institutional and regulatory concern as depositor's funds are at risk. In addition, the impact of environmental legislations which make banks liable and obliged to pay remediation costs, exposes them to risk in the event of environmental pollution as a result of third party activities (Wijen, Zoeteman, Pieters, & Seters, 2012).

Due to the potential effect on the safety of bank funds, the environmental and social implications of clients' activities and environmental remediation legislations such as the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) in the United States, banks in developed economies were compelled to develop internal voluntary environmental and social initiatives, codes and governance structures (Azapagic & Perdan, 2000.; UNEP Inquiry, 2014; Wijen et al., 2012). In time, these voluntary individual organizational codes developed into collaborations among leading financial institutions and other organizations, which gave birth to environmental governance frameworks and organizations such as the Equators Principles (EPs) (Oyegunle, A., & Weber, O., 2015; UNEP Inquiry, 2014; Wright, C., & Rwabizambuga, A., 2006).

2.2 Issues and New Development

Though voluntary approaches to sustainability have been relatively successful in driving sustainable finance in Europe, North America and other developed economies (Amalric, 2005), regulatory interests and enforcement has however been low, while the expected role of banks and expectations in this domain has never been clearly defined (Busch, Bauer, & Orlitzky, 2015). Also, there have been past arguments such as the ones postulated by Prakash and Potoski (2006) and noted by Wright (2012) on the effectiveness of collaborative codes such as Equator Principles in evaluating the capacity of "financial institutions to adopt and implement environmental and social commitments that have nontrivial costs and to establish effective mechanisms for monitoring compliance" (Wright, 2012:57).

In fact, Wright (2012:71) asserts that though "high degree of cooperation among financial institutions may facilitate "self-policing" and encourage compliance, (yet) differences in the domestic institutional environments of banks will continue to drive variations in policy commitments." He reasoned that due to these variations in policy commitments by banks, it is increasingly difficult for financial institutions that are signed up to these codes to collectively agree on new compliance and standards. The implication is that self-regulated policies and voluntary codes usually have little impact in ensuring banks' compliance with signed agreements, since they are not liable to disclose their performance due to their non-compelling approach. As noted by Wright (2012:64) while quoting Banktrack (2010), "most financial institutions remain reluctant to disclose project-specific information that is necessary for external actors to hold them accountable for their lending decisions." Hence, banks have never been fully committed to non-regulatory requirement.

Arguing on this, Coulson (2009:153) maintained that bank's management and integration of sustainability is constrained by regulations, which instead of being an enabler sometimes act as hindrance to environmental policy integration. She contended that banks being compelled by regulations to implement environmental policies may not create the desired impact as their "influence" is dwarfed by the fact that banks "are not the only source of corporate finance in the global market place (or even the largest)" (pg. 153). Alluding to (BBA, 1995) and House of Lords (1995), she argued that "on the broader debate on ecological modernization, a bank's degree of influence and regulatory constraints remains a point of contention" (Coulson, 2009:153). In her words, since banking is highly regulated already there is no need for additional environmental regulations that cuts across all banks as any "attempt by banks collectively to control the market (through cut crossing environmental regulations) through coalition could be deemed to breach monopoly or competition regulations" (Coulson, 2009:153). The argument here is that the implementation of an environmental policy that cuts across all financial institutions will amount to implementing a monopoly by banks.

Conversely, Clapp (2005) countered this by asserting that the "most influential motivating factor for corporate organizations (financial institutions inclusive) to develop environmental policies was government-based laws and regulations" (pg. 27). She asserted that since corporates "wish to avoid being held legally or financially liable for damages linked to their operations, they tend to be motivated to act by regulations which set out sanctions for breaches of the law" (Clapp, 2005:27). This argument contradicts Coulson's (2009) and Wright's (2012) views on collective regulatory driven policies and its impact on bank's perception. Also, Bouma and Jeucken (1999), Kern (2014), and UNEP Inquiry (2015) all see environmental regulations adoption as the

alternative for banks against the challenges posed by voluntary approaches in developed countries. This has led to the call for regulatory intervention in financial sectors with respect to environmental and social issues (International Finance Corporation (IFC), 2014; OECD, 2010; UNEP Inquiry, 2015b).

2.3 Evolving Regulatory Approach

This call for regulatory intervention becomes critical considering the fact that financial policy makers rarely incorporate green economy implications on financial performance and accountability while monitoring the efficient functioning of the financial system (UNEP 2014, OECD 2012). This could be explained by the fact that the interpretations of macro-prudential roles do not incorporate sustainability challenges into the assessment and management of systemic risks (UNEP Inquiry, 2014). Stampe (2014) reaffirmed this while arguing that the banking sector needs to significantly change its attitudes and actions to promote more responsible and sustainable business practices. Surprisingly, there is a growing trend in challenging this approach to sustainable finance management among developing economies of Africa, Asia and Latin America (IFC 2015, UNEP 2015).

In recent years, regulators, banking associations, environment ministries and central banks in emerging markets are taking up more environmental responsibilities by establishing sustainable finance policies. This development is aimed at enhancing banks' corporate social and environmental performance, increase their capacity to strengthen the financial system and help enhance the real economy. It is also changing the outlook in the adoption of sustainable finance practices amongst emerging economies (Cheung, Tan, Ahn, & Zhang, 2010; Hu & Scholtens, 2012). The involvement of regulators in this development is a departure from practices in

developed economies and is creating a new approach to the demands of sustainable development and standards in the banking sector.

Contrary to the system in developed economies where financial institutions are leading the charge in their individual capacities, regulators in emerging economies are taking up leading roles in the formulation of sustainability guidelines in the financial and banking sectors (Oyegunle & Weber, 2015). In most of the countries researched, it has been discovered that not only are regulators leading the way, but there is clear evidence of collaborations between banks and regulators. In one of the cases studied by Oyegunle and Weber (2015), the banks themselves invited the Central Bank to lead the process and ensure compliance. More importantly, the practice is gradually becoming a sustainable banking model that is fast growing in emerging markets which is a deviation from the voluntary system being practiced in more developed nations.

This raises questions on the ability of Central Banks and other bodies saddled with regulating the financial industry to combine sustainable finance management with other fiscal and regulatory responsibilities. Considering that this is essentially an unchartered territory, what lessons are there to learn from this evolving process? Could this have an effect on a hitherto untested operational model as regulatory bodies and apex banks take on more responsibilities in driving the establishment of sustainable approach in the financial sector? Or will cross-cutting legislation on the environment be tantamount to monopolistic tendencies as claimed by Coulson (2009)?

2.4 Sustainable Banking Regulations

Since China undertook the first environmental regulatory policy for its financial sector in 2007 (Aizawa & Chaofei, 2010; Bai, Faure, & Liu, 2013), there have been series of developments in which more countries are adopting the process. Between early 2011 and April 2015, 8 additional

countries have adopted sustainable guidance policies for their financial sector. Meanwhile, the two early adopters, China (2007) and Brazil (2008), have also improved on the initial regulations, expanded their frameworks or in the case of Brazil, moved from a voluntary protocol to a more regulatory driven policy.

The interesting observation here is that all countries in this pool are emerging economies, tries implement this practice. These countries with established regulations as presented below will be the focus of this research, below shows countries with established sustainable banking regulations, while Figure 1 shows their spread by region. In addition, there are a number of countries that are currently in the process of developing their own sustainable finance regulations. This list is expected to keep increasing and changing as more developing countries implement this practice. These countries with established regulations as presented below will be the focus of this research.

Table 1: Countries with existing financial sustainability regulations

See below the list of countries with sustainable finance regulations:

Country	Region	Year of adoption
Bangladesh	Asia	2011
Brazil	South America	2008/2009 (2014)
China	Asia	2007 (2014)
Colombia	Latin America	2011
Indonesia	Asia	2015
Kenya	Africa	2015
Mongolia	Asia	2014

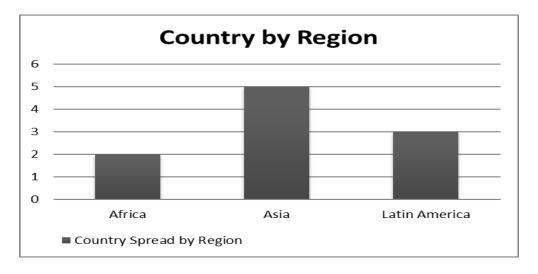
Nigeria	Africa	2011
Peru	Latin America	2015
Vietnam	Asia	2015

Source: Author based on IFC Sustainable Banking Network (See IFC, 2015)

See also, Figure 1 below which represents the spread of countries by region.

Figure 1: Countries by Region

See below the graphical representation of the countries by region:



Source: Author

2.5 Institutional Theory

I will be employing institutional theory to assess the phenomenon I am researching and derive conclusions. Institutional theory is based on organizational alignment with social behaviors and structures. The survival of organizations is based on its ability to conform to the social rules and belief systems in its operating environment (Scott 1995, DiMaggio and Powell, 1983, Meyer and Rowan, 1977). According to Johnson (2009:56) "The concept of institution is central to institutional theory". Hence, institution has been defined as "a cognitive, normative or regulatory

structure or activity that provides stability and meaning for social behavior" (Scott 1995: 34). In explaining this, he noted the three pillars of regulative, normative and cognitive elements as being core to his definition. The regulatory institutional pillar is based on instructions and rules that help shape institutional behavior. According to Scott (1995:37) normative rules "place prescriptive, evaluative and obligatory dimensions on social life," wherein social pressure or obligations is exerted. While the cognitive approach is concerned with "rules that constitute the nature of reality and the frames through which meaning is made" (Scott 1995: 40). As noted by Johnson (2009:56) the "idea here is that organizations should look and behave like other similar types of organizations".

The interrelatedness of the respective policies development processes and regulatory focus also aligns with the concept of organizational isomorphism as postulated by Di Maggio and Powell (1983). This is relevant to this study as the development of sustainable finance regulations in this research are in response to evolving industry norms and standards and lies within the three isomorphic processes of coercive, normative and mimetic isomorphism. As noted by Caemmerer and Marck (2009), coercive isomorphism relates to response to pressures from other organizations in which they are dependent upon such as regulatory bodies, normative isomorphism refers to organizational change being response to exchange with peer institutions, while mimetic isomorphism occurs when organizations tries to mimic the performance, structures and practices of other organizations.

Situating this research within the institutional theory therefore strengthens our research findings and affirms Tavallaei and Abu Talib (2010: 572) stance while quoting Anfara & Mertz (2006) that employing specific theories in a qualitative research helps relate "the researcher's chosen

methodology and the epistemologies underlying it". Hence, institutional theory will be utilized to create "an organized body of concepts and principles intended to explain a particular phenomenon" (Leedy and Ormrod, 2005:4) such as the evolving regulatory process within the banking sector. This will enable me situate the phenomenon within the context of this research, and also help explain the "how" and "why" (Johnson & Christensen, 2007:7) this process is evolving in emerging markets.

2.6 Stakeholder and Institutional Influence in Research

As highlighted earlier, growing stakeholders' pressure, social pressure and need for accountability led to the development of internal voluntary environmental and social initiatives, codes and governance structures particularly in developed countries, as businesses respond to emerging environmental issues (Azapagic and Perdan, 2000). In time, these individual codes developed into collaborations among leading financial institutions and other organizations which gave birth to environmental governance frameworks and organizations such as Equators Principles (EPs), Carbon Disclosure Project (CDP), Investment Network on Climate Risk (INCR). These frameworks helped develop standards for specific sustainability purposes. As noted by Kirton and Trebilcock (2004), these have the potential in some sense to 'serve as equivalents' to legislation, government law and regulation thus providing a platform for "voluntary multi-stakeholder standards systems developed as a response to perceived market or government failures to effectively deliver on an ethical outcome" (ISEAL, 2008: 8).

Thistlethwaite (2013) argued that this private environmental structure governance involves collaboration among non-state actors through the development of standards that go beyond addressing gaps in existing state-based regulations in an effort to "authoritatively steer constituents"

towards public goals" (Andonova et al, 2009: 53). It should be noted that the distinctive quality of these arrangements is a set of voluntary principles, norms, rules and decision-making procedures that steer the behavior of a targeted constituency, but do not derive authority from sovereign states (Thistlethwaite (2013) quoting Cutler, Haufler, and Porter 1999; Bernstein and Cashore, 2007).

This change led to greater consideration of the environmental and social responsibility of firms (such as corporate behavior), which has influenced the growth of ESG in banks (Hawley and Williams, 2005). On an individual basis, these standards soon evolved into the establishment of standards and codes to guide banks through the life-cycle of the transaction and credit process with far-reaching implications on respective bank's internal activities, governance, products, processes and business decision making. This also has a relative influence on their lending decisions depending on the bank's level of compliance and commitment to the process.

The above scenario laid the foundation for the establishment of E&S considerations in financial sector. The implication of this was noted by the European Commission (1997: i) as "financial institutions which assume the risk of companies and plants can exercise considerable influence - in some cases control - over investment and management decisions which could be brought into play for the benefit of the environment". It is this capacity for influence that led to the development of new standards for the embedding of sustainable and E&S standards into business process with implications for sustainable finance.

2.7 Literature Gap and Conceptual Framework

Adopting a constructivism position on E&S consideration this research will be exploring the evolving phenomenon in developing economies of Africa, Asia and Latin America where there is a fast growing adoption of regulatory driven sustainable finance approach in the financial industry

especially banks. The research will take the form of an exploratory narrative while analyzing its data and trying to understanding this evolving trend in sustainable finance. The process of research will involve utilizing emerging questions and procedures, (Creswell, 2014) while analyzing data collected inductively building from particulars to general themes. The goal is to produce an inductive style research with a focus on individual meaning, and the importance of rendering the complexity of a situation (Creswell 2014).

By applying a constructivist approach to my research, specifically social constructivism, I will be focusing on the concept that individuals seek to understand the world in which they live and work. This is relevant to this research as individuals continually seek to develop subjective meanings of their experiences (Creswell, 2014). The goal of my research applies to this as I will be relying as much as possible on country specific experiences which will be empirically sited to determine the level of adoption and drivers of the process at respective country level. This approach is very relevant to my research as my interest in the field was buoyed by my experience in implementing sustainability regulations in the financial sector of an emerging economy and interest in understanding the evolving governance system to the banking system.

Despite the evolving nature of this process and system, there are however gaps within the literature which this research intends to address. This was observed by the UNEP Inquiry (2015:6) when it identified that there is a "growing number of sustainability innovations in financial policy, regulation and standards. But their potential for scale and efficiency remains poorly understood. In their current form, many are ad hoc measures that are not integrated into the overall financial and capital markets. Many have only recently been enacted, so that their impacts remain untested and their prospects uncertain. The transferability of innovations is also unclear".

As noted by Kern (2014:24), many central banks in the Sustainable Banking Network have developed national approaches that could serve as a model for the G20 and other international bodies to recommend to all countries. This is however limited by the fact that "country-specific approaches may not be wholly transferable". Therefore, the gap here is

- To what extent are these regulations applicable,
- What is the implication of this process, and
- How is this going to impact on existing sustainable finance structure in the near future?

When these observations are placed in contrast to Coulson's (2009) notion as explained above then there is a clear need to understand the implications of these policies, their state of implementation and future prospects.

To address this gap, I will be focusing on reviewing and analyzing the components of existing guidelines across the countries with established sustainable finance regulations with the aim of decoding the components of respective regulations. I will also review individual country's compliance and implementation approach upon which the impact on the E&S process was implemented; while the drivers and modeling of the respective policies shall also be assessed, researched and reported. My hypotheses are derived on these assumptions.

2.8 Hypothesis development

My hypothesis was mainly derived from the organizational literature of stakeholders and institutional theories as earlier espoused in this chapter. Existing literature have largely asserted the need for regulations as earlier highlighted in this paper. However there have not been correlation in terms of the approach to this. Hence, the investigation into this evolving practice

provides an additional point of view to these developing arguments in the area of sustainable finance and E&S adoption in the financial sector, particularly banking.

2.8.1 Hypothesis 1

- The adoption of E&S consideration by banks in emerging markets is being driven largely by stakeholders' interest in the form of the following:
 - o Internal pressure, such as social pressure and environmental pollution
 - External pressure from financial aid institutions such as the Netherlands Development
 Finance Company (FMO) and IFC and
 - o Peer pressure from regional neighbours.

This hypothesis is hinged on the stakeholder institutional theory above. As noted by Kern (2014:24) "successful approaches to sustainable finance generally involve countries developing a strong dialogue between their environmental, the financial ministries and (other stakeholder groups) with respect to systemic environmental risk" and need to get buy-in across board.

2.8.2 Hypothesis 2

• The regulations in the countries of focus are developed on a case-by-case basis.

One key pillar of institutional theory as postulated by Scott (1995) is regulations. This pillar is applied through rules, laws and sanctions (Johnson 2009:56). Wright (2012) and Coulson (2009) were of the opinion that environmental regulations take into consideration the extant laws in the country of operation hence the uniqueness of one policy to another. This thesis expects to find that each country has case specific regulations with little or no similarity in approach with another.

This I expect will be due to several social and environmental factors and individual country's demand and experiences.

2.9 Research Focus

This proposal is a research into the development of sustainability and green banking regulations. This ongoing and evolving process seeks among other goals to explain the evolving approach to sustainable banking particularly in emerging economies. It also seeks to determine if there is need for the same approach for financial and environmental policies in developed economies.

3 Methodology

3.1 Introduction

This study employs a qualitative approach to research the content of sustainable banking regulations as being adopted in some emerging economies. Being an emerging field in sustainable finance, this approach will help explain the phenomenon being researched, while taking its evolving nature into consideration. Qualitative approach was also utilized for this research as it is more suitable for the exploratory nature of the phenomenon being assessed (Morse, 1991).

3.2 Method Used and Data Collection

This research was developed with the goal of analyzing financial sector's sustainability regulations in some emerging economies. It aims among other things to analyze what is obtainable in each country's system, their areas of strength, motivations, and how these policies are implemented. Though the impact of this development in respective countries and for key sectors such as carbon is of key concern, it is mainly beyond the scope of this research as the process is still evolving and this could be an area for further research in the near future.

The research was done through a desk review of existing literature and data. It utilized content analysis for each policy by looking at their composition based on identified indicators as adopted from the Global Reporting Initiative (GRI) financial sector supplement. The content analysis was undertaken to analyze the regulations of the ten identified countries by focusing on the characteristics of language as communication with attention to the content or contextual meaning of the text (McTavish & Pirro, 1990; Tesch, 1990). In doing this, I examined the use of language for classifying large amounts of text into an efficient number of categories that represent similar

meanings (Weber, 1990), this helps in understanding the phenomenon under study (Downe-Wamboldt, 1992) through the decoding of my data.

There were also consultations with some primary actors in some of the countries in practice mainly to cross-check and verify all observations noted. Though no formal interview or survey was conducted, there were email exchanges to obtain data for Kenya. The reason for this was obvious as Kenya just launched its principles and most information and data were not in the public domain. The only available information is the principles as launched in May. The researcher therefore contacted the consultant who helped developed the policy, having worked together on a project before during his time in the banking industry. The consultant is responsible for the development of the process in Kenya. She also served as the technical partner and consultant to the United Nations Environment Protection Finance Initiative (UNEP FI), and German Investment Corporation (DEG) in environmental and social impact assessment and policy implementation across developing countries particularly Africa and some Asian countries.

She provided us with the Sustainable Finance Initiative working paper and the Sustainable Finance Initiative Needs Assessment document for the Kenyan Bankers Association (KBA) as developed for the principles which provided some of the information used for this paper. She also helped gave an insight into the state of implementation of the process. All communications were done through emails and no formal interview was conducted. No other communication was done outside of the ones listed.

3.3 Research Focus and Data Source

This research is focused on existing regulations and guidelines in the banking sector. As noted in the literature review, some developing countries are taking the lead in implementing environmental and social governance (ESG) and risk management systems globally. To address this, the study focuses on reviewing and analyzing the components of existing guidelines across countries with sustainability regulations with the aim of decoding the components of respective regulations. It also reviews individual country's state of implementation.

Our main source of data is the International Finance Corporation, (IFC), a member of the World Bank Group led Sustainable Banking Network (SBN) which provides support for countries in their effort to develop standards, policies and guidelines for sustainable finance in the banking sectors. By August 2015, the SBN consists of 19 member countries that have committed to develop sustainability regulations for their banking sector. Ten of these countries have existing regulations, guidelines, roadmap or commitments for the integration of E&S within the financial sector (SBN 2015). The regulations from these identified countries, form the basis of our data. Extensive literature research has also shown that these 10 countries constitute the totality of countries with existing regulations in the banking sector globally.

3.4 Scope of Research and Analysis

This research utilized descriptive and comparative analysis of each policy. While the descriptive part introduces the content of respective policies, the comparative aspect addresses existing drivers and models in respective countries. The goal here is not to determine which policy is better or more effective, but to understand their composition and determine their main drivers. This paper will also attempt to deductively analyze the goals, coverage, impacts and strengths of sustainable finance policies in individual countries.

This research aims to reinforce the basis for the development of the policies and why it is fast gaining prominence. We are also interested in why these countries are implementing E&S policies

and what the drivers of these are beyond the obvious assumption of adopting a sustainable policy for the financial sector. Through this, we help deduce if there are any new developments in the implementation of the policies' and the level of progress that has been made at individual country level.

We will also look into content of the policies concerning the three main aspects of sustainability (i.e. environmental, social and economic) to determine the area of focus and strength of respective policies. Certain patterns and similarities here will help determine if countries with similar focus and strengths have same interests and goals. It will also help us determine the motive for the implementation of such policies either for economic gain, environmental protection, regulatory or social purposes. Through these findings, we will be able to create a basis for the validity of our assumption for the drivers of the process. We also discussed the adoptability of this process in developed economies and for the development of global sustainable finance best practices that is regulatory driven.

The focus of this research is on countries with existing sustainability policies that is backed by national legislation, financial industry guidelines, policies or regulation, financial sector's member associations' commitment or recognized by a country's legal framework. This clarification is necessary as this research is aware of existing guidelines in countries such as Turkey, Lebanon and other parts of the world which are either formulated by banks or are standalone agreements without necessary regulatory backing or banks' leadership commitment to its implementation.

There is also need to clarify that this research covers only existing sustainable finance guidelines with regards to banking operations and financial institutions' credit, social and environmental management and governance. Hence, the consideration of policies guiding sustainable finance

instruments such as green bonds and capital market indexes are beyond our scope. To arrive at our conclusions, it suffices to undertake a comparative analysis of these policies so we can understand what each policy constitutes beyond the observations and comparison noted above. Through this, we intend to determine what similarities and differences exist between respective policies. We will also provide insights into what each policy encompasses in terms of content, with a view to giving an insight into their respective implementation process.

3.5 Descriptive Results Summary

One of the approaches employed in the analysis of the respective regulations is the use of a descriptive table to assess the policies. Table 2 below gives a summarized description of the main headings in our analysis and what each section aims to describe. The table has the following headings: Name of policy, applicability, main mission and goals, drivers, content/focus of the policy, strength, weaknesses and state of implementation. These headings were developed based on the recurring themes across all regulations assessed and to form the basis for the descriptive section of the policies and comparative analysis table. These were developed by the author based on the observed cross-cutting themes of all the policies. The same headings were adopted for both the descriptive table and analysis. The goal here is to maintain a consistent assessment throughout our analysis such that we can have a uniform approach to both the descriptive and comparative parts of the policies.

Table 2: Table of Descriptive Results Summary

Content	Explanation of Meaning

Name of policy (year)	This section states the name of the policy and the year the policy was launched. It is focused on the latest policy in the country being assessed where this is applicable.	
Applicability Applicability looks into which area of the finance industry the potential to. It is interested in the sector that is required to comply with or the guidelines as developed? This segment is also interested in the has the highest authority for implementing the policy.		
Main mission and goal	Looks into the question of why the country developed the policy and what were the main objectives for this.	
Drivers	The drivers are concerned with the factors that influenced the development of the process, what interest drives the process and if there are external factors and interests that contributed to this?	
Content	This section concentrates on the areas the policy is focused on by looking at the sustainability aspect that interest the policy. It also takes a look into the areas of concerns for the regulators as they develop the policies.	
Strengths	This concentrates on the core advantages of the policy. It looks into areas where the policies leverage its strength from	
Weaknesses	This section is concerned with the weaknesses of the process. Are there an sustainability issue that was ignored based on the parameters highlighted an specified category.	
State of Implementation	This part gives a summarized progress report on the policies by looking at what currently exists and what the plans are for the future. It aims to determine if the policy is being implemented at present, its current status and state of implementation. It also considers the milestones to be achieved or	

termination dates for the implementation of the policy and if these have been adhered to.

The structure as explained in the table above will be used to analyze the respective policies as developed in this research. It will also be used to describe the individual table of description.

3.6 Policies' Categorization and Analysis

Having highlighted the structure and focus of the respective policies, they were further categorized to help us determine their content in terms of individual relationship to sustainability aspects. This was used to determine their component parts and drivers and also give an in-depth view into their respective contents, while allowing us breakdown the composition of individual regulations in an analytical manner beyond the descriptive analyses already undertaken.

3.6.1 Categorization of Policies

To achieve this, each policy was segmented into three broad sustainability categories namely, economic, social and environment categories. The individual aspects were divided into distinct indicators which are relevant to this research particularly to the financial sector and sustainability in general. The goal of this is to ensure that all sustainability aspects as covered in the respective policies are considered for classification.

As a guide, we utilized the Global Reporting Initiative (GRI) latest G4 Financial Services Sector Disclosure document, to determine and help provide guidance on the choice of indicators to be applied. These indicators were modified to suit the topics addressed by the policies being analyzed and to cover a broader range of expectations. The indicators were selected based on general sustainability classifications of environment, social and economic criteria. The individual aspects were then divided into different indicators for identification and assessment purposes. This process

is expatiated below. Also, each of the countries name were abbreviated to fit into the tables for analysis purposes. So for example Mongolia was represented as Mong, while Nig. was used to represent Nigeria.

3.7 GRI Financial Services Supplement Indicator Modification

According to GRI (2014) the "disclosures cover key aspects of sustainability performance that are meaningful and relevant to the Financial Services sector and which are not sufficiently covered in the G4 Guidelines" (GRI G4 financial Services Supplement, 2013:3). It highlighted the three broad categories of Economic, Social and Environmental aspect which were adopted by this research as the main categories for analysis.

In utilizing these broad categories, the supplement identified various aspects for the respective categories. These are listed below:

3.7.1 **Economic Sustainability Category**

The economic category is made up of the following aspects: Economic Performance, Market Presence, Indirect Economic Impacts, and Procurement Practices

3.7.2 Environment Sustainability Category

This consist of the following: Energy use, water, biodiversity, GHG emissions, effluents and waste, products and services, compliance, transport, overall, supplier environmental assessment and environmental grievance mechanisms.

3.7.3 Social Sustainability Category

This categorization was divided into four sub-categories in GRI G4 which covers labor practices and decent work, human rights, society and product responsibility (GRI G4, 2014). These sub-categories have different aspects considered under them, they were however used as individual standalone aspects by this research as a basis for our social category analysis since breaking them down will not suit the purpose of our analysis.

3.7.4 General Sustainability Category

For the purpose of this research, we also created and captured other sustainability indicators which we termed as general sustainability category. This is made up of issues addressed under policy and governance of respective guidelines. Though they cut across all the policies, they however do not fit into any particular set of categorization mainly because they are regulatory expectations for sustainability processes. These consist of Audit, monitoring, accountability and control, reporting and disclosures, regulatory requirement/input and capacity building.

3.8 Additional Aspects of Sustainability Categorization

Despite the identified aspects above, it will suffice to note that this research is focused on understanding and assessing policies that govern the financial sector sustainable finance activities and not the process of operations of financial services for which the GRI supplement was developed. This clarification is necessary as undertaking such an assessment will be beyond the purview of this research. It also explains why the full adaptation of the GRI G4 disclosure aspects for the purpose of our analysis will not be in tandem with achieving our goals.

This research utilized the subject matters based on the three identified broad categories. It further identified key sustainability issues, which occurred in three or more of the policies discussed in line with our research. For example, it utilized all the sub-categories under social sustainability

categorization, while we included aspects such as emission and pollution under environment.

Aspects such as credit management, financial inclusion and environmental risk management which

were not considered under the GRI supplement economic aspects were also included under the

economic category to give a more representative analysis of the content of the policies.

3.9 **Identification of Aspects in Each Policy**

To determine whether the identified aspects and indicators are present in the respective policies

two approaches were utilized. The first one was to use the Nvivo software to undertake a word

search. In doing this, nodes were created to search individually identified indicators. The software

was then applied to do an automated search for key words and related or similar words in meaning.

The selected words were then manually looked up in the context utilized so as to determine if they

fit into the expected context in the policies.

To double check these and ensure accuracy, a manual search was also used to cross check the

findings and also ensure that no aspect in the document was ignored. To ensure accuracy of this a

series of similar synonyms or related phrases were searched to ensure coverage, while manual

cross-check was done on each policy to double check findings.

For example, we highlighted below a few of the similar words and phrases that were used in our

word search to arrive at our findings based on their contextual relativeness. The following words

were used under the respective highlighted categories:

3.9.1 Economic Category

• Credit: borrow, lend, loan, grant etc.

Corporate Governance: board of directors, executive management

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• **Economic performance:** Productivity, profitability, economic growth, financial gain, economic progress

3.9.2 Environmental Category

- Environmental Pollution: Effluence, waste, GHG
- Internal Process/Environmental Performance: ESG, Internal governance, self-assessment, self-audit, reporting, policies.
- Climate Change: Environmental degradation, extreme weather etc.
- Natural resource: raw materials, mineral resources etc.

3.9.3 Social Category

- Labor: Workforce, employment, staff, employee interest, collective bargaining
- Community investment: Corporate social responsibility, giving, philanthropy.
- **Human rights:** privileges, civil rights, freedom etc.

The main goal of this as stated earlier is to ensure a robust coverage of our search and to ensure that all aspects as represented in each policy are well represented. The researcher needs to clarify that utmost care was undertaken to ensure that all aspects as represented by the respective policies were noted. The researcher is however aware that the represented points in this paper may sometimes not be a full view of the requirements for adoption in the respective policies. This clarification is necessary as oftentimes interpretation at the level of implementation often go beyond and above stated provisions of the guidelines. Since the focus of our research is not on the

interpretation of the policies, but rather on the content upon which they are built, we need to clarify that delving into this in this document will be beyond our purview and may require further research in the future.

3.10 Assigning Values for Content Analysis

In conducting this analysis, we applied values to respective aspect as they exist in each policy. To this end, value 0 was applied to non-existent sustainability aspect, while 1 was applied when existent. For example, if a policy has human rights included in its process it gets 1 and if not 0 is applied. It thus follows that the computation of the value applied will be as follows:

1 = Existing Aspect

0 = Non-existent Aspect

To derive the results, these values were computed and calculated and applied, while the result was plotted on graphs to determine the areas of focus, strengths and weaknesses of these policies with respect to the identified area of sustainable finance. This will also be used in the analysis to determine the most important areas to respective regulatory and sustainable finance process.

3.11 Overall Priority Area of Focus

In determining the priority areas of sustainability for the policies assessed, we undertook a compilation of the total weight of all the sustainability aspects considered. To ensure a balanced analysis, the total weight of each aspect (i.e. economy, social and environment) was computed against the overall value.

For example, the environmental aspect has 5 areas considered from 10 countries which equal a total of 50. The total point was placed against 100 to get the percent of the total achieved. The achieved score was then applied for a comparative allocation.

i.e. 44/50*100 = 88%.

This step was done for each of the category recognized above.

3.12 Cluster Analysis of Policies

In determining the similarities and difference between one policy and the other we employed hierarchical cluster analysis which results were presented in a dendrogram. According to Sasirekha and Baby (2013:1) "clustering is a task of assigning a set of objects into groups called clusters." Cluster analysis is a multivariate method that groups subjects such as policies with regard to their similarity. In this research, the cluster analysis groups data that is binary coded (0 vs. 1). The more similar policies are with regard to addressing different categories the more similar they are clustered together. Thus Tan, et. al. (2006: 487) noted that "cluster analysis divides data into groups (clusters) that are meaningful, useful or both". They asserted that the clusters help capture the natural structure of the data. Hence cluster analysis helps in grouping objects such that they are grouped together based on their similarities and dissimilarities.

In this research, we utilized clustering analysis to assess our result. This is presented in a dendrogram, defined by Everitt (1998:96) as a "tree diagram used to illustrate the arrangement of the clusters produced by hierarchical clustering". The dendrogram shows the relationship between respective sustainability categories in relation to each countries policies and helped determine the similarities of their regulatory content. To achieve this, we reviewed the policy using the values generated from our table to create a dendrogram. The idea here is to generate a tree-structured graph to visualize the result of our findings through the development of hierarchical clustering calculation. This method is used to help determine the similarities and differences that are inherent in the respective policies beyond the assumptions of the research. The result generated

a grouping of respective policies in clusters. It highlights the similarities in their structure and content using the imputed values of their respective sustainability categories. It also revealed the distance or similarity of the policies as developed by individual countries and the relationship of one to the other.

3.13 Limitations and Challenges in Data Collation

The major limitation for this research is in the availability of data and little or no literature on the subject of research. This placed a limit on the capacity to assess previous work done, as the process is evolving and not fully developed. This research is also conscious of the fact that the implementation/interpretation of this approach may as well take a new form or dimension in years to come particularly as it relates to adoption and implementation of green regulations in different countries.

Accessibility to background information such as working papers and language barrier based on the non-availability of the translations and confidential issues in the development of such documents were also some of the challenges that was experienced in the collection of data and development of this research.

4 Country Analysis, Policy Description and Findings

4.1 Introduction

This chapter will undertake a content analysis of each policy, assess their underlying drivers and establishing the findings of this research. This will help us understand the individual pattern and structures as adopted by the respective countries especially with regards to the development and implementation of sustainable finance practices and policy adoption in the countries where this practice is in existence.

4.2 Country Analysis

Below is the analysis of the background, composition and observation of respective countries' sustainable finance guidelines. The goal here is to create a breakdown of what respective policies encompasses while doing an in-depth analysis of their content. We will be using the same parameters as employed in Table 3 for consistency. Through this approach, we will be able to assess respective policy documents while appreciating what their main goals are and what observations are noted in their operationalization.

4.3 Bangladesh

Table 3 below describes the sustainable finance regulation in Bangladesh. Also, the analysis below consists of the same structure used for the description table and aims to undertake an in-depth review and breakdown of the regulation this format will be applied for all regulations assessed.

Table 3: Bangladesh Sustainable Finance Policy Description Table

Content	Explanation of Meaning	
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Name of Policy	Environmental Risk Management (ERM) - Guidelines for Banks and Financial Institutions in Bangladesh		
(Year)	Year: 2011		
Applicability	The guidelines were developed for all Banks/Financial institution in Bangladesh. Policy implementation responsibility: Bangladeshi Bank		
Main mission and Goals	- Protection of bank funds from environmental risks and climate change impacts		
	- Streamline environmental risks management approach among financial institutions		
	- Enable banks make useful and important contributions towards local and global sustainable development.		
Drivers	- Development Finance institutions (DFIs) impact		
	- Stakeholders pressure		
	- Environmental degradation and climate change		
	- Credit risk management and bank financing protection		
	- Standardization of processes and policy		
Content /Area of Focus	Environmental Risk Management in credit and lending process.		
Strengths	- Strong environmental risk management stance		
	- Standardized policy creating a "streamlined formal and uniform approach" to credit risk management (Bangladesh Bank, 2011)		
	- Enforced policy backed by central bank policy.		

Weaknesses	- Weak on social sustainability issues	
	 Mainly an environmental risk management document and not all encompassing in terms of overall sustainability issues It has not fully followed through on its updates and targets. 	
State of Implementation	Progress has been made with implementation particularly in areas of encouraging banks with investing in green products and services.	
	The guideline has been in effect since 2011. It was expected to be revised at least once in every 3 years.	
	However, the new Guidelines on Environmental and Social Risk Management (ESRM) for Banks and Financial Institutions (2015) is being developed and the draft document has been produced in June.	

Source: Author

4.3.1 Name of Policy, Year and Applicability

The policy is called Environmental Risk Management (ERM) - Guidelines for Banks and Financial Institutions in Bangladesh and was developed in 2001. The Bangladesh Environmental Risk Management (ERM) guideline is mandatory for all Banks and Financial institution in Bangladesh. Bangladesh Bank is responsible for the implementation of the guidelines.

4.3.2 Main Mission and Goals

The policy was developed to protect the financial sector from environmental issues arising from credit relationship with clients and the vulnerability of the country to "environmental degradation" (Bangladesh Bank, 2011:2). To achieve this the implementation of the policy was divided into 3

phases of internal green banking development, designing of sector specific policies, and the introduction of environmental friendly products (Volz et al., 2015).

The guideline was also focused on enhancing the capacity of the financial industry on integrating environmental principles into credit management. To achieve this, it mandates banks to train their staff and raise awareness on E&S concerns, formulate their own E&S risk management framework, introduce sector-specific policies and start reporting on E&S issues (Bangladesh Bank, 2011). The main goals are to protect the banks' financing from the risks of a deteriorating environment and ensure sustainable banking practices (Bangladesh Bank, 2011).

The aim of implementing this is to help financial institutions protect their finance from environmental risks and climate change impacts which the country is highly susceptible to (World Bank, 2015) through the integration of environmental risks management approach among financial institutions which enables banks undertake meaningful contributions towards local and global sustainable development (Bangladesh Bank, 2011).

4.3.3 Drivers

The Bangladesh ERM was influenced by the need to create a guideline that will help ensure the protection of the country from its vulnerability to environmental degradation and climate change challenges. It was influenced by existing national legislations such as the Bangladesh Environmental Conservation Act (1995). Also, increasing stakeholder's pressure such as international investors and impacts of DFIs like IFC played a key support role in the encouragement and development of the guidelines.

In addition, there was the need to develop a standardized approach to environmental and credit risk management with the goal of protecting bank financing and investment particularly in some specific high risk sector of the economy. This necessitated the need for regulators to provide a standardized minimum process and policy that is expected from financial institutions in the implementation of the ERM. The goal of this is to provide a balanced playing field for all parties and ensure that no bank is left disadvantaged for implementing the policy.

4.3.4 Content/Focus of the Policy

The policy includes the classification of investments into high, medium and low-risk E&S categories and division into sector-specific aspects to complement the general due-diligence guidelines. It focuses on strengthening banks' ability to evaluate environmental risks as part of lending and investment activities.

The Central Bank of Bangladesh also introduced some refinance schemes for commercial banks to finance environmentally sustainable projects, such as solar power, biomass plants, effluent treatment plants (ETP) and energy-efficient kilns. The interest rate for these schemes is lower than the market rate, and, therefore, the schemes could be an effective means for improving the environmental standard in Bangladesh. (Bangladesh Bank, 2011; Islam and Das, 2013; Kamruzzaman, 2012). This was in line with Oyegunle and Weber (2015:5) observation that "the guidelines were established as a minimum standard on what banks and other financial institutions should be having in terms of ERM, while aiming "to ensure a level playing field is maintained in the financial sector in Bangladesh".

4.3.5 Strengths and Weaknesses

The policy is a risk management guideline with strong focus on environmental risk. This strong environmental risk management stance ensured that the ERM is a standardized policy that helps create a "streamlined formal and uniform approach" to credit risk management - (Bangladesh Bank, 2011) among Bangladeshi financial institutions. The remarkable part of this is that the guideline is mandatory for all financial institutions in the country as the Central Bank made it a compulsory policy for all institutions under its authority.

The document is heavily skewed towards the environmental risk functions of banks. Though there was provision and definition for social risk such as labor and community, this was basically definitional and it focused on the type of risks that businesses may be exposed to if not well managed and not a provision for the social sustainability of the sector. This point was clearly stated by the IFC in its baseline survey report (IFC, 2014) when it observed that the Bangladesh "guidelines have a strong focus on environmental risk management".

4.3.6 State of Implementation

The guideline was expected to be constantly updated and revised at least once in every 3 years. However, this has not been done since 2011. There is however a draft policy that is currently being reviewed and maybe published soon. Though the policy made allusion to an expected reporting system, there was also no clear cut process for this and banks are not obligated to make public their report.

The policy consists of an Environmental Due Diligence Structure (EDD) structure which takes a look into the different aspect of the businesses and is being used for the implementation of the policy in the financial industry.

In 2013, in line with the implementation process of the policy, the Bangladesh Bank established its Green Banking and CSR department to help with the monitoring and implementation of the process. The apex bank also encouraged capacity development in line with E&S issues, ensured individual bank formulation of their own E&S risk management framework, introduced sector-specific policies and enforced E&S reporting. It also released a draft of the revised ERM to help ensure further integration of the ERM policy with credit risk management and the use of numerical risk rating methods E&S assessment.

4.4 Brazil

Table 4 below is the table of description of the sustainable finance regulation in Brazil.

Table 4: Brazil Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Resolution No. 4,327 of April 25, 2014 – The Social and Environmental Responsibility Policy (Política de Responsabilidade Socioambiental – PRSA) for financial institutions and other entities authorized to operate by the Central Bank (2014)
Applicability	The PRSA must be adopted by financial institutions and other entities authorized to operate by the Central Bank of Brazil. Policy implementation responsibility: Brazilian Central Bank (Banco Central Do Brasil (BCB) Support: Federação Brasileira de Bancos (FEBRABAN) (Brazilian Bankers Association), Brazilian Ministry of Environment.

Main mission and Goals	Focused on principles of Relevance and Proportionality in managing E&S exposure Weighing PRSA adequacy with nature, the complexity of institution activities, financial services and products. Aims to guide internal and external activities of financial institutions with respect to their E&S impacts.
	Obligates institutions to manage E&S risks to avoid incurring losses arising from E&S damage
Drivers	Offshoot of initiative led by stakeholders notably FEBRABAN Influence of Existing environmental laws and guidelines e.g. Article 12 of law 6938/81 of Brazilian Environmental Policy Impact of E&S issues such as the Amazon and slave labor Standardization of processes and policy Risk control without creating liability for the bank on third party activities
Content /Area of Focus	Environmental Risk Management, Climate change, Subtle Social aspect majorly with respect to economic concerns and environmental purposes especially as regards environmental procedures
Strengths	Enforced for all institutions under the authority of the Brazilian Central Bank Improvement on past guidelines and voluntary codes Enhanced the "governance structure for implementation, monitoring and effectiveness of PRSA" (BCB, 2014) Protected banks from liability of third party.

Weaknesses	Resolution does not have powers to charge banks for the liability of their investments. Partly issues driven based on local challenges which make it concentrated on such issues while other sustainability challenges didn't get same attention. Goal of the resolution on complicity and liability to protect banks from third party activities raises arguments on institutional commitment if they are not liable for the activities of their clients
State of Implementation	The Brazilian policy has evolved from the voluntary Green Protocol (1998) led by the FEBRABAN – The Banker Association into a regulator led regulation in 2014. Between this periods, BCB developed 6 environmental compliance procedures for The Amazon, Sugar Cane Expansion, Slave labor, Low Carbon Agriculture, Mitigation and adaptation to climate change and Internal Process of Capital Adequacy Assessment - ICAA P. The current regulation provides a framework for a balanced and regulated procedure within the banking industry
	Coordination between the BCB, FEBRABAN and environment ministry on policies to ensure databases of infringements of environmental laws and regulations are made publicly available, is enabling banks to access them

4.4.1 Name of Policy, Year and Applicability

Resolution No. 4,327 of April 25, 2014 – The Social and Environmental Responsibility Policy (Política de Responsabilidade Socioambiental – PRSA) for financial institutions and other entities authorized to operate by the Central Bank. It was promulgated in 2014. The PRSA applies to all

financial institutions and other entities authorized to operate by the BCB which has the implementation authority.

4.4.2 Main mission and goals

In April 2014, The Central Bank of Brazil released the PRSA which requires all institutions under the BCB to draft and execute a Socio-Environmental Liability Policy (SELP) by 2015. "The main aim of the SELP is to prevent losses stemming from environmental damage caused by activities of financial institutions as well as their clients" (Stampe, 2014):16).

One issue the resolution aims to avert is reputational risk. It provides a framework for financial institutions to evaluate possible socio-environmental impacts of clients' activities, products and services in order to avert inherent reputational risks of their activities. It proposes the development and implementation of process and governance structure to identify, assess and mitigate risk for E&S considerations (Banco Central do Brasil (BCB), 2014).

4.4.3 Drivers

The process was driven by initiatives such as the development of voluntary guidelines by Federação Brasileira de Bancos (FEBRABAN) which laid the foundation for the resolution. There was also the influence of existing environmental laws and guidelines in the country such as Article 12 of Law 6938/81 of Brazilian Environmental Policy, which the financial institution needs to put into consideration in the implementation and management of their credit portfolios.

Also, social and economic considerations such as the issues of deforestation of the Amazon and slave labor issues also played a significant role in the development of the policy. The key interest of BCB here is the standardization of processes and policy that cuts across and ensures proper

implementation of right procedures in the financial industry (Banco Central do Brasil (BCB), 2014).

More importantly, there was need for the implementation of a risk control mechanism for E&S management of resources without creating liability for the banks in third party activities in the country (Banco Central do Brasil (BCB), 2014). This was to ensure that customers' funds are protected while banks do not unnecessarily suffer loss due to their client's negligence.

4.4.4 Content/Focus of the Policy

The Brazilian resolution is based on two fundamental principles of 'relevance' and 'proportionality' to guide financial institutions activities and response to social and environmental issues. Relevance was defined as the level of social and/or environmental risks to which the activities and operations of institution are exposed, while proportionality weighs the adequacy of the PRSA with the nature of the institution and complexity of its activities, financial services and products (Banco Central do Brasil (BCB), 2014). It also provided rules through which financial institutions are obligated to manage environmental and social risks.

Further to this, all banks are required to make an "in principle" commitment to ERM with the goal of integrating this in their credit policies. The policy was specific with regards to liability of E&S issues as not of financial institutions, but was created in line with existing rules such as the Brazilian Environmental Law Article 12. This provided an encompassing "systems, routines and procedures for financial institutions to classify, evaluate, monitor, mitigate and control the socioenvironmental risk of their activities and operations" (Stampe, 2014):15).

4.4.5 Strengths and weaknesses

One of the key strengths of this regulation is the fact that it is an enforced policy for all institutions under the authority of the BCB. Due to the long process that led to the development of the PRSA, there were improvements on the challenges of the initial voluntary codes. This reality provided an enhanced "governance structure for implementation, monitoring and effectiveness of PRSA" (BCB, 2014:3).

However, the fact that banks cannot be held liable for the provisions of the resolution since it does not have power to charge banks for the liability of their investments is one key weakness. This resolution on complicity and liability to protect banks from third party activities also raises arguments on the commitment of banks. The challenge here is if a bank is not liable for the activities of its clients then it creates a weakness as such bank may not see the need to fully comply with the regulation knowing fully well that it has nothing to lose by not complying.

Lastly some of the resolutions such as the Amazon biome and slave labor resolutions were case driven and was based on local sustainable challenges which could limit the capacity to adopt these or other resolutions to other general sustainability challenges that were not considered but could arise.

4.4.6 State of Implementation

The Brazilian sustainable finance policy started as a voluntary effort that was led by the Brazilian Bankers Association – FEBRABAN. The first guideline known as the Green Protocol (Protocol Verde) was introduced as a voluntary guideline in 2009 with the goal of ensuring that Brazilian Banks voluntarily commit to sustainable practices.

The Protocol has 5 core principles which are:

- Provide financial credit lines and programs that promote the population quality of life and sustainable use of the environment;
- Consider the impacts and environmental costs in managing its assets and the risk analysis
 of projects;
- Promote conscious consumption of natural resources and materials derived from their internal processes;
- Inform, sensitize and continuously engage interested associates into policy and sustainable practice, and
- Promote cooperation and integration of efforts among the signatories to the Protocol.

(FEBRABAN, 2012)

Between 2008 and 2011 BCB through different resolutions and circulars, improved the protocol by providing sustainable direction for diverse key sectors of the economy through the financial sector. Table 5 below shows these resolutions as developed and their content:

Table 5: List of BCB Banking Resolutions and Circulars

Resolution/Circular	Bank operations	Description
	impacted	
Resolution	Rural Credit –	Applies to the Amazon biome. Requires
3,545/2008	environmental compliance	financial institutions to demand from credit
	in the Amazon	borrowers' documentation proving
		environmental compliance.

Resolution	Rural Credit – sugar cane	Links agro-industrial credit to the Agro-
3,813/2009	expansion	ecological Zoning for expansion and industrialization of sugar cane. Prohibits financing for crop expansion in the Amazon and Pantanal biomes, as well as in Upper Paraguay River Basin, among other areas.
Resolution 3,876/2010	Rural Credit – slave labor	Prohibits rural credit granting either to individuals or businesses who keep workers in conditions similar to slaves, according to the List of Employers elaborated by the Ministry of Labor and Employment.
Resolution 3,896/2010	Rural Credit – Low Carbon Agriculture	Establishes the Program for Reducing Greenhouse Gas Emissions ('ABC Program') in the Brazilian Development Bank (BNDES) framework.
Resolution 4,008/2011	Credit for mitigation and adaptation to climate change	Rules on financing of projects aimed at climate mitigation and adaptation, backed by resources from the National Plan for Climate Change (FNMC).
Circular 3,547/2011	Internal Process of Capital Adequacy Assessment - ICAAP	Requires that the institution demonstrate how it considers the risk of exposition to socio-environmental damages in its assessment process and in the calculation of capital needed for risks.

Resolution	Financial Institutions	Rules on guidelines that shall be observed
4,327/2014	Socio-Environmental	upon establishing and deploying socio-
	Responsibility	environmental responsibilities by SFN
		institutions.

Source: (FEBRABAN, 2014)

These guidelines and resolutions laid the foundation for the development of the 2014 PRSA. The document was also timely as the initial Green Protocol for private banks was a five-year plan. This development, aside from being a step forward in the implementation of E&S in the Brazilian financial sector, also shows the transition of the process from an association to regulator led process. This indicates how the policy has evolved over the years from a voluntary Green Protocol (2009) led by the Banker's Association – FEBRABAN into a regulator led resolution in 2014 which provides a framework for a balanced and regulated procedure within the banking industry. Kern (2014) also observed that there has been increased coordination between the BCB and ministry of environment ministry to ensure that databases of infringements of environmental laws and regulations are made public thereby enabling banks to access them for environmental due diligence and assessment of clients which is enhancing the implementation of the process.

4.5 China

Below is the table of description and analysis of the sustainable finance regulation in China.

Table 6: China Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy	Notice of the CBRC on Issuing the Green Credit Guidelines
(Year)	

	(Feb. 24, 2012)
Applicability	The Guidelines apply to policy banks, commercial banks, rural cooperative banks and rural credit unions established within the People's Republic of China Policy implementation responsibility: China Banking Regulatory Commission (CBRC) Support: Ministry of Environmental Protection (MEP) and People's Bank of China (PBOC).
Main mission and Goals	Developed to promote green credit growth among banks in China. Aims to use green credit as a strategy to support economic growth and manage E&S issues. Strengthen credit policies and processes to identify, assess, monitor, control or mitigate E&S risks in business operations.
Drivers	Existing environmental laws. Environmental issues and degradation especially pollution challenges. Need to reduce environmental impacts of industries.
Content /Area of Focus	Environmental Protection, Credit and Lending process management, pollution management
Strengths	Provides platform to support flexible interest rates for environmental friendly and non-polluting industries Backed by banking guideline from CRBC Strong green credit procedure KPIs developed for Green Credit Implementation and performance monitoring
Weaknesses	Targets mainly pollution and environmental biased industry

	 -Not strong on non-environmental issues - Highly focused on credit risk management - Little or no mention of expectations from banks in terms of their own operations
State of Implementation	The Chinese policy has seen notable progress and improvements from the initial Green Credit Policy in 2007.
T	Some of the progress made till date are:
	Launched the Green Credit Guidelines mandating E&S integration into lending practices in domestic and overseas financing in 2012
	Published Green Credit Guidelines Statistical System in 2013, requiring banks to report loan balances in 12 green sectors.
	In 2014, released the Key Performance Indicators to fulfil requirements made by the Green Credit Guidelines and promote the implementation of green credit by banking institutions

Source: Author

4.5.1 Name of Policy, Year and Applicability

The Notice of the CBRC on Issuing the Green Credit Guidelines was launched in 2012. It applies to policy banks, commercial banks, rural cooperative banks and rural credit unions established within the People's Republic of China, while the CBRC is responsible for its implementation.

4.5.2 Main Mission and Goals

The Chinese guidelines have two goals: to reduce the environmental impacts of industries, which is not something Central Banks usually deal with and help address financial risks for the financial sector arising from environmental concerns.

The regulation focuses on flexible interest rates for environmentally friendly and polluting industries (Zhao, N., & Xu, X.-j., 2012). Banks have to implement assessment and pricing systems for the environmental impacts of their clients, and consequently vary the interest rates based on their compliance. Secondly, Chinese banks are obliged to reduce the amount of loans to polluting industries in their portfolio by assessing new businesses and terminating businesses with clients not compliant to environmental regulations. The Guidelines also provide banks on how to integrate sustainability thinking into the lending cycle of all their activities.

4.5.3 Drivers

The development of the Chinese guidelines was driven by the environmental and pollution issues caused mainly by population and economic development in the country. The guidelines focused on how banks can encourage environmental responsibility so as to ensure reduction in environmental impacts of industries.

One major goal here is that the policy provides the platform to encourage banking institutions to develop green credit guidelines and process that will help manage the institutionalization of environmental and social impact assessment in credit management.

4.5.4 Content/Focus of the Policy

CBRC developed the regulation to comprehensively and accurately reflect the results of implementing green credit guidelines by banking financial institutions, and in accordance with national macro-control policies particularly the fifth 12-year plan.

Though many of the 'green credit policies' were recommendations on process (as opposed to outcome), they are relevant as banks are obliged to report on key performance standards related to the 'Green Credit Guidelines' (Innovation Seed, 2015).

In terms of structure, the document focuses on specific areas of expectations from the banks in the implementation of the environmental policy. These ranges from the purpose of encouraging banking institutions to develop green credit, the coverage of the policy, expectations from the institutions, with respect to environmental performance, credit and lending process assessment, and mitigation of environmental and social risks.

4.5.5 Strength and Weaknesses

Initial challenges with the Chinese policy lie in the assessment of environmental risks (Jin, and Mengqi, 2011). However, these were addressed through the introduction of new guidelines and KPIs. The KPIs were developed for Green Credit Implementation and performance monitoring that will meet the expectations of banks in the implementation of the guidelines.

The policy also provides a platform to support flexible interest rates for environmental friendly and non-polluting industries which is backed by the guideline and thus made compulsory by CRBC. The challenge here is that the policy targets industries with huge environmental impact such as air pollution and emission. It is also highly focused on credit management particularly as it relates to banks funds but takes little cognizance of social issues that may arise from such actions. In addition, the policy does not give much responsibility or expectations to the internal environmental management of banks.

4.5.6 State of Implementation

Implementing the Green Credit Guidelines has been relatively successful as it encouraged the development of the process globally, though there are obvious issues in terms of implementation a good example is the challenge with monitoring the impact of Chinese companies environmental impact in developing countries. Nevertheless, the policy development over the years shows China's commitment to sustainable banking practices and in helping address environmental challenges as they arise. Locally, the policy is encouraging Chinese banks to lend more to energy efficient and environmentally sustainable companies and less to polluting and high energy consuming enterprises. It the progress made with the implementation is helping to integrate sustainability thinking into the banks' lending cycle.

The development of the Chinese regulation by the China Banking Regulatory Commission (CRBC) has been in the following phases:

- **2007** CBRC requested that banks assess environmental risks in loan applications and integrate environmental considerations into bank investment choices
- **2012** Launched the Green Credit Guidelines, specifying how banks should integrate sustainability into their lending practices, both in domestic and overseas financing (2012).
- **2013** Published the Green Credit Guidelines Statistical System, requiring Chinese banking institutions to report loan balances in 12 green sectors, including sustainable forestry, sustainable agriculture, and overseas lending based on international sustainability standards.
- **2014 -** Released key performance indicators (KPIs) to fulfil requirements made by the Green Credit Guidelines and other regulations. The KPI requires all banking institutions to carry out self-assessment of their green credit implementation and make yearly reports to the CBRC.

(CBRC, 2012; CBRC, 2013; CBRC, 2014; Stampe, 2014)

4.6 Colombia

Table 7 consist of description and analysis of the sustainable finance regulation in Colombia.

Table 7: Colombia Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Protocol Verde - Agenda for Cooperation between the National Government and the Financial Colombian Sector (2011)
Applicability	Voluntary Process instituted by the Colombian Banking Association - Asobancaria. It was adopted in 2012 by major commercial banks in Colombia applies to all signatory banks in Colombia Policy implementation responsibility: Asobancaria Support: Colombian Government, National Authority of Environmental Licenses - ANLA, Ministry of Environment and Sustainable Development.
Main mission and Goals	Need for the preservation of environmental and cultural heritage of the country. Combine government and financial sector efforts to incorporate and implement environmental policies and goals. Promote the financing and development of sustainable and natural resource management through credit facilities and investment. Enhance credit risk and E&S impact assessment in project funding.
Drivers	Foreign investment drive and global developments Government interest and support Bankers association movement

Content /Area of Focus	Promote sustainable consumption of natural resources, credit risk and investment. It also analyses E&S impacts and costs of projects.
Strengths	The voluntary nature allows individual banks to make a decision on implementing the process Has the federal government and relevant ministries backing. The president was part of the signatories. The Asobancaria Sustainability Committee provides oversight supervisory functions which enhance collaboration.
Weaknesses	It is strictly voluntary The policy allows signatories to unilaterally terminate their participation in the protocol The protocol is valid till 2017 and does not make any provision for continuation afterwards.
State of Implementation	The process is voluntary and driven by Asobancaria, with national government support. This protocol has a 5 years' lifespan which questions what happens beyond 2017. The other issue is that the process allows any of the signatories to unilaterally terminate their participation in the process without any damages, fines or expenses. This makes it almost ineffective for implementation. Though no banks has pulled out till date.

Source: Author

4.6.1 Name of Policy, Year and Applicability

The Colombian policy, Protocol Verde - Agenda for Cooperation between the National Government and the Financial Colombian Sector, was launched in 2011. This is a voluntary guideline which was instituted by the Colombian Banking Association – Asobancaria, which also has the responsibility for its implementation. It was adopted in 2012 by major commercial banks, Colombian Government, National Authority of Environmental Licenses - ANLA, Ministry of Environment and Sustainable Development. It applies to all protocol signatory banks in Colombia.

4.6.2 Main mission and goals

The Colombian Green Protocol - The agenda for cooperation between the national government and the financial Colombian sector (also known as Protocol Verde) was signed in 2011 as a culmination of government and Colombian financial sector efforts to incorporate and implement E&S considerations into the country's financial sector.

The objective of this protocol is to facilitate the implementation of policies and actions that enhance sustainable development in the financial system. It aims to provide credit and/or investments and programs that promote the sustainable use of natural resources and sustainable practices by the signing parties (Asobancaria, 2012).

The policy sees public and private sector collaborations as the solution to environmental and social issues. It stresses government's conviction on the importance of the business sector to protect and conserve the environment while caring for the social needs of the population. Though it stops short at making any provisional regulations to ensure the protection or enforcement of this. Rather it views the responsibility as an "an ethical vision that goes beyond mere compliance with the legislation" (Asobancaria, 2012:2).

4.6.3 Content/Focus of the Policy

The protocol is focused on the development of environmental preservation, sustainable use of renewable resources and continuous improvement of the welfare of society and the admission that the action of the protocol may help "minimize" their exposure to different types of risk improve efficiency by reducing their ecological footprint.

It involves undertaking strategies aimed at developing the three main areas of managing green portfolio, eco efficiency and E&S risk management. The goal here is to support the funding of sustainable development, while promoting the sustainable consumption of natural resources and materials and in credit risk and investment analyses and considering the E&S impacts and costs caused by the activities of projects being funded (BBVA, 04/07/12).

4.6.4 Drivers

The protocol acts as precursor for further policies and guidelines and was influenced by existing laws in the country and other global declarations such as Rio 1992 Summit.

The issues of disclosure communications and stakeholder's engagement were clearly defined in the policy as societal pressure on financial institutions due to its intermediary role and economic relevance is one key influence in driving this process. The protocol was also motivated by the need to mitigate environmental impacts particularly climate change on the gross domestic product (GDP). These concerns led to the initial government efforts aimed at combating GHG emissions such as the Colombian Strategy Low Carbon Development (CSLCD) which seeks to identify and evaluate actions that are intended to prevent the rapid growth of GHG emissions (Asobancaria, 2012).

International funding for financial institutions to take advantage of facilitating the development of low carbon economic sectors, promote technology transfer, and define a regulatory framework was also another key influence. This was seen as having the capacity to support the development of the country's economy, by taking into account the carbon-efficiency of production processes (Asobancaria, 2012).

4.6.5 Strengths and Weaknesses

There is provision for the harmonization of procedures, cooperation and integration of efforts between the signatory organizations, in implementing the strategies through Asobancaria Sustainability Committee. Signatories are expected to share experiences, monitor the effectiveness of the protocol, and propose improvements in the process of implementing the strategies and their evolution (Asobancaria, 2012).

The voluntary nature of the policy allows individual banks to make a decision on implementing the process without the fear of repercussion or penalty. Also, the fact that the protocol has government support as shown by its signing by the President of Colombia gives it credence and strengthens the adoption of the protocol by all concerned.

One major weakness of the protocol is the fact that it allows unilateral termination of participation by signatories without prior notice (Asobancaria, 2012). Hence, it has no binding effect on the signatories to implement or follow through.

Also, the protocol is valid until 2017, yet the document does not make any provision for continuation afterwards. So the question is what happens going forward?

4.6.6 State of Implementation

The protocol is strictly voluntary. This makes it almost ineffective for implementation beyond the personal commitment of signatories. Though no banks have pulled out till date which in itself is a good news. However, the 5 years' lifespan of the protocol questions what happens to it beyond 2017. There may be hope on this considering that the Brazilian voluntary protocol evolved into a regulation after the end of the voluntary guideline. Also, the three key strategies that made up the Protocol is currently being reviewed, which gives hope on the continued commitment of association and its membership to the process.

In terms of operationalization, the process is mainly self-driven by concerned parties. Sustainability Committee of Asobancaria has so far been the operational body, while the financial sector signatories and the Ministry of Environment and Sustainable Development, has an advisory role.

4.7 Indonesia

Below is the table description and analysis of the sustainable finance regulation in Indonesia.

Table 8: Indonesia Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Roadmap for Sustainable Finance in Indonesia 2015-2019 (December 2014)
Applicability	Applies to all institutions under the authority of Indonesia Financial Services Authority (OJK). This includes the banking sector, capital market and Non-Bank Financial Services Industry (IKNB) sectors Policy implementation responsibility: OJK.

	Support: Had capacity support from IFC and Swiss State Secretariat for Economic Affairs (SECO).
Main mission and Goals	Improve Indonesia's financial sector resilience and competitiveness in a sustainable manner. Provide financing resources for the pro-growth, pro-job, pro-poor and pro-environment long term goals of the government. Enhance national commitment to address global warming challenge by supporting climate change mitigation and adaptation. Build a competitive low carbon economy.
Drivers	National government development plan Existing environmental laws Global sustainability development and influence. Regional relevance DFI support
Content /Area of Focus	Environmentally friendly products and investments in priority sectors. Targets increased demand for sustainable financing products, risk management Adoption of E&S process to enhance the 4Ps (pro-growth, pro-jobs, propoor and pro-environment)
Strengths	It is a long term policy plan which gives banks the chance to implement in stages It is part of Indonesia's government master plan Has regulatory backing and clear objectives for the financial sector

Weaknesses	The plan has a target of about 10 years which makes implementation rather slow
	The regulation is embedded in Indonesia's national master plan which means any alter to the plan might affect the implementation of the process.
State of Implementation	implementation of sustainable finance in Indonesia.
	Part of the Master Plan for Indonesia's Financial Service Sector (MPSJKI) 2015 - 2024 to be released in December 2015.
	Specify measures and recommendations that should be adopted in the form of integrated work plan involving all financial service institutions.

Source: Author

4.7.1 Name of Policy, Year and Applicability

The Indonesian Roadmap for Sustainable Finance in Indonesia 2015-2019 was launched in December 2014. It applies to all institutions under the authority of Indonesia Financial Services Authority (OJK). This includes the banking sector, capital market and Non-Bank Financial Services Industry (IKNB) sectors

4.7.2 Main mission and Goals

The Indonesian Roadmap to Sustainable Finance (2014) was anchored on aligning previous environmental policies of the government with the financial sector's importance. The goal of the sustainable finance program in Indonesia is to:

• Improve the Financial Service Institutions (FSI)'s resilience and competitiveness to enable them to grow and develop in a sustainable manner.

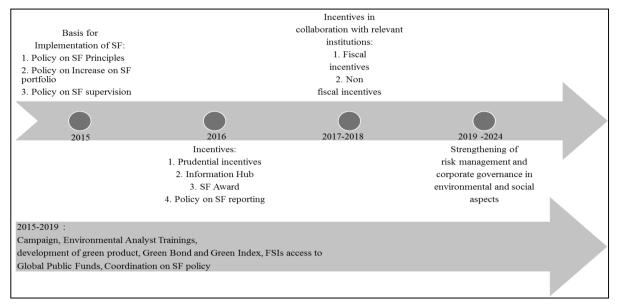
- Provide financing resources required by the public by using the pro-growth, pro-job, propoor and pro-environment as points of reference.
- Contributes to national commitment to address the global warming challenge by carrying
 out climate change mitigation and adaptation in business activities towards a competitive
 low carbon economy.
- The objective is to utilize the policy to improve Indonesia's financial sector resilience and competitiveness in a sustainable manner. This would be achieved by supporting the creation of mechanisms to help create financing resources for long term goals of the national government.
- It also aims to support the building of a competitive low carbon economy which will help enhance national commitment to address global warming challenge by supporting climate change mitigation and adaptation in business activities (Indonesia Financial Services Authority (OJK), December 2014)

4.7.3 Content/Focus of the Policy

The sustainable development framework is a medium to long term development plan that comprises four aspects of sustainable development, namely the social, economic, environmental and institutional aspects.

It clearly creates an implementation plan towards achieving sustainable finance goal between 2015 and 2024 (See fig. 1). The policy gave priority to some sectors of the economy namely; Agriculture, Infrastructure, Manufacturing, SME and Oil and Gas.

Figure 2: Roadmap for Sustainable finance



Source: (Indonesia Financial Services Authority (OJK), December 2014:20)

To achieve these goals, the roadmap puts forward four principles which are Risk Management Principle, Sustainable Priority Economic Sector Development Principle, Environmental and Social Governance and Reporting Principle and Capacity Enhancement and Collaborative Partnership Principle. The roadmap is also interested in the development of environmentally friendly products and investments in priority sectors. This it intends to achieve by targeting increased demand for sustainable financing products and risk management. It also ultimately aims to align the E&S process to enhance the 4Ps (pro-growth, pro-jobs, pro-poor and pro-environment) of the government development plan (OJK, 2014:17, 18).

4.7.4 Drivers

This process was largely influenced by growing E&S importance globally and regionally. This was fueled not only by the need to adopt best global practices or regional competition, but also through the support and influence of leading DFIs who aids the economic support of the country. It had its initial influence in prior environmental policies such as the Program for Pollution Control, Evaluation and Rating (PROPER 1995) and AMDAL Process (1982) (IFC, 2014). The roadmap was also developed in line with the 6th Indonesian national development plan – the Long Term Development Plan (RPJP) for the period of 2005-2025 and other environmental laws as currently exists in the country. The goal is to align the National government development plan with the provision of sustainable development within the financial industry.

4.7.5 Strengths and Weaknesses

The Indonesian policy is unlike the other guidelines as it is long term policy plan which gives banks the chance to implement the process in stages. It also provides them with necessary time to integrate sustainable finance into their processes and align it with the goals of national development plans based on set milestones.

Also, (Volz, et al., 2015:96) noted that a "vital concern" of the Indonesian financial sector is the creation of a "level playing field" which allows banks "to develop a green lending business without the disadvantages of being first movers". They observed through research that banks believed that "equal conditions" can be created only by a "green finance framework that puts pressure on banks" (pg. 96) through regulation as well as support their capacity development.

This key observation could be one of the motivating factors for Indonesia Financial Services Authority (OJK) involvement in the development of the process. It also explains why it gives regulatory backing to the implementation of the long term plan.

But this is also a source of concern as the plan has a target of about 10 years, which implies that implementation will take a longer time and could be slow. The embedding of the process with Indonesia's national master plan may also mean sudden death should there be any form of alteration due to government change, bureaucracy or change of policy which is common in developing countries. The possibility of any of this happening could alter the plan and may affect its implementation.

4.7.6 State of Implementation

This document is a roadmap aimed at ensuring the full implementation of sustainable finance in Indonesia. It is an embedded part of the National Master Plan for Indonesia's Financial Service Sector (MPSJKI) 2015 - 2024 which is expected to be released in December 2015. Though its full implementation is expected to commence in late 2015, it specifies measures and recommendations that should be adopted in the form of an integrated work plan involving all financial service institutions. Some of these are highlighted below:

In medium term (2015-2019) the basic regulatory framework and reporting system will be established and running well (UNEP Inquiry, The Association for Sustainable and Responsible Investment in Asia (ASrIA), & International Finance Corporation (IFC), 2015). Competence on sustainable finance in the financial sector is expected to increase through capacity development, while provision of incentives and coordination with related agencies will be carried out regularly.

In the long term (2020-2024), FSIs are expected to have integrated environmental and social aspects in its risk management and corporate governance, and provide regular progress reports on sustainable finance implementation to the public. An integrated information system with relevant institutions to support the implementation of sustainable finance has been established and is running well which in turn would contribute to reduction in the national greenhouse gas emission.

4.8 Kenya

Below is the table description and analysis of the sustainable finance regulation in Kenya.

Table 9: Kenya Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Kenya Sustainable Finance Principles and Guidelines (May 2015)
Applicability	It applies to all members of the Kenya Bankers Association (KBA) which is made up of all banks within the Kenyan banking industry. Policy implementation responsibility: Kenya Bankers Association
	(KBA). Support: FMO, IFC and UNEP FI
Main mission and Goals	Support economic development and process Achieve international investors and interest ESRM expectations Provide sustainable backbone for growing non-banking finance and financial innovations Optimize business goals with economic priorities and socio-environmental concerns
Drivers	DFI influence

	Regional/continental influence
	Direct investment and economic interests
Content /Area of Focus	Risk Management (Economic and Associated risks), resource management, Growth through Inclusivity & Innovation, corporate governance - Business Ethics
Strengths	Strong multilateral support and funding
	Aims to help innovation by non-banking as regards provision of finance and financial services e.g. mobile money. Strong economic growth support and inclusivity
Weaknesses	Capacity development is a big issue in the development of the process.
	Implementation at beginning stage making impact unpredictable
	Lack of Central Bank legislation
	Not self-driven but motivated by need to apply E&S standards to meet global investors demands
State of	KBA expects its member institutions to develop policies for credit risk, HR,
Implementation	corporate governance, internal control and compliance.
	Still in its infancy, the guidelines were released in May 2015 and would require time for its implementation and adherence by KBA members to be assessed.

Source: Author

4.8.1 Sustainable Finance Analysis Breakdown

Below is the content analysis of Kenyan Sustainable Finance Principles and Guidelines. The analysis consists of the same structure used for the description table above and aims to undertake an in-depth review and breakdown of the regulation.

4.8.2 Name of Policy, Year and Applicability

The Kenya Sustainable Finance Principles and Guidelines was launched in 2015. The policy applies to all members of Kenya Bankers Association (KBA) which is also in charge of implementation of the process. The membership of this body comprises all commercial banks in Kenya.

4.8.3 Main mission and goals

Kenya sustainable guiding principles was developed by Kenya Bankers Association (KBA) with the support of United Nations Environment Protection Finance Initiative (UNEP FI), the Netherlands Development Finance Company (FMO), German Investment Corporation (DEG) and the IFC.

The guideline aims at guiding banks to align their priorities with environmental, social and economic considerations. In doing this it intends to support economic development and process while meeting international investors' interest and ESRM expectations.

It was developed to provide a sustainable backbone for growing non-banking finance and financial innovations in the country as being presently experienced in the mobile banking sector. It also aims to ultimately optimize the sustainable platform to address business goals with economic priorities and socio-environmental concerns.

4.8.4 Content/Focus of the Policy

The Kenyan guidelines were developed through the Sustainable Finance Initiative (SFI) which explored opportunities for industry alignment while building bank wide capacity in the area of environmental and social risk management (Kenya Bankers Association, 2015). The SFI was grounded in three priorities areas of equipping the financial services sector for optimal performance in comprehensive risk management; enhancing best business practice, leadership and governance through engagement and capacity building at the board and senior management levels; and promoting industry growth and development by fostering a culture of innovation and inclusivity enabled by new technology (Kenya Bankers Association, 2015).

These priorities were articulated by the SFI Working Group and adopted as the thematic areas of the initiatives. To operationalize this, the thematic areas were then developed into the 5 sustainable finance guiding principles for the industry.

The principles as developed are financial returns versus economic viability; growth through inclusivity and innovation; managing and mitigating associated risks; resource scarcity and choice; and business ethics and values.

Each principle is individually defined with expectations from financial institutions stated. It also aims at informing financiers on optimizing their business goals with the economic future priorities and socio-environmental concerns of the industry (Kenya Bankers Association, 2015).

4.8.5 Drivers

Though encouraged by the DFIs, a key motivation for the development of the process is the growing request by stakeholders' especially international investors for Kenyan Banks to

incorporate E&S risk management systems into their credit management processes (UNEP FI 2015).

There was also the need to remain relevant and competitive in regional economic landscape. In this case, the two bigger economies in Africa – South Africa and Nigeria have adopted environmental standards either for their banking sector in case of the latter or as an embedded regulatory environmental reporting expectations for corporate firms in the former.

The policy requires member to implement the guidelines in line with the Kenyan Government Vision 2030 plan which contributed as a key driver for the implementation of the guidelines.

4.8.6 Strengths and Weaknesses

One key thing that is working for the implementation of the Kenyan guidelines is the interest by multilateral organisations and DFIs. This gave it the kind of opportunity that most of the early adopters of this process do not have access to.

The process was also developed in line with the economic development goals of the country and how the banking industry can contribute to this. One interesting issue here is how KBA intends to embed the non-banking financial sector into the financial system through the guidelines and how this could further aid the integration of the unbanked population in the financial sector.

However, human capacity is one key challenge in the implementation of this process, this is more challenging as the process had to rely on international partners to support capacity for its implementation.

Another issue is the lack of Central bank regulation to enforce the process. The guidelines currently hinge on the commitment of banks to support the process, whereas since it is voluntary there is no compliance mechanism to guide and ensure adherence to its provisions.

4.8.7 State of Implementation

The principles are the most recent of all being considered. Though already launched, its implementation framework and course of action has not fully matured. The guidelines are at the beginning phase of implementation, hence the future and impact cannot be ascertained in the immediate. Also a lot of efforts are being put into capacity development, for example, KBA is currently setting up series of web pages and an e-learning course on the principles and sustainable finance in general.

Also, there are series of innovation in the Kenyan banking sector especially by non-banking entities with respect to the provision of finance and financial services e.g. mobile money. The opportunity side of this is of great interest to the sector. There is growing partnership between banks, mobile money platforms and entities offering innovative products such as solar systems to the bottom of the pyramid. A couple of cases such as the MKOPA are being developed for the sustainable finance platform which is expected to go live by the end of 2015.

The process is purely driven by the KBA though with the support of the central bank, which explains its present voluntary nature. It has also been aligned to the Vision 2030 goal of the government. However, for it to have a more effective impact there is the need for compliance and control there may also be the need for Central Bank of Kenya to be more involved which will help entrench the process among all banks.

4.9 Mongolia

Below is the table description and analysis of the sustainable finance regulation in Mongolia.

Table 10: Mongolia Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Mongolian Sustainable Finance Principles and Sector Guidelines (December 2014)
Applicability	Initiative led by the Mongolian Bankers Association (MBA) includes all banks and financial institutions in Mongolia who jointly released a commitment statement in November 2013 to implement the initiative Policy implementation responsibility: Mongolian Bankers Association (MBA), Partners/Support: Netherlands Development Finance Company (FMO), Mongolian Ministry of Environment, Green Development and Tourism, the Bank of Mongolia and IFC (a member of the World Bank Group)
Main mission and Goals	Alignment of economic growth with environmental protection. Preservation of nomadic culture to enhance sustainable livelihoods. Support Mongolia's green economic development
Drivers	 DFI influence Regional/continental influence Direct investment and economic interests Cultural heritage preservation
Content /Area of Focus	Policy focus includes: ESRM issues in line with the following considerations: cultural heritage protection, natural resources, financial

	inclusion, corporate governance, accountability and internal sustainability governance
Strengths	Had strong DFIs support Sectorial guidelines to help specific sector Well spread and had different principles to help drive the process Strong in social sustainability Had commitment of all banks in the country for implementation
Weaknesses	Not backed by legislation as it is bankers' association led Voluntary in nature Lengthy milestone of over 15 years Capacity challenge at respective banking level
State Implementation	This is a voluntary process. The guidelines are made up of 8 principles. It has its core strength in social issues and the move towards protecting the natural environment, communities and culture. It is also interested in promoting green economy, financial inclusion and governance. It is expected that though voluntary, by the end of 2015 all banks should be implementing the guidelines. It also anticipates to have a fully matured sustainable finance system by 2030. The principles has sector guidelines for key areas of the economy namely, Agriculture, construction, manufacturing and mining sectors which were developed as a companion document to the principles

Source: Author

4.9.1 Name of Policy, Year and Applicability

The Mongolian Sustainable Finance Principles and Sector Guidelines was launched in late 2014. It applies to all banks and financial institutions in Mongolia under the leadership of the Mongolian Bankers Association (MBA).

4.9.2 Main mission and goals

The Mongolian Sustainable Banking principles was an offshoot of efforts by Development Finance Banks notably FMO and IFC's towards the integration of environmental and social management system into the financial sector particularly in emerging economies. The Mongolian principles process was started by these multilateral firms after successes in countries like Nigeria and Bangladesh.

The goal was to align the country's growing economy with environmental protection policies that will ensure responsible growth. One key area of interest for the Mongolians is the preservation of nomadic culture, for which the country is very famous and the utilization of the sustainability platform to help enhance sustainable livelihoods in this area.

The policy also focuses on how the financial sector can help contribute and support Mongolia's green economic development process. As noted in the joint commitment statement of Mongolian banks, that was released in November 2013, the banks "have the opportunity to play a major role in Mongolian green economic development", this informs their decision "to support the development and implementation of a set of principles which commit Mongolian banks to integrate environmental and social considerations into business decisions and banking practices" (Mongolian Bankers Association (MBA), 2014).

4.9.3 Drivers

The process was driven by the need to align rapid economic growth with environmental protection. The need to preserve the country's unique nomadic culture in alignment with the social sustainability consideration of the people towards sustainable livelihoods was also dominant in the development of the process.

Neighbour, China's stride in environmental management in the financial sector and the growing interest among the leading economies in Asia in sustainability is also another contributing factor to the establishment of this process.

Like Kenya, the impact and need to meet the interest of investors and DFIs also played a prominent role in the integration of the process.

4.9.4 Content/Focus of the policy

The policy is made up of a set of 8 guiding principles set around the protect, promote and practice approach. These are: protect people and communities, protect cultural heritage, promote green economy growth, promote ethical finance and corporate governance, promote transparency and accountability and practice what we preach. It also consists of an E&S risk assessment document which have the exclusion list and sensitive additional due diligence that was created in line with international best practices and relevant Mongolian laws.

The principles were developed to adhere to Mongolian laws and international standards, though banks were expected to adopt this by aligning them to individual E&S goals. The principles will provide required guidance to help determine internal policies; processes, tools and systems, roles and responsibilities; training; product and service development and reporting.

4.9.5 Strengths and Weaknesses

The Mongolian principles have strong DFIs support which supported the whole process through its development and implementation. Also, the policy is divided into sectorial guidelines to help specific sectors develop guidelines that will enable them manage environmental compliance and ensure due diligence.

Unlike most policies, the Mongolian policy is strong on communities and social sustainability as it considers the impact of such in the management of its credit and business interest. This is further strengthened as the process has the commitment of all banks in the country for implementation through a joint commitment statement signed by all the banks chief executives.

However, despite the commitment of the banks, the process is a voluntary initiative with regulatory backing as it is banker's association led. It also provides for a lengthy period of about 15 years for its full implementation which increases the chances of banks becoming weary and governments and policies changing which may pose a threat to the policy. There is also the issue of technical capacity at individual bank level which may affect the implementation of the policy.

4.9.6 State of Implementation

The policy is Mongolian Bankers association led. It is a voluntary process that is currently being implemented by signatory banks. The guidelines 8 principles are focused on social issues, protecting the natural environment, communities and culture enhancement and promoting green economy, financial inclusion and governance.

It is expected that though voluntary, by the end of 2015 all banks should be implementing the guidelines. While it also anticipates to have a fully matured sustainable finance system through various milestones by 2030.

The guidelines are enabling banks to address E&S issues that are potentially associated with their business activities and business operations and those that are considered integral to the proper management of transaction, client, portfolio and reputational risks. Banks are also expected to take leadership roles in supporting sustainability, green development and financial inclusion through the provision of sustainable products and services. (Mongolian Bankers Association (MBA), 2014).

4.10 Nigeria

Below is the table description and analysis of the sustainable finance regulation in Nigeria.

Table 11: Nigeria Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Nigerian Sustainable Banking Principles (NSBP) (July 2012)
Applicability	The Nigerian Principles was led by the Bankers Committee, though the Central Bank of Nigeria has since taken over the initiative and is now driving it as a banking sector regulation. The policy applies to all Commercial Banks, Merchant Banks, Discount Houses and Development Banks in the country. Policy implementation responsibility: Central Bank of Nigeria (CBN) Support: Bankers Committee of the Central Bank
Main mission and Goals	Enhance financial sector impact on economic, social and environmental development. Embed E&S processes in the financial sector Create a balanced E&S management platform for the financial industry Attract foreign investors and meet ESRM expectations

Drivers	DFI influence
	Economic and investment interest
	Balanced policy drive
	Support government policies
Content /Area of Focus	ESRM particularly in relations to credit risk and lending process as it affects the E&S risk management, E&S footprint, human rights, women's economic empowerment, financial inclusion, E&S governance, capacity building, collaborative partnerships and reporting
Strengths	Has a fairly balanced spread between social and environmental expectations.
	Divided into overarching principles to guide specific sectors
	Had strong international support for implementation
	Strong legislative backing and implementation enforcement
Weaknesses	Capacity challenges as slow implementation process at respective banks have shown
	Mandatory nature puts banks under pressure making it a tick box approach rather than system based
	Inadequate support capacity for E&S in the country also hindering extensive process implementation
State of	The NSBP is a mandatory policy of the Central Bank which all Banks are
Implementation	expected to implement. Divided into 9 principles and 3 overarching sector
	specific guidelines for the key economic sectors of Agriculture, oil and gas and power. The policy is presently undergoing implementation, while
	Banks had made four periodic report on progress based on the

implementation circular released by **CBN** circular. the

It is expected that all banks in the country would have fully implemented the process by the end of 2015, while sanctions on non-compliance will take effect from 2016.

Source: Author

4.10.1 Name of Policy, Year and Applicability

The Nigerian Sustainable Banking Principles was launched in September 2012. The principles apply to all members of the Bankers Committee of the Nigerian Banks which comprises all commercial banks, merchant banks, development banks, discount houses and the central bank of Nigeria, which is also responsible for its enforcement.

4.10.2 Main mission and goals

The Nigerian Sustainable Banking Principles (NSBP) was developed as an idea of the Bankers Committee of Nigerian banks. The inclusion of the CBN in the development process and invitation of the regulator to take over the oversight and implementation of the principles arose as a result of the need for compliance and also to create a level playing ground for all banks in the country.

Nigerian banks' objectives for undertaking this process is due to the need to encourage the financial sector to support the economy and have a positive impact on the development of the country. Beyond this it also intends to enable a procedure that will help in the embedding of E&S process in the credit activities of the financial sector which will ensure a more responsible credit management process that does not negatively affect the environment.

One other key point that enhanced the development of the NSBP is the need to develop sustainability processes that will not only attract investors and but also meet ESRM expectations of stakeholders in line with global best practices.

4.10.3 Drivers

One of the reasons Central Bank of Nigeria (CBN) introduced these guidelines was to guarantee access for the country's banks to foreign investments, protect core industries and ensure a level playing field among banks. Financial institutions such as the Dutch FMO require information about how sustainability is addressed by their investees. Hence, economic and investment interests also played a role in the development of the process and ensuring that financial institutions become more concerned with environmental and social issues.

There was also a need to create a balanced platform for the implementation of the environmental and social management issues. The need for this arose as a result of the implementation of E&S practices by some banks, which puts them in a disadvantageous position with clients as the requirements and standards they are expecting are not same across board. This was however resolved by the introduction of the policies, which allowed the CBN to support government policies within the identified key industries.

4.10.4 Content/focus of the policy

The Nigerian regulation consists of nine sustainable guiding principles that cover E&S risk management, E&S footprint, human rights, women's economic empowerment, financial inclusion, E&S governance, capacity building, collaborative partnerships and reporting (Central Bank of Nigeria, 2012). The Nigeria's central bank mandated full adoption and implementation of these

principles and guidelines by the financial institutions and promised to provide incentives for compliance. It also requires quarterly report of progress from all banks with the expectation that all banks in Nigeria would have fully implemented and integrated the principles at the latest by December 2015.

The guidelines made provision for overarching guidelines by engaging three priority sectors of the economy which are the Agriculture Sector Guideline, Power Sector Guideline and Oil and Gas Sector Guideline. These were developed to ensure the integration of the process in the key sectors of the economy. The principles were adopted in recognition of Nigerian banking sector's role and responsibility to deliver positive development impacts to the society whilst protecting communities and environments. There is also a commitment to review the principles annually.

Also key is the development of the E&S impact assessment guidelines which is embedded in the policy and expects to act as a guideline for respective banks to develop its own credit risk management and lending process as it affects the E&S risk management, E&S footprint, human rights, women's economic empowerment, financial inclusion, E&S governance, capacity building, collaborative partnerships and reporting provisions of the policy.

4.10.5 Strength and weaknesses

The policy is fairly balanced in its provision for social and environmental expectations from clients and development of an internal sustainability governance system for the banks. Also its provision for respective key aspects of the economy enables it utilize the overarching principles to guide those specific sectors activities thereby strengthening the banks' responsibility in their activities particularly as it affects the environment.

One other factor that worked well for the Nigerian policy is the fact that it had strong international support for the implementation of the policy through technical support from DFIs such as the FMO, UNEP FI and IFC. While DEG, though not part of the development process, is helping some commercial banks develop ESRM system for their credit process. Oftentimes, this comes as a prerequisite for further business relationships with these organizations.

There is also strong regulatory backing and implementation enforcement by the CBN for the process, while it intends to start enforcing compliance through sanctions by the end of 2015. However, this also poses a challenge to the banks as the mandatory nature of the policy puts banks under pressure to undertake a tick-box approach to the implementation of the policy so as not to be sanctioned rather than engage in a holistic integration of the process.

The challenge of technical capacity is also frequent among most implementing banks. This challenge which can be adduced to inadequate support capacity for E&S in the country is one of the major reasons for the slow application of the policy at respective banks and has been hindering the extensive implementation of the process.

4.10.6 State of Implementation

In September 2012 via a circular, CBN sanctioned the principles and made it a regulation for the financial industry in Nigeria (Central Bank of Nigeria, 2012a). This singular act and subsequent circulars released is helping the integration of the sustainable guidelines among banks.

Most banks are currently in the integration stage of the policy with internal ESRM systems being developed, tested and implemented across banks in Nigeria. There has also been 3 quarterly

progress report to the CBN in the last one year, while Nigerian Banks are also expected to produce sustainability report in their annual reports or as standalone starting from 2014.

Efforts are on to enhance collaborative partnership among all stakeholders in the development and integration of the policy. This has led to ongoing engagement among the Central Bank, the Bankers' Committee, the commercial banks, other financial institutions in the Bankers' Committee and the DFIs, who are helping with the implementation in an otherwise highly competitive industry. One of the key examples of this is the development in 2014 of the Sustainability Steering Committee which is self-led and driven by the banks to communicate with and engage one another, while ensuring adherence to the policy as developed. The Committee consists of all members of six member banks and the CBN sustainability department as an observation member. The leadership of the committee is on one-year rotational basis. The committee among other expectations is saddled with the responsibility to oversee the process, support, engage and monitor individual bank performance and progress.

4.11 Peru

Below is the table description and analysis of the sustainable finance regulation in Peru.

Table 12: Peru Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Regulation for Social and Environmental Risk Management (March 2015)
Applicability	Applies to all financial institutions in Peru. This includes banks, municipal credit institutions, rural credit institutions, finance companies and specialized lending institutions for microcredit under the supervision of the

	Superintendency of Banks, Insurance Companies and Private Pension Fund Administrators (SBS)
	Policy implementation responsibility: Superintendency of Banks, Insurance and Private Pension Fund Administrators (SBS).
Main mission and Goals	To establish minimal requirements for E&S risk management Help encourage financial institutions implement best practices and prudent decision-making process. Support project finance and environmental risk management of investment and credits.
Drivers	DFI influence Regional development with respect to E&S Protection of key economic sectors such as mining and logging industries.
Content /Area of Focus	Environmental Risk - credit risk guidelines particularly bothering on the following: non-renewable and renewable natural resources, purchase and use of land and water, relocation and involuntary economic displacement, indigenous people and communities living within the area of influence, project finance and disparities between project workers and local population.
Strengths	Strong environmental focus Strong regulatory backing through the SBS which ensures enforcement Provides basis to support key sector of the economy Protects banks from third party liabilities.
Weaknesses	Weak on social expectations Have little expectations from the banks internal operations

	Technically an environmental risk management document in approach regulation protects banks from with regards to breaches of E&S rules by their suppliers or investment
State o	Released in March 2015, the SBS regulation provides a mandatory platform
Implementation	for the establishment of social and environmental risk management
	procedure in Peru.
	The regulation seeks to achieve E&S responsibility in Peru by stating the minimum requirements for managing E&S risk. The regulation is applicable when offering advisory services, financing, bridging loans and corporate credit facilities within a certain threshold. The SBS also released a due diligence guideline stipulating expected role of all parties to enhance the process. The regulation is expected to take effect from February 1, 2016

Source: Author

4.11.1 Name of Policy, Year and Applicability

The Regulation for Social and Environmental Risk Management was launched by Peru in 2015. It applies to all financial institutions in Peru, which includes banks, municipal credit institutions, rural credit institutions, finance companies and specialized lending institutions for microcredit under the supervision of the Superintendency of Banks, Insurance Companies and Private Pension Fund Administrators (SBS). The SBS has the implementation responsibility for the regulation.

4.11.2 Main mission and goals

The Superintendency of Banking, Insurance and Private Pension Fund Administrators (SBS) launched the Resolution SBS 1928/2015, <u>Regulation for Social and Environmental Risk Management</u> in March 2015 (IFC, 2015). The regulation aims to establish minimal requirements

for social and environmental risk management in order to encourage financial institutions to implement best practices and ensure prudent decision-making process. It majorly focused on project finance and environmental risk management of investment and credits.

As part of this process, SBS also released the Role of Enhanced Due Diligence in the Regulation of Socio-environmental Risk Management for Financial Firms to explain key features of the regulation. This was developed to help manage the E&S risk of financial institutions due to social conflicts and environmental hazards.

Led by the SBS, the policy applies to all financial institutions including banks, municipal credit institutions, rural credit institutions, the finance companies and the specialized lending institutions for microcredit under its purview.

4.11.3 Drivers

One key influence here is the economy as financial institutions know that socio-environmental risk is particularly important because mining and logging industries represent a significant portion of the GDP and their areas of operation frequently house communities with longstanding expectations (Superintendency of Banking, Insurance and Private Pension Fund Administrators (SBS), 2015). There was also the need to meet the interest of development partners and investors who require not only the safety of their funds but also assurances on the environmental and social impacts of their investment in the country. This coupled with the fact that regional competition from neighbours such as Colombia and Brazil have gone ahead to develop key ESMS systems, also contributed as an added push to the process.

4.11.4 Content/Focus of the Policy

The policy is divided into six sections which relates to the mandate of the regulator, details the particular features of socio-environmental risk, traditional approaches to deal with socio-environmental risk, the case for enhanced due diligence, key elements of these rules and expected results from the policy. This gives a direction for the management of E&S issues particularly as it bothers on credit management.

It was specific on issues of liability, as the "regulation does not attempt to transfer the responsibility or roles that belong to the specialized public institutions to the financial sector; neither to make such firms responsible for potential breaches of social and environmental rules by projects and/or their primary suppliers" (SBS, 2015).

The policy requires banks to evaluate E&S risks prior to granting any credit or finance through the classification of risk as high, medium or low. The regulations will however be applicable within a certain threshold of credit for proper management. It also requires annual reporting to the supervisor and public at least once a year.

4.11.5 Strengths and Weaknesses

The policy has strong environmental focus. This is strengthened by the fact it has strong regulatory backing through the SBS which ensures enforcement. This provides the basis to support key sectors of the economy, while protecting banks from third party liabilities, which was clearly stated as the role of the relevant laws of the country.

Conversely, the Peruvian regulations is weak on social expectations. Also, the policy did not clearly articulate its expectations on banks internal operations. The regulations more or less an environmental risk management document. It subtly protects banks with regards to breaches of

E&S rules by their suppliers or investment which raises the question of commitment from banks if regulatory sanctions are not applied to such negligence.

4.11.6 State of Implementation

The regulation will become effective in February 2016. It is expected to affect existing process and laws to include report about E&S risk, the evaluation of E&S risk management regulations and the breaches for non-compliance with the regulations for E&S risk management. It is expected to create a balanced platform for E &S issues in the system.

The policy broadly categorized project and process covered by policy as "development" which includes exploration, installation, operation, and expansion or material changes, as well as decommission of facilities (SBS, 2015). This includes but are not limited to advisory services, project finance and wholesale lending which are included in socio-environmental risk management systems and banks are expected to take note of. The SBS also released a due diligence guideline stipulating expected roles of all parties to enhance the policy implementation process.

To achieve this, Kern (2014: 24) noted that the Peruvian government has "adopted coordination mechanisms between environmental and finance ministries and banking regulators to ensure the exchange of information, data and mutual support in the investigation and enforcement of environmental laws. Both the bank and environmental regulator are required to coordinate their regulatory practices and supervision where environmental regulatory compliance and financial regulatory compliance implicate one another".

4.12 Vietnam

Below is the table description and analysis of the sustainable finance regulation in Vietnam.

Table 13: Vietnam Sustainable Finance Policy Description Table

Content	Explanation of Meaning
Name of Policy (Year)	Directive on Promoting Green Credit Growth and Environmental – Social Risks Management in Credit Granting Activities
Applicability	Require compliance from units under the State Bank of Vietnam, including commercial banks, finance companies, financial leasing companies, cooperative banks and foreign bank branches operating in Vietnam. Policy implementation responsibility: State Bank of Vietnam (SBV)
Main mission and Goals	To support the National Action Plan on green growth period 2014-2020 Developed to help manage E&S impacts of investment Enhance green credit products as well as promote credit growth to E&S friendly business activities
Drivers	Existing legislature and laws Economic interests Global/DFI encouragement Political influence and public institution led
Content /Area of Focus	Environmental protection, natural resources, energy efficiency improvement; environment quality enhancement and human health protection
Strengths	Strong and firm legislative and regulatory backing

Weaknesses		Aims at stimulating business activities that are environmentally and socially friendly Strong environmental and credit risk management focus Political system influence shown in policy delivery. Most banks are state owned with bureaucracies which could make timely enforcement a challenge.
		Policy is heavily skewed as a credit regulations in line with the National Action Plan rather than being industry driven
State	of	The policy is part of larger process of implementing the National
Implementation		Action Plan on green growth period 2014-2020.
		Released in 2015, it mandates all banks in Vietnam to implement
		an E&S process.
		Considering the socialist inclination of the country and the reality
		of its state owned entities, it will be interesting to see how
		successful this would be in coming years and towards the
		actualization of the 2020 plan.

Source: Author

4.12.1 Name of Policy, Year and Applicability

The Directive on Promoting Green Credit Growth and Environmental – Social Risks Management in Credit Granting Activities was launched by Vietnam in 2015. It requires compliance from all units under the State Bank of Vietnam (SBV), including commercial banks, finance companies, financial leasing companies, cooperative banks and foreign bank branches operating in Vietnam.

4.12.2 Main mission and goals

The Vietnam sustainability policy is in line with the country's National Action Plan on green growth period 2014-2020. The policy is a structured regulatory directive that was issued by the State Bank of Vietnam (State Bank of Vietnam (SBV), 2015) through a policy document named: Directive on Promoting Green Credit and Managing Environmental and Social Risks in the lending activities in March 2015.

The guideline is an offshoot of the collaboration between the SBV, the Vietnam Bankers Association and international partners such as the IFC which began towards the end of last decade and involved peer learning and capacity development at various stages. It requires all commercial banks to proactively manage environmental and social impacts of their customers' activities and develop green credit products as well as promote credit growth to environmentally and socially friendly business activities (Vietnam Investment Review, 20/04/2015).

The policy is clear on the goals and expectations of the process and responsibilities for its constituent units. For example, it requires the Credit Department to review, research and develop regulations on ESRM in credit granting activities of credit institutions (banks) for the government banks, while it expects the state bank branches to understand the socio-economic situation and banking activities in their managed territory.

4.12.3 Drivers

The political system in Vietnam and the structure of the banking system which is largely state owned had a strong bearing in the development of this policy. This reality is reflected in the tone of the document which was a directive to the financial institutions involved.

Influence of existing legislation and laws in the country is also one key area of influence in the development of the Vietnamese sustainable banking directive. A key part of this is the need to integrate the banking credit management process with the National Action Plan on green growth (2014-2020) while maintaining the countries' economic interests.

4.12.4 Content/Focus of the policy

The directive requires all financial institutions that are operating in Vietnam to develop an internal and external ESRM system which will enhance innovative products by contributing to lending, while ensuring that E&S considerations are taken into account (IFC, 2015).

The major focus of the policy is on credit regulations in line with the National Action Plan. This takes into account the need for banks to be conscious of different needs in their activities as it relates to environmental use and management particularly in the lending process.

The goal is to develop and implement measures to promote green credit growth in order to enhance the growth of green credit products, develop credit programs offering incentives for projects, production and business which are green growth-oriented. It also aims to give funding priority to projects in the economic sectors which conserve, develop and utilize natural resources (State Bank of Vietnam (SBV), 2015)

By doing this, the SBV aims to enhance and stimulate business activities which are environmentally and socially friendly through the provision of necessary guidelines that will help provide the right platform which will align with the expectations and goals of the national action plan. This provides clear expectations from banks on the implementation of the process and state the required process of compliance, evaluation and monitoring.

4.12.5 Strengths and Weaknesses

The Vietnamese directive adopts a strict regulatory stance which ensures compliance among all banks. Its goal at stimulating business activities that are environmentally and socially friendly is also an added advantage for the economy. This is more important as it helps to ensure a strong environmental and credit risk management focus in the banking system.

However, the country's political system has an influence on the banking procedure. The policy in itself was structured as a directive. Also, the major banks in the country are state owned with bureaucracies which could make timely enforcement of the directive a challenge. The fact that the policy is heavily skewed as a credit regulation in line with the National Action Plan rather than being industry interest driven could also be a huge challenge in its delivery as any change to the challenge might affect the implementation of the policy.

4.12.6 State of Implementation

In implementing the process, the directive provides among other things coordination and capacity building for ERSM so as to support the capacity of Vietnamese banks particularly as it relates to the management of credit guidelines.

The policy is part of a larger process of implementing the National Action Plan on green growth period 2014-2020, which implies that the directive is an ongoing expectation tailored towards the achievement of the National action plan.

In view of the socialist inclination of the country's political system, and the reality of its state owned entities, it will be interesting to see how successful this would be in coming years and if the policy will meet its goals towards the actualization of the 2020 plan.

5 Analysis of Sustainability Categories and Aspects of Policies

Having conducted an in-depth description of the respective policies, this section will analyze the content of each policy by looking into the aspect of economic, social, environment and general sustainability categories. As explained in the method chapter, values were assigned to each aspect to represent their presence in the individual policy or otherwise. Each of this value are collectively computed to arrive at the total value for respective categories, which is utilized for the comparative analysis of the policies later in this chapter.

5.1 Economic Category

Table 14 below shows the considerations of respective economic categories under the policies being analyzed. For this category, aspects such as credit risk and lending process; profitability and economic growth, corporate governance, financial inclusion, partnership and collaborations, products and services and sector specific focus are considered. Of the seven aspects considered, Nigeria, Mongolia and Indonesia covered every area, while Bangladesh and Vietnam addressed only two of the aspects considered. Other countries considered at least four aspects of the polices while Kenya with six out of seven aspects and Peru with just three considered aspects were the exceptions.

Table 14: Economic Category Classification

Element	Ban	Bra	Chn	Col	Ind	Ken	Mong	Nig	Peru	Viet	Total
Credit Risk/ Lending Process	1	1	1	1	1	1	1	1	1	1	10
Profitability/Economic growth	0	0	1	1	1	1	1	1	0	0	6
Corporate Governance	0	1	1	0	1	1	1	1	1	0	7

Financial Inclusion	0	0	0	0	1	1	1	1	0	0	4
Partnership/Collaborati ons	0	0	0	1	1	1	1	1	1	0	6
Products and Services	0	1	1	1	1	1	1	1	0	1	8
Sector specific focus	1	1	0	0	1	0	1	1	0	0	5
Sum	2	4	4	4	7	6	7	7	3	2	46

5.2 Environment Category

Table 15 is mainly focused on the environmental aspects of the policies. It takes a look into the following areas: environmental risk management, internal process/environmental performance, climate change, emissions and pollutions and natural resources. Aside from Peru which focused on just 3 of the 5 aspects considered under environment others have at least four areas of focus embedded in their policies.

Table 15: Environment Category Classification

Aspects	Ban	Bra	Chn	Col	Ind	Ken	Mong	Nig	Peru	Viet	Total
Environmental Risk management	1	1	1	1	1	1	1	1	1	1	10
Internal Process / Environmental Performance	1	0	1	1	1	1	1	1	0	0	7
Climate Change	1	1	1	1	1	1	1	1	0	1	9
Emissions and pollutions	1	1	1	1	1	1	1	1	1	1	10
Natural resource	0	1	0	1	1	1	1	1	1	1	8

Sum	4	4	4	5	5	5	5	5	3	4	44	
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5.3 Social Category

Table 16 focuses on the social category of our analysis. Here social sustainability aspects of the policies such as community investment and social responsibility, labour practices, work ethics and employee rights, human rights, product and services responsibility, local rights and land allocation/disputes are noted and their presence in respective policies recognized. Of all the regulatory policies assessed, only Nigeria and Monglia covered all aspects of the social sustainability category identified, while Colombia and Indonesia considered just one of the identified five aspects in their policies. Aside from Brazil, which considered 4, other countries either considered just two or three aspects.

Table 16: Social Sustainability Category Classification

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Aspect	Ban	Bra	Chn	Col	Ind	Ken	Mong	Nig	Peru	Viet	Total
Community Investment/ Social responsibility	0	0	1	0	0	0	1	1	0	0	3
Labour Practices, work ethics and employee rights	1	1	0	0	0	1	1	1	1	1	7
Human rights	0	1	0	0	0	0	1	1	0	1	4
Product and services responsibility	0	1	1	1	1	1	1	1	0	1	8
Local rights and land Allocation/Disputes	1	1	0	0	0	1	1	1	1	0	6
Sum	2	4	2	1	1	3	5	5	2	3	28

5.4 General Sustainability Considerations

Table 17 mainly focused on other key aspects of sustainability which are important to the process but are not covered under the three sustainability classifications for our analysis. It covers issues such as Audit, monitoring, accountability and control; reporting/disclosures; regulatory requirements and capacity building. Aside from Colombia whose policy consider just two of the aspects under general, others did fairly well with six countries considering all the identified aspects, while Brazil, Kenya and Mongolia considered 3 out of four possible considerations.

Table 17: General Sustainability Category Classification

Aspect	Ban	Bra	Chn	Col	Ind	Ken	Mong	Nig	Peru	Viet	Total
Audit, monitoring,											
accountability and control	1	1	1	0	1	1	1	1	1	1	9
Reporting/ Disclosures	1	1	1	1	1	1	1	1	1	1	10
Regulatory requirement	1	1	1	0	1	0	0	1	1	1	7
Capacity building	1	0	1	1	1	1	1	1	1	1	9
Sum	4	3	4	2	4	3	3	4	4	4	35

5.5 Breakdown of Analysis and Findings

This section undertakes an analysis of the tables as developed for the identified aspects above. Each aspect is awarded a point based on its representation in the respective policies. The point are on a scale of 1to 10 with 10 being the highest number of representation and 1 being the lowest amongst individual regulations. The results are utilised to assess the importance or otherwise of

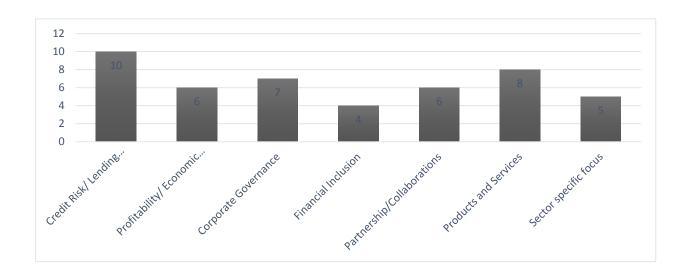
respective sustainability categories to the countries' policies. It also helps to give an insight into the content of respective policies and how each aspect are represented. For each of the category there is a graphical representation of the spread of each indicator and their importance to the process.

5.5.1 Economic Sustainability Category Analysis

For the economic category classification, Figure 3 below shows the importance of safety of bank funds in the development of the E&S regulatory across all countries. The fact that regulations from all the ten countries considers credit risk and lending process management as important shows the level concern for the protection of depositors funds through the integration of sustainable finance practices. One other reason that may be adduced to this aspect could be the need to prevent losses and to generate income for the banks, which the adoption of credit management will ensure particularly as credit and facilities granting is often the biggest source of income for financial institutions.

It is also noteworthy that 50% (i.e. 5 out of 10) of the countries analyzed have sector specific guidelines or economic sector preferences, which may be due to the fact that bank regulators are getting more involved in protecting certain core sectors of the economy. This reality could also be a driving force in some of the countries being assessed since their economies largely depends of certain key sectors which may be vulnerable to environmental impacts. This observation we believe could be true for countries that are natural resources or key economic sector dependent.

Figure 3: Economic Sustainability Aspect Classification



5.5.2 Environmental Sustainability Category Analysis

The impact of existing environmental laws and growing global interest in E&S considerations particular in relation to project finance activities could be said to be one of the main reasons for the high importance placed on the environment risk management and pollution concerns by all the regulations reviewed.

Overall, environmental considerations were accorded high importance across all the policies. As shown in figure 4 below, almost all aspects of environmental considerations has at least 70% consideration in all the policies (7 out of 10 policies analyzed). In fact majority of the policies are regarded as environmental risk and impact focused which seems to explain the reason for this reality.

However, it was observed that internal environmental performance and integration of E&S by banks' do not seem to have the same expectations with the standards set for clients as 3 of the policies assessed show lack of consideration for this. This could be argued as being related to the level of approach to environmental issues by financial institutions as earlier discussed as some

banks/regulators do not still regard the industry as big pollutants, and probably see no need to exert much resources to the internalization of environmental.

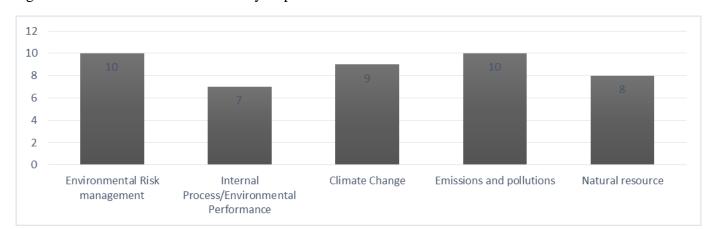


Figure 4: Environmental Sustainability Aspect Classification

5.5.3 Social Sustainability Category Analysis

Figure 5 below show interesting aspects of the E&S policies as developed across the regulations being assessed. The most notable is the little focus on community investment and human right concerns. These areas in particular explain the low weight for the social aspect. It also shows that globally banks are still reluctant to interfere in the affairs of their clients especially in developing countries where such issues are rampant. The reason for this could be fear of losing businesses, legal implication, and third party liabilities among other factors.

The interesting deviation here is the level of consideration given to stakeholder's engagement which has the highest on social sustainability consideration. It can be said that while banks do not want to interfere in the internal operations and community relations of their clients, they are often concerned with their views and interests and this usually play a big role in their decision making process and policy development.



Figure 5: Social Sustainability Aspect Classification

5.5.4 General Sustainability Aspect

It is important to note that while though not all the policies considered had regulatory input or compliance, all of them as shown in Figure 6 requires one form of reporting or disclosure to their stakeholders, regulator or the public. This expectation may include but is not limited to their annual sustainability or financial report. The implication of this is that banks especially signatories to this process are being compelled to report which is good for the sustainable finance policy development process and can help to drive performance in the implementing countries.

However, there is also the obvious lack of regulator (i.e. Central Bank) enforcement of the process in four of the countries assessed. Rather in most of these four countries, the process is often bankers' association led or regulators when involved, have very limited expectations in terms of implementation and compliance.

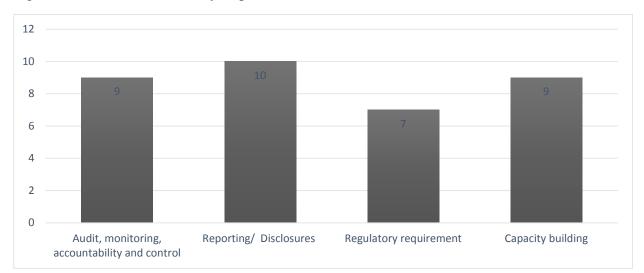


Figure 6: General Sustainability Aspect Classification

5.6 Overall Sustainable Finance Regulation Priority Areas

Considering the overall priority of each sustainability category as analyzed above, figure 7 below shows the growing importance of the environmental consideration in the banking industry. It generally reflects the growing influence of environmental risk management which form the basis of some of the policies analyzed and its impact on the bank's credit portfolio. We can adduce that for E&S policies to fully mature it requires, general aspects such as regulatory input, compliance mechanism and reporting to drive the process. The fact that the environment and general categories which incorporates these aspects got the highest weight, show their importance for the implementation of sustainable finance policies across the countries analyzed.

Also, this table shows that despite the importance of economic performance and profitability to the banking system, it has proven not to be strong enough reason to motivate banks to adopt the sustainable finance into the mainstream of their business. This can be explained as various existing literature have proven that banks still sees sustainability issues as not primary to their business or profitability.

Conversely, while it can be argued that financial gain is not the main driver of sustainability process in some of the policies assessed, it suffices to note that credit risk management and depositors' funds protection is still afforded high priority, and a key focus for the implementation of this process across all countries. Basically the difference here is the role of regulation in merging the economic importance to E&S priorities. Therefore, the interest of further research will be how and when banks draws the line between financial investment gains and financial risk concerns in the implementation and adoption of sustainability regulation and process.

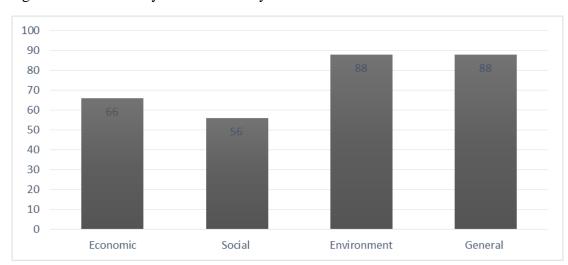


Figure 7: Sustainability Policies Priority Areas

5.7 Cluster Analysis

This study explores evolving E&S regulation in the financial sector of developing economies. It tries to achieve this through a desk analysis of the policies as developed by respective countries. Through the analysis conducted and table derived across the four recognized sustainability categories utilized in this policy, we undertook a cluster analysis of the overall result of our table through a hierarchical clustering to derive a dendrogram. The analysis derived two main clusters segmenting the countries into large part clusters.

As reflected in figure 8 below, there is a similarity between the Bangladesh and Peru which are clustered together. This could be explained as both policies are heavily focused on the environment. Also, Brazil and Vietnam policies are both structured as legal regulatory policies with strong environmental focus. They were also developed in line with existing laws or environmental plans that were already established in the country.

The clustering of Nigeria and Mongolia is due to the similarities in structure and content. The reason for this can be said to be because both countries relied on same technical capacity, particularly from the DFIs for the development of their policies. The respective categories segmenting the different aspects in our analysis above clearly reflects this as both countries have same similarities and weight, the only difference between the two being the regulatory requirement which is voluntary with Mongolia and mandatory in the case of Nigeria.

Kenya and Colombia also have similar goals with regards to economic focus, foreign investment and the fact that they are association managed and voluntary in nature. The same could be said for Indonesia as the process was developed in line with the National Development Plan.

Dendrogram for _clus_1 cluster analysis 0 Ś 4 ဖ ω Ban Peru Bra Viet Chn Col Ind Ken M₀ng Nig

Figure 8: Sustainable Regulations Cluster Analysis Dendrogram

5.8 Overall Research Findings

Having discussed the drivers of this process and undertaken a comparative assessment of the policy it is important to undertake a holistic view of the findings of this research. These findings and observation of the research are discussed in details below.

5.8.1 DFIs Importance to Sustainable Finance Regulations

Of all the policies analyzed there is no singular country that did not have an input from at least one DFI or multilateral organization in the development of their policies. Even countries that were selfled such as Colombia, Vietnam, Brazil and China, had DFIs providing background technical support and capacity either in terms of implementation, drive or capacity development.

For example, our findings show that in countries such as Nigeria, Mongolia and Kenya, not only were DFIs part of the development process, but in some cases provided part or full funding for the development of the policies. Their inclusion also provided the needed credibility and capacity development that was required for the implementation of the process. Also, in these three countries, they were part of the sustainability working group that either drafted the policy where they undertook different functions such as technical or as advisory members.

It suffices to say that the investment interest, protection and considerations of these agencies are important drivers and supporters of the process in emerging economies. One can also adduce that the success attained across these countries would not have been possible without the role played by these global bodies in supporting the development of inclusive and environmentally sound policies across board.

5.8.2 Existing Environmental and National Development Plans Influence

Existing environmental laws, environmental and economic development plans had a significant influence on the development of E&S financial regulations and lending process in the banking industry in some of the countries researched.

One interesting case here is Vietnam whose sustainable finance policy is part of a larger process of implementing the National Action Plan on Green Growth. Another example is Indonesia whose sustainable finance roadmap is part of the Master Plan for Indonesia's Financial Service Sector

(MPSJKI) 2015 - 2024. Kenya also requires its member to implement its sustainable finance guidelines at an individual level in line with the Kenyan Government Vision 2030 plan.

In terms of environmental laws, the Chinese Green Policy Guidelines was developed in accordance with national macro-control policies, such as Comprehensive Scheme for Energy Saving and Emission Reduction of the 12th Five-Year Plan, Energy Saving and Emission Reduction Planning of the 12th Five-Year Plan, and Environmental Protection Planning of the 12th Five-Year Plan. Also, Brazil's policy was formulated in line with existing legislations such as the Brazilian Environmental Law Article 12 which influenced the development of the PRSA for the financial sector. In the case of Bangladesh, the Bangladesh Environmental Conservation Act (1995) was a key influence. The Indonesian policies also had its initial roots in the Program for Pollution Control, Evaluation and Rating (PROPER) of 1995 and AMDAL Process of 1982.

5.8.3 Foreign Investment Considerations and Impact

Countries such as Bangladesh, Colombia and Kenya made it clear that their policies were influenced by the need to drive foreign direct investment to their economy. This move was seen by these countries as being necessary to encourage investors as it will help reflect adoption of best practices in the financial sector.

This also applies to most of the developing countries in this league. A case is that of Nigeria and Mongolia where safety of investor funds among investee banks led to the instigation of the process through individual bank relationships with multilateral investors before it became a banking sector policy.

5.8.4 Global Influence, Practices and Regional Competition

On a global scale, sustainable practices are gaining importance. The introduction to the Colombian Policy was explicit on this, neighbors such as Brazil was already implementing green policy on a voluntary scale when it took up the process. Also Indonesia, China, Peru, Bangladesh and Vietnam were all influenced either in the development of their process or the improvement of it due to what is happening across their respective borders.

Same was the case for Kenya and Nigeria as the NSBP played a role in encouraging the process on the other side of Africa. The influence of countries of same region cannot be overemphasized as this has shown as a trend particularly as reflected by the spread of countries with existing policies. Also impacts of international standards, principles and guidelines such as the equator principles and the requirement of such by leading global banks and investors who often have stakes in these countries' financial sector also helped fuel the development of the process.

5.8.5 Bankers Associations, Stakeholders Influence

Almost all the policies made allusions to the influence of stakeholders particularly leading global investors and operating communities as one of the main factor for the implementation of the process. This is more evident in smaller economies and countries like Bangladesh which is prone to climate change effects and serious environmental degradation. One other notable fact on this is the role played by the banking association which led to the development and implementation of the regulations in countries like Nigeria, Mongolia, Brazil and Kenya. These association and financial sector investors' demand also played key roles in the development of the process in some of the countries assessed.

5.8.6 Funds Protection and Economic Gains

It is generally believed that for banks to show interest in an endeavor, there must be a financial implication to it. Considering this, it was not a coincidence that all the policies examined had credit risk as top of their priority. This is a pointer to one fact – if there are no economic gain, impact or threat to the financial resources or customers' funds, banks and other financial institutions may never be interested in the development of sustainable finance policies. The learning here is environmental and sustainability drivers need to start putting financial value to their sustainability arguments and developing business case to enhance interest for E&S in the financial sector.

5.8.7 Different Needs and Nature of Policy

There is dynamic application of the policies due to the circumstances of individual countries. For instance, no two countries have the same guidelines or policy, regardless of similar structures (e.g. Nigeria and Mongolia; Colombia and Brazil (Protocol Verde). Yet individual countries' have developed their policies to suit their challenges by addressing peculiar sustainability issues as need be. Through this approach, countries develop focused policies and guidelines to help drive the process within their domain in line with their desired sustainable finance needs and key sector influence.

This creates an unusual trend in respective countries' approach to the development of their process. For example, Kenya is interested in growth and economic viability as against China concern with ensuring environmental compliance from a growing environmental pollution challenge. In Mongolia cultural heritage and resource management was key to its development of its process,

while in Brazil the adoption of ICAAP and protection of the Amazon were key issues. In Nigeria, financial inclusion due to its large base of unbanked population and issues of women empowerment and human rights were also important, while Indonesia's need to bring the finance sector to speed with government future development plan played a key role.

5.8.8 Banking System, Political Impact and Regulatory Influence

One fact that cannot be denied in this process is political impact on the banking sector. The Peruvian, Chinese and more obviously the Vietnam policies are very good examples of this. Vietnam's approach is interventionist and this clearly reflects in its banking system and regulatory tone as it developed a directive which all institutions under the SBV are expected to align with. The tone of the draft was also unequivocally firm.

Also, the existing banking system in respective countries played a key role. For example, countries with large public banks and those with commercial driven systems have clear variances in their approach to regulation development. Vietnam and China where the financial system are mainly public institution dominated and are socialist or communist countries in practice had a remarkably different tone of language in their policy when compared to a Brazil which is a democracy despite the fact that the latter also has an enforced E&S regulation. In its case, Brazil regulation and choice of words and tone were not as forceful when compared to the other two. It was generally observed that most countries with democratic systems adopted a persuasive approach to the implementation of the policies e.g. Colombia, Mongolia.

5.8.9 Control and Regulatory Influence on Banks' E&S Adoption

Though it can be argued that E&S considerations, funds safety and economic benefits largely drive the adoption of sustainable finance policy in emerging economies, yet, this research has observed that these factors may not be enough for banks to adopt sustainability standards.

One interesting finding of this research shows that for E&S considerations to be fully integrated into a banking sector system, it has to have legislations or other regulatory requirements such as reporting, disclosures and audit controls which often forces banks to be environmentally compliant.

5.8.10 Social Aspect of Sustainability is Weak

This research discovers that despite high challenges with social issues in some of the countries analyzed, social sustainability was not a key influencer of this process among many bank regulators. From our data, only about 40% of all the countries see the need to consider an important issue such as human rights in their policy while land dispute and operating community concerns which are largely tied to the credit risks aspects have only 6 and 3 policies give consideration to them respectively in the regulations of the countries assessed. This finding may not be unconnected with the fact that banks still evade issues of third party relationships issues. The effect of this is that social sustainability considerations are weak and needs more attention even among countries implementing E&S policies.

6 Discussion

6.1 Sustainable Banking Process Drivers and Model

Having assessed the impact and evolving roles of regulators' in developing sustainable finance process, this research has observed that when implementing E&S practices, there is often no singular driver for the process across different countries. One notable reason for this could be the existence of different incentives and drivers for respective central banks and regulatory agencies which are taking up this role. For instance, while some countries are committed to this process for the purpose of managing their exposure to specific environmental issues, industries and sectors (e.g. China, Bangladesh), others are interested in its capacity to help the financial sector capitalize on opportunities, such as socio-economic and environmental support provided by development finance institutions (DFIs) (e.g. Nigeria).

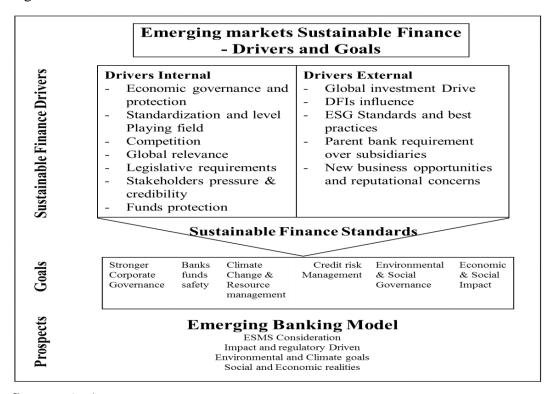
Another observation here is the role being played by banking regulators, such as FEBRABAN – Brazilian Federation of Banks, the main representative body of the Brazilian banking sector, which championed the process in Brazil; The Bankers Committee in Nigeria, which led the process of adoption for the NSBP, Kenya Bankers Association (KBA), Colombian Banking Association – ASOBANCARIA, and the Mongolian Bankers Association (MBA). These bodies not only contributed significantly to the establishment of the process, but in some instances encouraged regulators to take the lead and ensure compliance of their self-developed rules. The clear driver here is the need to align with global best practices and ensure adherence of their members to emerging E&S standards in the financial sector. Though the social, economic and political climates are different from what is present in developed countries, by ensuring regulatory influence, these

groups have been able to ensure control and take sustainability governance of the sector beyond self-governance, thus increasing influence among their members.

Attracting foreign investment and the need to protect business interests in some of the fastest growing economies in the world may be another factor for implementing sustainable finance regulations in these countries. Despite their promising economic prospects, the business environment of emerging economies comes with inherent risk and infrastructure challenges, which no concerned regulator or apex bank will allow. The environmental and social implications of these risks are often too high for mitigation or total avoidance, as weak regulation will have an adverse effect on the banking system. One way to mitigate these risks is to address the basic reasons for their existence, through the provision of a sustainable finance system that ensures the environmental, social and economic needs of the society are addressed. This partly explains why the leading DFIs and the World Bank's IFC are promoting this process across different countries (Goodland, 2005; Grigoryeva, Morrison, Mason, & Gardiner, 2007).

On the whole, the issues that drive these processes are diverse and differs from one country to the other. These drivers are both internal and external within the financial systems. It is also sometimes based on intervening policy plans of the government for achieving extensive development and environmental goals (e.g. Indonesia, Brazil, Vietnam and Kenya). Nevertheless, one achievement of these goals is the creation of new sustainability standards and an emerging financial system that is fast gaining attention globally and evolving a new model of sustainable finance banking. (UNEP Inquiry, 2014; UNEP Inquiry, 2015a; UNEP Inquiry, 2015b). Figure 9 below is a representation of the drivers of this sustainable finance model in emerging markets, their goals and future prospects. This model was developed based on the findings and points discussed in this research.

Figure 9: Sustainable Finance Drivers and Goals



Source: Author

6.2 Conclusion

In determining what this research has added to the body of literature we need to compare the assumptions made in our findings with existing conclusions in the body of literature. This will help us conclude on our findings and where further research interests could be focused on as the process of embedding E&S considerations into the financial sector policies grows. For example, UNEP Inquiry (2015:6) observed that though there is a "growing number of sustainability innovations in financial policy, regulation and standards. But their potential for scale and efficiency remains poorly understood". The Inquiry further adduced that, "in their current form, many are ad hoc measures that are not integrated into the overall financial and capital markets. Many have only

recently been enacted, so that their impacts remain untested and their prospects uncertain. The transferability of innovations is also unclear"

While it is true that many of these policies have only been recently enacted, and largely untested, this research has shown that the argument that their potential for scale and uncertainty of their prospects can be argued as countries like Brazil and China and recently Bangladesh have proven that the process can stand the test of time and is dynamic enough to evolve with needs of the sector and implementing country per time. Also, the financial markets and banking systems are two standalone entities and do not often times coalesce to form policies as their dynamics are different. Also, in Nigeria and Indonesia capital markets operators have instituted sustainability reporting guidelines for the core of the organizations listed on their stock exchange which includes banks. The adoption of the process in Mongolia, Kenya and Colombia also falsifies the issues on the transferability of innovation as all these countries policies were based on the learning from the early adopters.

Perhaps in relations to academic concerns, we can infer that while several literatures have addressed the need for sustainability in core sectors including banking, none has actually dealt with the regulated aspects of sustainable finance (See Garcia, 1997 and Jeucken, 2010). This research has been able to address this gap by analyzing the differences and similarities of the different regulations and structure, while connecting the result of existing regulations to their drivers. We have also established that respective regulations are driven by diverse interests and governance approach with the goal of addressing varying sustainability issues. Hence while some regulations are more social, some are focused on stability and others on environmental viability.

One fact our literature has thrown up is the unsustainability of self-regulated policies as currently exist in most developed economies since "success of private-sector regulatory processes is more dependent on the public sector" (Porter and Ronit, 2006:67). Though we may not be able to say the impact of regulatory driven process in the immediate, however, there is ample example of progress among implementing countries to believe that there is good prospect for the future of this approach to E&S governance particularly with the growing interest it has garnered in the last one year. This finding is starkly in contrast with the monopoly of regulation as postulated by Coulson (2009).

Also, regulatory influence on the countries of focus sustainable finance policies can be expounded through the institutional theory concept of coercive isomorphism. Though the adoption of the policies by Colombia, Kenya and Mongolia can be argued to be normative in nature since they were influenced by adoption in neighboring or regional countries. Nevertheless, the logical explanation for the regulatory nature, compliance expectations, implementation process and adoption of this research across all the countries investigated is more strengthened by coercive isomorphism. This situates our research within the ambits of institutional theory as a basis for explaining this phenomenon. It also aligns with the key pillar of regulation as noted by Scott (1995). More importantly, it strengthens and validates our second hypothesis as established on the influence and development of respective regulations as a basis for control and establishment of distinctive E&S standards in the financial sector.

This research has shown that guaranteeing a balanced field of play for those implementing and adhering to good environmental standards and their competition within the same markets is one of the reasons why regulatory influences are necessary. Hence, we believe that rather than causing "a monopoly" of the market, these policies help drives competition as events in some of the countries

of research have shown. More importantly, there is the need for compliance, monitoring and control to actualize the goals of providing sustainable finance with a positive impact on the social, environmental and economic landscape of their constituencies. There is also the need to encourage and incentivize banks and support proactive environmental policies. This is why our findings is in tandem with Wright (2012) on the challenges of allowing financial institutions drive the process by themselves as it may leave them unable to achieve E&S goals in the long run, as this could be detrimental to achieving a sustainable financial system. In its present format, the voluntary system can only encourage and enhance competition at a limited level, but cannot enforce compliance, as individual institutions will always be subservient to local laws. The fact is regulatory procedure may not only aid the implementation of E&S considerations, but can also contribute to ensuring sound environmental and social practices amongst borrowers of bank funds, while serving as a means of enforcing standards.

These realities have necessitated a need for regulators to be more involved in the creation of national enabling frameworks for sustainable banking. It has also created an emerging trend in which regulators are involved in banks' adoption of E&S practices, which is fast evolving and gradually expanding the responsibilities of regulators in the financial sector (UNEP Inquiry, 2015b). This paper argues that banks can have a significant impact in the way economies and business conduct themselves in the near future in relation to climate change management and may provide a hint on what is to come in the future of sustainable finance governance. This is why the involvement of central banks, bankers' associations, environment ministries and other regulatory bodies is important. However, further research is needed to determine the impact of this participation, and whether or not it will produce positive influence on the global banking sector.

6.3 What does the future hold?

One recurring question is to determine if regulators' participation in the sustainable finance process will catalyze any significant change for the financial sector. Unfortunately, sustainable finance adoption in banks is still in its infancy, and it cannot be said for certain what effects the introduction of such regulations will have on the banking industry and economy. This point is crucial considering the fact that this is an evolving process with little or no research into its function, implementation or impacts across adopting countries. The current wave is less than a decade old, though quickly gaining popularity, which makes it more difficult to predict.

Despite this uncertainty, the biggest economies in Africa, Asia and Latin America have taken the lead with regards to the implementation of regulatory driven environmental and social governance in the financial sector. The growth pattern of these economies in the last decade could be evident of a new trend towards consolidating current economic successes by strengthening social and environmental behaviors through the banking system. The rate at which other developing countries are also embedding this approach for their financial sector could also be an indicator as to what lies ahead. While this leaves room for optimism, the question on whether or not developing countries will take the lead in this space from the originator of the process remains unanswered. Therefore, there is a need to determine whether the approach of these countries could help drive regulator led integration of sustainable systems in financial institutions globally, while encouraging leading economies to join the process. The only feasible explanation for the noninvolvement of the developed countries in this field could be said to relate to the assumption that the voluntary system is working well and the belief in the systemic structure of corporate governance and sustainability adoption amongst these countries. However, as earlier discussed in this paper, the reality is far from this and it would be in the interest of global sustainability efforts

for this approach to evolve in the leading economies financial sector. If this evolves, then E&S considerations can be strengthened through legislation, which could help ensure that climate targets are met much faster, sustainable finance and products are promoted, social investment is increased and businesses adhere to more responsible practices.

In conclusion, it is critical to note that further research needs to be done on the impact of these principles and to understand the possibility of their successful implementation beyond the present adopters and more importantly among more advanced economies. This is important considering the role financial sector plays in businesses and how this could help the actualization of climate change goals. However, further research will also need to go into the need for, and continued role of financial regulators in the environmental and climate impact drive. In whole, it only appeals for one to look forward to what further research interests this phenomenon will necessitate in the coming years.

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8 Appendix

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