6-29-2015

Successes and Shortcomings in the Implementation of National Sustainable Development Strategies: From the Greening of Governance to the Governance of Greening

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DOI: 10.25148/etd.FIDC000103

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

SUCCESES AND SHORTCOMINGS IN THE IMPLEMENTATION OF
NATIONAL SUSTAINABLE DEVELOPMENT STRATEGIES: FROM THE
GREENING OF GOVERNANCE TO THE GOVERNANCE OF GREENING

A dissertation submitted in partial fulfillment of

the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

PUBLIC AFFAIRS

by

Rachel Emas

2015

To: Dean Michael R. Heithaus
College of Arts and Sciences

This dissertation, written by Rachel Emas, and entitled Successes and Shortcomings in the Implementation of National Sustainable Development Strategies: From the Greening of Governance to the Governance of Greening, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Florida International University, 2015

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DEDICATION

I dedicate this dissertation to my family: Marilyn, Kevin, Erica, and Sam (Trouble and Olivia, too). I could not have survived this process without each of you in my life. Thank you for somehow knowing when I needed to talk or be spoken to, to listen or to be heard, to be validated or to be edited. And thank you especially for those moments when we could be still and silent together and enjoy the sunset.

I love each of you more than life itself-- always and all ways.

ACKNOWLEDGMENTS

I wish to thank the members of my dissertation committee for their patience, support, and kindness. Their gentle but firm guidance has been most appreciated. Dr. Sukumar Ganapati was particularly supportive in helping me to select my field of study while I was still completing my coursework; as he explained to me, “you must select a topic you love enough that you can study it happily for the next forty years”. Dr. Shaoming Cheng, through his innovative teaching methods and reflexive curricula, helped me identify my affection for statistics and research methods. Dr. Pallab Mozumder taught me that my work must always reflect the needs of my audience, while still remaining true to my objectives.

Finally, I would like to thank my major professor, Dr. Allan Rosenbaum. From the beginning of my time at FIU, he instilled in me a deeper self-awareness that I have learned to accept and honor. In all of my work, I strive to make him, and myself, proud. Dr. Rosenbaum, I will never be able to express how significant and vital our relationship has been in my progression and growth as a student, scholar, and as an adult. I am eternally grateful for everything you have taught me about public administration, about life, and about myself. Thank you for everything.

I have completed this dissertation with the ongoing assistance of the Florida International University Graduate School through the support of the Dissertation Evidence Acquisition (DEA) Fellowship and the Dissertation Year Fellowship (DYF). I have also received support from the Institute of Public Management and Community Service.

ABSTRACT OF THE DISSERTATION

SUCCESES AND SHORTCOMINGS IN THE IMPLEMENTATION OF
NATIONAL SUSTAINABLE DEVELOPMENT STRATEGIES: FROM THE
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Rachel Emas

Florida International University, 2015

Miami, Florida

Professor Allan Rosenbaum, Major Professor

The interdependence between the economy and the environment necessitates integrated policymaking that recognizes the biological limits of our world and the scarcity of these natural resources. At the 1992 Earth Summit, countries agreed to adopt a National Sustainable Development Strategy (NSDS) which should comprise the integration of economic, social, and environmental policies across sectors, territories, and generations; country ownership and commitment; broad participation and effective partnerships; development of the necessary capacity and enabling environment; and focus on outcomes and implementation. Working from these key factors and based on decades of international research and peer reviews of these policies, this study hypothesizes four relationships to test the influence of these principles on the successful execution of an NSDS. Offering the first formal framework which theorizes and evaluates connections between these dimensions, this qualitative approach is applied to two case studies, South Africa and Germany, by the

use of documentary analysis and semi-structured interviews. The present study finds that embedding NSDS programs and institutions within existing policy agendas and organizations is extremely difficult, especially in countries with a solid history of environmental policy. Also, the significant role of subnational governments and entities in all aspects of policymaking must be taken into account for the effective implementation of a National Strategy. The present research examines the necessity of specific policymaking processes and implementation mechanisms for an effective National Sustainable Development Strategy, ascertains common implementation challenges, and offers recommendations for the improved implementation of National Sustainable Development Strategies.

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LIST OF ABBREVIATIONS AND ACRONYMS

AGU	Federal Working Group on Environmental Protection (Arbeitsgemeinschaft für Umweltfragen)
ANC	African National Congress
APP	Annual Performance Plan
ASGISA	Accelerated and Shared Growth Initiative for South Africa
BAUM	German Environmental Management Association (Bundesdeutscher Arbeitskreis für Umweltbewusstes Management)
BBU	Federal Alliance of Citizens' Initiatives for Environmental Protection (Bundesverband Bürgerinitiativen Umweltschutz)
BIN	Citizens Initiate Sustainability Program (Bürger Initiieren Nachhaltigkeit)
BK	Federal Chancellery (Bundeskanzleramt)
BMBF	Federal Ministry for Education and Research (Bundesministerium für Bildung und Forschung)
BMF	Federal Ministry of Finance (Bundesministerium der Finanzen)
BMUB	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit)
BMWi	Federal Ministry of Economics and Technology, later renamed Federal Ministry of Economic Affairs and Energy (Bundesministerium für Wirtschaft und Energie)
BMVBS	Federal Ministry of Transport, Building and Urban Affairs (Bundesministerium für Verkehr, Bau und Stadtentwicklung)

BMVg	Federal Ministry of Defense (Bundesministerium der Verteidigung)
BMZ	Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
BRICS+G	Brazil, Russia, India, China, South Africa, and Germany
BUND	German League for Environment and Nature Protection (Bund für Umwelt und Naturschutz Deutschland)
CA	Constitutional Assembly
CDU	Christian Democratic Union (Christlich Demokratische Union)
CEC	Committee for Environmental Coordination
CODESA	Convention for a Democratic South Africa
CONNEPP	Consultative National Environmental Policy Process
CSIR	Council for Scientific and Industrial Research
CSU	Christian Social Union (Christlich-Soziale Union)
DBSA	Development Bank of Southern Africa
DDP	German Democratic Party (Deutsche Demokratische Partei)
DEAT	Department of Environmental Affairs and Tourism
DEA	Department of Environmental Affairs
DFA	Department of Foreign Affairs
DNVP	German National People's Party (Deutschnationale Volkspartei)
DVP	German People's Party (Deutsche Volkspartei)
EC	European Community
EIA	Environmental Impact Assessment
EU	European Union
FEA	Federal Environmental Agency

FRG	Federal Republic of Germany (or West Germany)
FSO	Federal Statistical Office
GDR	German Democratic Republic (or East Germany)
GEAR	Growth, Employment, and Redistribution
GTZ	German Technical Cooperation (Gesellschaft für Technische Zusammenarbeit)
IARC	Impact Assessment Research Centre
IDP	Integrated Development Plan
IIED	International Institute for Environment and Development
IRC	Integrated Reporting Committee
IRPS	International Relations, Peace and Security
JPOI	Johannesburg Plan of Implementation
KPD	Communist Party of Germany (Kommunistische Partei Deutschlands)
M&E	Monitoring and Enforcement
MAT	Management and Advisory Team
MEC	Members of the Executive Council
MINMEC	Ministers and Members of Executive Councils Meeting
MISEREOR	German Catholic Bishops' Organization for Development Cooperation
MPNP	Multi-Party Negotiation Process
MTSF	Medium-Term Strategic Framework
NATO	North Atlantic Treaty Organization
NCSD	National Council for Sustainable Development (or National Committee for Sustainable Development)
NDP	National Development Plan
NEMA	National Environmental Management Act

NFSD	National Framework for Sustainable Development
NGP	New Growth Path
NP	National Party of South Africa (or Afrikaner National Party)
NPA	National Peace Accords
NPC	National Planning Commission
NSDS	National Sustainable Development Strategy
NSSD	National Strategy for Sustainable Development
OECD	Organization for Economic Cooperation and Development
PBnE	Parliamentary Advisory Council on Sustainable Development (Parlamentarischen Beirates für nachhaltige Entwicklung)
PGDS	Provincial Growth and Development Strategy
PRS	Poverty Reduction Strategies
RDP	Reconstruction and Development Program
RNE	Council for Sustainable Development (Rat für Nachhaltige Entwicklung)
SADC	South African Development Community
SALGA	South African Local Government Association
SD	Sustainable Development
SED	Socialist Unity Party of Germany (Sozialistische Einheitspartei Deutschlands)
SIA	Sustainability Impact Assessment
SOE	State of the Environment
SORA	Summary Oral Reflexive Analysis
SPD	Social Democratic Party of Germany (Sozialdemokratische Partei Deutschlands)
SRU	Advisory Council on the Environment (Sachverständigenrat für Umweltfragen)

UAL-AG	Supporting Committee of Heads of Under-Directorates (Unterabteilungsleiter-Arbeitsgruppe)
UBA	Federal Environmental Agency (Umweltbundesamt)
UDF	United Democratic Front
UMK	Conference of Environmental Ministers (Umweltministerkonferenz)
UN	United Nations
UNCED	United Nations Convention on Environment and Development
UNCSD	United Nations Commission on Sustainable Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Program
UNSD	United Nations Division for Sustainable Development
UNEP	United Nations Environmental Program
WSSD	World Summit for Sustainable Development

Chapter One: Introduction

Since the late 20th century, it has become more widely accepted that long-term social and economic development is reliant upon the sustainable use of natural resources. The concept of sustainability is founded on the notion that everything that humans require for survival and well-being depends, either directly or indirectly, on our natural environment. The interdependence between the economy and the environment necessitates integrated policymaking that recognizes the biological limits of our world, the scarcity of natural resources, and the inherent constraints these factors impose. The mutual dependence between the economy and environment, and the integration which it necessitates, lies at the heart of sustainability and sustainable development.

Background of the Problem

The 1992 United Nations Conference on Environment and Development (UNCED) brought together over 178 governments from around the world. The two-week UNCED, also known as the Earth Summit, culminated in the adoption of two key international agreements: the Rio Declaration on Environment and Development and Agenda 21. Building on the previous Declaration of the United Nations Conference on the Human Environment adopted in Stockholm in 1972, the Rio Declaration is a statement of 27 principles upon which nations agreed to guide their actions in dealing with environmental and development issues (United Nations, 1992). Agenda 21 is regarded as a comprehensive plan of action to be taken globally, nationally, and locally in every area in which humans impact the environment (United Nations, 1997). While the

Rio Declaration focused on the efforts of the national governments, Agenda 21 highlighted the importance of local efforts in making progress towards sustainability.

Agenda 21 addressed some of the fundamental problems of resource degradation, environmental scarcity, and governmental responses to these issues. Chapter 8 of Agenda 21 calls on countries to adopt a National Sustainable Development Strategy (NSDS or National SD Strategy) that builds upon and complements the various sectoral economic, social, and environmental programs that are in place in the country. According to the UN, a National Sustainable Development Strategy is a “coordinated, participatory, and iterative process of thoughts and actions to achieve economic, environmental, and social objectives in a balanced and integrative manner” that best fits the needs of the nation (United Nations Division for Sustainable Development, 2002). As these international agreements articulate, it is not necessary to sacrifice growth for sustainability.

The countries at the Earth Summit agreed that a crucial and necessary step to move towards the paradigm of sustainable development was the creation, passage, and implementation of a National Sustainable Development Strategy which would build on and harmonize the various economic, social, and environmental policies that are operating in the country. An NSDS is not simply a document, as the ratifying nations agreed, but rather it is a dynamic process of comprehensive and coordinated action and feedback, which is developed from the foundation of previous policies and institutions, and acknowledges the complex contexts and history of a specific country (United Nations, 1992).

A well-planned, comprehensive set of sustainable development policies can help to tackle the problems of both the economy and the environment. The passage and implementation of a National Sustainable Development Strategy is an important symbol of a government's commitment to integrated and sustainable growth in the long-term. An NSDS is a major step towards and a signal of the significance of sustainable development in a country. These comprehensive plans are inherently unique from other types of policy.

Five principles have been developed by the UN Division for Sustainable Development that differentiate a National Strategy from traditional environmental policies: 1. integrated economic, social, and environmental policies across sectors, territories, and generations; 2. country ownership and commitment; 3. broad participation and effective partnerships; 4. development of the necessary capacity and enabling environment; and 5. focus on outcomes and implementation (United Nations Division for Sustainable Development, 2010). The set of five essential factors for an NSDS has driven the work of policymakers, administrators, and academics in the field for over 20 years, but the assessment of these policies has been ad hoc and lacking a replicable evaluative framework.

Though the UN has outlined these distinguishing elements of a National SD Strategy, there is no blueprint or simple set of plans for the effective creation and implementation of an NSDS. Therefore, after identifying its development objectives, “every country has to determine by itself how to develop and implement strategies for achieving its sustainable development goals” and short-, medium-, and long-term

planning aspirations (United Nations Division for Sustainable Development, 2010). The necessary uniqueness of each country's NSDS experience, amongst other complexities and constraints, has given rise to various difficulties in the measurement of and research regarding these policies.

Statement of the Problem

To date, there are no sustainable development indicator sets that are universally accepted, backed by compelling theory, rigorous data collection and analysis, and influential in policy making and implementation. Our global “understanding of what constitutes an effective NSDS has improved substantially over the past decade and has led to various sets of principles of sustainable development and strategic planning being proposed”, though very few of these approaches have been verified by empirical research (Cherp, George, & Kirkpatrick, 2004, p. 4). The research field lacks a replicable and empirical framework for the evaluation of National SD Strategies which aligns these five principles with specific variables and indicators; this study fills this gap in the literature.

Additionally, though it has been more than twenty years since the Earth Summit, very little guidance has been provided or comprehensive analysis undertaken as to how to implement and fulfill the NSDS policy commitments. Nevertheless, a small body of literature has described national and subnational activities in respect to National Sustainable Development Strategies and similar initiatives, but in an informal fashion. Research on National Sustainable Development Strategies has been limited, in part because it is a young program. Currently, the field lacks a formal framework to assess the development, administration, and implementation of these National Strategies.

Purpose of the Study

National Sustainable Development Strategies, and the specific programs contained within them, have been evaluated in an ad hoc fashion. Though there exists a consensus on the five UN-established principles of an NSDS, the field has offered few frameworks to analyze the implementation of these National Strategies (Institute for European Environmental Policy, 2006). The peer review mechanism coordinated by the United Nations Division for Sustainable Development is one formal and well-regarded avenue of assessment for National SD Strategies. The UN review mechanism, however, fails to draw a fundamental link between the five principles of a successful NSDS and the indicators used in the analysis.

The NSDS peer review process provides a good deal of guidance regarding how to assess these strategies, but fails to formally link the questions or indicators to the principles established by the UN and in peer review guidebooks (International Institute for Environment and Development, 2005). The present study fills this vacuum in the literature by providing such a framework. In the creation of a testable and replicable assessment policy framework, this research bridges the gaps between qualitative and quantitative data and methods, and the peer review questions and five UN-established principles for an effective NSDS. In so doing, the present research will help answer the ongoing demand for more rigorous analysis of sustainable development policy implementation.

The peer review mechanism, while a central mechanism for NSDS evaluation, fails to draw a causal link between the five principles of a successful NSDS and the

indicators used in the analysis. This qualitative study presents a formal framework for the assessment of National Sustainable Development Strategies and applies this approach to the NSDSs of two countries. Based on the decades of work from scholars and practitioners, this study introduces a structured analytical approach to the examination of National SD Strategies, which is then applied to two in-depth case studies.

Significance of the Study

National SD Strategies have the capacity to put in place a new paradigm of policymaking, one which focuses on the integration of social, environmental, and economic concerns throughout the decision making and implementation processes, while relying on the participation of a broad range of stakeholders. These National Strategies can be used to shift a nation onto a more sustainable path of development, benefitting its citizens and future generations. As such, it is vital to examine the effectiveness of the implementation of these policies, and make recommendations for their improvement. By providing a formal assessment framework to better understand a nation's progression towards sustainability, the present research will benefit policymakers and administrators, practitioners and politicians, and citizens and civil society groups; the study will also help to influence those policies with significant impacts on future generations.

Theoretical Framework

This research presents a framework of analysis of the implementation of National Sustainable Development Strategies focused on the work of the UN, OECD, EU, and pilot peer review processes of National SD Strategies. From the first two decades of exploration, the present study developed research questions and proposed hypotheses

regarding the significance of the five key principles of an effective National Sustainable Development Strategy.

Through its in-depth evaluation of two National SD Strategies within their respective country contexts, the present study identifies, links, and tests the necessity and significance of the five central components to the effective implementation of a National SD Strategy in South Africa and Germany. These findings can provide policymakers with practical implementation information, examples of coordinated and integrated action for sustainable development, and a broader understanding of how country contexts can constrain or encourage a nation's shift to a sustainable path of development. The formal analytical approach presented here can also be replicated and applied to other nations looking to assess their National SD Strategy and progress towards the objectives of sustainable and integrated development processes.

Research Design

The study develops and applies a formal NSDS assessment framework to answer the following critical questions: How do nations successfully identify, involve, and maintain the engagement of stakeholders throughout the creation, revision, and implementation processes of a National Sustainable Development Strategy? How does the national commitment of key resources influence the intergovernmental cooperation of a National Sustainable Development Strategy? How does the leadership of key NSDS institutions influence the level of inter-departmental cooperation at the national level? How do nations integrate current monitoring and enforcement institutions and approaches

to design an effective evaluation and feedback system for a National Sustainable Development Strategy?

The study's hypotheses tested the relationships between the core principles of a successful National Sustainable Development Strategy. In doing so, the present study is the first in the field to present a set of testable hypotheses that operationalize the key NSDS elements into selected variables, which are then linked to a set of specific questions to be assessed via interviews and documentary analysis.

The research tests the importance of several factors in the implementation of NSDSs, while accounting for particular country characteristics in the two case studies. National contexts must be accounted for if research is to determine common elements of successful NSDS implementation, necessitating a qualitative research design. Therefore, the case study method is specifically appropriate to analyze this type of a comprehensive policy.

To provide maximum generalizability, the cases were selected to provide comparative knowledge and generalizability. Therefore, one highly developed European and one developing African nation were selected for analysis: Germany and South Africa, respectively. Country-level and subnational evidence was collected using publicly available documents and literature, complemented by semi-structured interviews with key civil society stakeholders, government representatives, and sustainable development experts and officials. These data and information were utilized to inform the indicators in the assessment framework and evaluate the effectiveness of each country's National Sustainable Development Strategy.

Conclusion

Since the Earth Summit and the emergence of National Sustainable Development Strategies more than two decades ago, little research has been undertaken in order to identify how the five elements of an effective NSDS are informed or inhibited by the specific context of a nation. The present study links the established principles of an NSDS to indicators and variables in a framework of testable hypotheses which can be replicated over time and across countries. The assessment approach is then utilized to evaluate the National Strategies of Germany and South Africa.

The following chapter outlines the theoretical framework of sustainable development upon which this research is based. Subsequently, in Chapter Three, the literature on policymaking and policy implementation is reviewed. Chapter Four describes the study's research design, methods of analysis, and framework for assessment. Then, each national case study features two chapters. Chapter Five presents a history of South Africa, concentrating on the country's socioeconomic development and its influence on environmental matters. This is followed by Chapter Six, which details the evolution of environmental management policies and evaluates the National Sustainable Development Strategy of South Africa. Chapter Seven offers a review of the political history and administrative development of Germany and its impact on environmental management. A detailed description of the processes undertaken in the creation and implementation of the German NSDS, and a formal assessment of the National Strategy is presented in Chapter Eight. Finally, the research concludes with a summary of the findings and recommendations for policymakers and practitioners.

Chapter Two: Sustainable Development Framework

Introduction

Governmental institutions are traditionally organized into sectoral agencies and departments. The traditional departmental arrangement works reasonably well until the system encounters a challenge that is multifaceted, complex, and comprehensive, such as sustainable development (SD). Over the last half-century, the policy issues of environment and development have been grouped together under the framework of sustainability. As government has generally been held responsible for dealing with the issues of environment and development, this new focus on sustainability has created new demands on policy and policymakers.

Sustainable development is unique, however, from other types of policy for several reasons. First, issues of sustainability are truly global problems, but policy mechanisms are often national or subnational. Therefore, political leaders of one country have the incentive to allow those from other nations to address these global environmental issues and, if they do, everyone will still reap the benefits.¹ Secondly, sustainability problems occur and arise over various timelines, but rarely within a politically convenient timeframe (Dovers, 1996). Third, sustainability policy is comprehensive, interdisciplinary, and calls for integration across government levels, territories, and sectors; the policy arena is inherently multifaceted and highly complex. Finally, sustainable development requires a constant iterative process of learning, adaptation, and revision of policies.

¹ This example highlights another cause of market failure in the provision of public goods: free riding.

The key principle of sustainable development is the integration of economic, environmental, and social objectives across sectors, territories, and generations. A National Sustainable Development Strategy is presented as the main policy tool to guide the long-term developmental vision of a country, establish and align objectives and targets, and integrate the processes and policies required to make progress towards these goals.

The integration mechanisms advocated in the sustainability policy framework promote consensus building and a realistic recognition of the political trade-offs necessary in development policymaking, but not at the expense of environmental or social matters. The paradigm of sustainable development requires the integration of social, economic, and environmental issues to promote balanced decision making which should become the new pattern of policymaking. Little research, however, has been conducted on the process of implementation of these integrated decision making mechanisms within the NSDS framework. Moreover, much of the relevant literature has failed to present an assessment framework for National SD Strategies which is empirical and theory-driven, reliant on agreed-upon principles for SD, and replicable across time and place. It is this gap in the literature that is addressed by the present research study.

In the analysis and evaluation of the implementation of National Sustainable Development Strategies, several bodies of literature from various fields of study are relevant. Drawing on such disciplines as public administration, environmental science, economics, political science, implementation studies, and policy analysis, the chapter will review the current state of knowledge as regards the areas of sustainable development,

policymaking, and policy implementation. In so doing, the review of research will provide a greater understanding of the evolution of sustainable development concepts, principles, tools, and strategies for their execution, and identify the current gaps in knowledge—both theoretical and empirical.

The following section presents the evolution and current status of the definition and core principles of sustainable development. Then, National Sustainable Development Strategies will be explained, including a typology of these policies, current assessment approaches, and the key distinguishing features of an NSDS. This section is followed by an explanation of NSDS evaluation frameworks. The chapter concludes by identifying the significant gaps in the literature and research on National Sustainable Development Strategy policymaking and implementation.

Concept of Sustainable Development: Definition and Defining Principles

In 1987, the Brundtland Commission published its report, *Our Common Future*, in an effort to demonstrate the feasibility of simultaneously addressing the issues of economic development and environmental stability. The Brundtland Report provides the oft-cited definition of sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations General Assembly, 1987, p. 43). Albeit somewhat vague, this concept of sustainable development aims to maintain economic advancement and progress while protecting the long-term well-being of the environment; just as it set out to do, the report “provides a framework for the integration of environment policies and development strategies” (United Nations General Assembly, 1987). However, long

before the late 20th century, scholars argued that there need not be a trade-off between environmental sustainability and economic development.

By utilizing market-based tools such as taxes and fees, early economic theorists offered that policies to protect the environment could also promote innovation and turn a profit. In 1920, Arthur Pigou noted that the presence of incidental, uncharged services act as a barrier to achieving equilibrium in the market. In his work “The Economics of Welfare”, Pigou noted that the divergence between marginal private costs and benefits and marginal social costs and benefits give rise to what we now call “externalities” (Pigou, 1920). These externalities are conceived as transaction spillovers, or costs and benefits unaccounted for in the given price of a good or service. In order to correct the market failure, Pigou proposed a tax on those activities that produce negative externalities at a rate equal to those external costs. By levying this charge, called a Pigouvian tax, the market price will more accurately reflect the comprehensive social costs and benefits of the activity (Pigou, 1920).

Building on the ideas of Pigou, Michael Porter and Claas van der Linde hypothesized that pollution, as a negative externality, is a sign of inefficient resource use. Therefore, win-win opportunities for the environment and economy can be captured through improvements which reduce pollution in production processes (Porter & van der Linde, 1999). Porter and van der Linde argue that competitive advantages rely on the capacity for innovation; thus, “by stimulating innovation, strict environmental regulations can actually enhance competitiveness” when designed effectively (Porter & van der Linde, 1995, p. 98). As the Porter Hypothesis states, properly designed environmental

policies that make use of market mechanisms can encourage the innovation and introduction of new technologies and reduce production waste and pollution. The tests of the Porter Hypothesis have yielded mixed results, but scholars generally agree that policy design and public support are crucial elements to the success of these incentives (Cerin, 2006; Feiock & Stream, 2001). Nonetheless, market-based environmental tools are generally perceived as more “business friendly” than traditional command and control policies, and these economic incentives are growing in popularity (Cooper & Vargas, 2004).

The appreciation and recognition of our natural resource constraints is also in our best societal interest. Truly rational and “effective governance requires a nation to consider and protect the environment and natural resources on which its current and future development depend. Any other approach is self-defeating. The connections between the environment and development thus provide a powerful rationale for environmental protection: enlightened self-interest” (Dernbach J. C., 1998, p. 20). The inherent interdependence between the long-term stability of the environment and the economy is the foundation of the field of sustainable development. Similar to Pigou’s notions and Porter’s win-win hypothesis, sustainable development policies look to tackle the sources of environmental degradation, not just the symptoms, while simultaneously providing opportunities and creating incentives for economic innovation and growth (Porter & van der Linde, 1995).

Components of a healthy environment, such as clean air and water, are considered public goods in that they are non-rivalrous and non-excludable. Thus, it is up to the

public sector to maintain the provision of these goods and services (Boulanger & Brechet, 2005). More recently, nations have moved towards the implementation of market-based mechanisms, such as taxes, rebates, or user fees, to internalize the complete costs of pollution and safeguard long-term stability of the environment; in other words, to ensure sustainable development.

Although many definitions abound, the most often used definition of sustainable development is that proposed by the Brundtland Commission, as mentioned (Adams, 2009; Carvalho, 2001; Cole, 1999; Franks, 1996; Stoddart, 2011). The broad definition, which will be used in the dissertation, does not limit the scope of sustainability. The explanation does, however, touch on the importance of intergenerational equity. The concept of conservation of resources for future generations is one of the major features that distinguishes sustainable development policy from traditional environmental policy, which also seeks to internalize the externalities of environmental degradation (Pezzey, 2004). The overall goal of sustainable development is the long-term stability of the economy and environment; this balance is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the process of policy development and implementation.

In the application of the definition of sustainable development, one core issue concerns the substitutability of capital. There are several types of capital: social, natural, and man-made. The definition of weak sustainable development explains that only the aggregate level of capital matters: man-made, or manufactured, capital is an adequate alternative to natural capital. Strong sustainability, on the other hand, recognizes the

unique features of natural resources that cannot be replaced by manufactured capital (Stoddart, 2011). Most ecologists and environmentalists are proponents of the strong sustainability definition (Carvalho, 2001; Goodland, 1995).

In addition to substitutability, the definition of sustainability is also founded on several other important principles. Contained within the common conception of sustainable development, intergenerational equity recognizes the requisite long-term scale of sustainability in order to address the needs of future generations (Dernbach J. C., 1998; Goodland, 1995; Stoddart, 2011). Also, the polluter pays principle states that “governments should require polluting entities to bear the costs of their pollution rather than impose those costs on others or on the environment” (Dernbach J. C., 1998, p. 58). Thus, government policy should ensure that environmental costs are internalized wherever possible; this also serves to minimize externalities and capture the complete costs of polluting activities.

The precautionary principle establishes that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measure to prevent environmental degradation” (United Nations, 1992). Therefore, the proponent of an activity bears the burden of proving that this action will not cause significant harm. Explicitly stated in the Rio Declaration, the notion of common but differentiated responsibilities recognizes that each nation must play their part on the issue of sustainable development. The principle also acknowledges the different contributions to environmental degradation by developed and developing nations, while appreciating the future development needs of these less developed

countries (Brodhag & Taliere, 2006; Carvalho, 2001; Dernbach J. C., 1998; United Nations, 1992). Developed nations, therefore, bear greater responsibility in light of their history of resource use, their current resource demands, and the pressures they exert on the environment.

The key principle of sustainable development underlying all others is the integration of environmental, social, and economic concerns into all aspects of decision making. All other principles in the SD framework have integrated decision making at their core (Dernbach J. C., 2003; Stoddart, 2011). It is this deeply fixed concept of integration that distinguishes sustainability from other forms of policy. The policy tool presented to most effectively implement this integration is a National Sustainable Development Strategy (NSDS).

With little consensus or consistency found in the literature regarding which SD elements should be taken into account and how to do so, the selection of indicators to evaluate and assess progress towards sustainable development is a difficult decision (Bohringer & Jochem, 2007). Built on the principles and pillars of sustainable development, several indices have been created which purport to measure SD progress. These indices include Yale University's Environmental Performance Index (previously named the Environmental Sustainability Index from 2001 to 2005), which has been both criticized (Bohringer & Jochem, 2007; Morse & Fraser, 2005) and lauded as a first step towards a more analytically driven approach to evaluating environmental outcomes (Happaerts, *The Use of Comparative Analyses for Sustainable Development*, 2009; Niemeijer, 2002). Produced by the group Redefining Progress, the Ecological Footprint is

also offered as a standardized measure of demand for natural capital, contrasted with the planet's ecological capacity to regenerate (Parris & Kates, 2003). These are just two of the leading indices that have begun to appraise and assess various elements of sustainable development, though not specifically National SD Strategies.

National Sustainable Development Strategies

The 1992 Earth Summit, which led to the adoption of the Rio Declaration on Environment and Development and Agenda 21, called on countries to adopt a National Sustainable Development Strategy. The international agreements established that the goals of each NSDS “should be to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations.... developed through the widest possible participation... based on a thorough assessment of the current situation and initiatives” (United Nations Programme of Action from Rio, 1992). These objectives are directly founded on the concept and principles of sustainable development.

National SD Strategy processes are complex and represent a systematic and nationally driven approach to turning sustainable development from concept into practice. Further, although sustainable development is a universal and global challenge, most “practical responses can only be defined nationally and locally” (Organization for Economic Cooperation and Development, 2001, p. 21). Therefore, every country must determine by itself how to develop and implement strategies for achieving its specific sustainable development goals. As such, national SD objectives will often be quite unique

to each nation. There are no blueprints for an effective NSDS, given that institutions and their capacities differ across nations.

A National Strategy is further distinguished by an “adherence to a set of strategic planning principles and by a coordinated set of measures that ensure their implementation” (Kirkpatrick, George, & Curran, 2001, p. 5). Though elusive, this concept of an NSDS requires a policymaking paradigm shift towards the incorporation of the major principles of sustainable development. Whether or not one agrees that sustainable development can be identified as a tangible outcome, the integration efforts towards sustainability are a worthwhile undertaking in order to bring about more comprehensive, participatory, and inclusive decision making.

Typology and Principles of National Sustainable Development Strategies

As nations “differ in their institutional, developmental and biophysical conditions, NSDSs differ both in coverage and structure” as national demands vary (United Nations Division for Sustainable Development, 2010, p. 4). Recognizing the importance of national context in selecting how best to incorporate the objectives of sustainable development, the UN Division for Sustainable Development identified four broad types of National Strategies. First, several nations have initiated a completely new strategy process to develop a NSDS; this type of “Generic NSDS” has been created in countries that found their existing strategy processes ill-equipped to the integration of sustainable development principles.

The second type of NSDS is found mostly in low-income countries, which include SD issues in their poverty reduction strategies (PRS).² A third form of NSDS is utilized by nations with existing processes for comprehensive development strategies which select to further develop these current approaches in order to effectively incorporate the principles of sustainable development. Finally, some nations choose strategies that focus on the environmental dimension of sustainable development, but still include linkages to the social and economic aspects of the concept as well (United Nations Division for Sustainable Development, 2010).

In addition to the general types of National Sustainable Development Strategies, there are several institutional frameworks of governance for these policies; these structures are not exclusive and, thus, more than one governing institution may exist in a single country. The formal types of NSDS administrative approaches include a national council/commission for sustainable development; national environmental department; national economic development department; national level planning commission; and national inter-ministerial coordination committee (United Nations Economic and Social Commission for Asia and the Pacific, 2003). Each nation's choice of institution(s) is a key element to be analyzed in the case studies that follow. The nations selected for analysis exhibit various distinctions in the broad type, governing structures, and objectives of their National Strategies. In addition, each nation must select specific

² As the Johannesburg Plan of Implementation (JPOI) explicitly states, national sustainable development strategies, "where applicable, could be formulated as poverty reduction strategies that integrate economic, social and environmental aspects of sustainable development, [and] should be pursued in accordance with each country's national priorities" (United Nations Division for Sustainable Development, 2002a).

targets and indicators by which to measure progress and performance in the National SD Strategy.

The fundamental principle of sustainable development is the integration of economic, environmental, and social objectives across sectors, territories, and generations. Linking the short to the medium and long-term, the sustainable development strategy should be comprehensive, balanced, and vertically (local to national) and horizontally (between various sectors) well integrated³. They also require long-term, multi-scale, and multi-agent action; therefore, these policies need to be approached as a learning and iterative process (Swanson & Pinter, 2006). These various integration mechanisms work to promote consensus building and a realistic recognition of the political trade-offs necessary in policymaking, but not at the expense of the environment.

Often considered the fundamental principle of sustainability, the argument in favor of integration is straightforward: unsustainable development is the result of decision making which is fragmented into separate economic, social, and environmental categories; disintegration and fragmentation illustrates the current policymaking paradigm (Dernbach J. C., 2003; Dovers, 1996; Organization for Economic Cooperation and Development, 2001; United Nations Division for Sustainable Development, 2002). Therefore, sustainable development requires the elimination of fragmentation; that is, environmental, social, and economic concerns must be integrated throughout decision making processes in order to move towards development that is truly sustainable. At its core, then, sustainable development is operationalized through the integration of these

³ In public administration literature, horizontal integration is known as inter-departmental cooperation; and vertical integration is known as intergovernmental cooperation (Carvalho, 2001).

three pillars; thus, an NSDS should be designed to incorporate these elements (Meadowcroft, 2007). A National Sustainable Development Strategy is considered the most significant tool with which nations can establish an integrated paradigm of policymaking that reflects the principles of SD and articulates the long-term vision of growth for the country.

In classifying a National Sustainable Development Strategy, international organizations have identified several significant elements and essential features that distinguish this specific type of policy. In 2001, the OECD Development Assistance Committee DAC developed a set of guidelines to assist countries in formulating their National Sustainable Development Strategies. These guidelines were based on a number of key elements such as broad consultation and effective participation, national and local ownership, and realistic targets and priorities. But this guide also acknowledges that “there is little documented experience in most countries of developing such [integrative] mechanisms and there are no tried and tested methodologies” to adequately address the intergenerational dimension of sustainable development (Organization for Economic Cooperation and Development, 2001, p. 21). Given the lack of tested methodologies in the application of National Sustainable Development Strategies, the handbook by the OECD offers a potential framework and guidance for implementation. The OECD guiding document argues that the following twelve principles should guide the creation and implementation of National SD Strategies:

1. People-centered;
2. Consensus on long-term vision;

3. Comprehensive and integrated;
4. Targeted with clear budgetary priorities;
5. Based on comprehensive and reliable analysis;
6. Incorporate monitoring, learning and improvement;
7. Country-led and nationally-owned;
8. High-level government commitment and influential lead institutions;
9. Building on existing processes and strategies;
10. Effective participation;
11. Link national and local levels; and
12. Develop and build on existing capacity (Organization for Economic Cooperation and Development, 2001).

Additionally, the OECD guide establishes that a strategy for sustainable development should comprise a coordinated and comprehensive series of “participatory and continuously improving processes of analysis, debate, capacity-strengthening, planning and investment, which seek to integrate the short and long term economic, social and environmental objectives of society – through mutually supportive approaches wherever possible” and work to manage and mitigate trade-offs where these win-win opportunities are not possible (Organization for Economic Cooperation and Development, 2001, p. 25). The handbook was offered as a source of information and best practices on sustainability policies, borrowing from the fields of public administration, policy implementation, and strategic planning management, so that nations may effectively formulate and implement their National SD Strategy.

In 2002, the United Nations Department of Economic and Social Affairs (UNDESA) also developed guidelines for preparing a National Sustainable Development Strategy. On the basis of their experiences, the UN determined that sound and effective National Sustainable Development Strategies would have certain fundamental elements in common, regardless of the country's current level of development; these five precepts, which are well-supported by NSDS research are:

1. Integrated economic, social, and environmental policies across sectors, territories, and generations;
2. Country ownership and commitment;
3. Broad participation and effective partnerships;
4. Development of the necessary capacity and enabling environment; and
5. Focus on outcomes and implementation (United Nations Division for Sustainable Development, 2002)

Adapted from a 2006 best practices report by the OECD, a comparison of the sets of principles presented by the OECD and the UN is provided below, illustrating their commonalities and the significant overlap between the research of the two organizations.

Table 1: Comparison of Principles for a National Sustainable Development Strategy

Principle	OECD Principles	UN Principles
Policy integration	Integrate economic, social, and environmental objectives Ensure comprehensive and integrated strategy	Integrate economic, social, and environmental objectives Link different sectors
Inter-generational equity	Develop consensus on long term vision	Develop shared strategic and pragmatic vision Link short term to medium/long term
Analysis and assessments	Base strategy on comprehensive and reliable analyses Build on existing processes and strategies	Anchor strategy in sound technical and economic analyses Build on existing mechanisms and strategies

Coordination and institutions	Embed strategy in high-level government commitment and influential lead institutions	Ensure a strong institution(s) spearheading the process, with strong commitments
Local and regional governance	Link national and local levels	Link national, regional, and global levels
Stakeholder participation	Ensure effective participation Develop a people-centered approach	Ensure access to info for all stakeholders, transparency, and accountability Develop partnerships among government, civil society, private sector, and external institutions
Indicators and targets	Include targets with clear budgetary priorities	Base strategy on realistic, flexible targets
Monitoring and evaluation	Incorporate monitoring, learning, and improvement	Include integrated mechanisms for assessment, follow-up, evaluation, and feedback

Source: Adapted from Swanson and Pinter (2006) “Good Practices in the National Sustainable Development Strategies of OECD Countries”.

The first of the principles offered by the United Nations, country ownership and commitment, includes the development of a strategy defined by a shared pragmatic vision that reflects the nation’s history, and the core values and aspirations of its citizens. In addition, to effectively move towards sustainable development, the policy objectives must be reasonably achievable and local institutions must reflect a strong driving force in implementation, though the Strategy is approved at the national level (United Nations Division for Sustainable Development, 2002). A balance must be sought between the broad national planning and detailed local execution of National Strategies; and country ownership and buy-in is vital to the policy’s success.

Broad participation and effective partnerships, the third principle of National Strategies identified by the UN, requires the creation of partnerships with civil society groups, the private sector, and external organizations built around concrete initiatives which make the best use of stakeholder capabilities, offer incentives, and ensure commitment. Key for effective partnerships, transparent communication and information

dissemination should also be used as a tool for establishing broad ownership of the Strategy throughout the country. A decentralized governance structure is advocated to enable and facilitate the broad-based participation, giving local governments a stronger role in the formulation and implementation of the policies (United Nations Division for Sustainable Development, 2002). To be effective, decentralization and devolution of power should be well-supported by the legislation, leadership, and resources of the national government.

Sustainable development policies necessitate strong human and institutional competencies which help build the capacity for complex problem solving throughout the policy process, the fourth element identified by the UN. The development of human (technical skills, conflict resolution, capacity to internalize diverse perspectives, etc.) and institutional capacities (project and program development, common vision and sense of purpose, encouraging innovative behavior, developing incentive mechanisms, etc.) help create an enabling environment. A nation's SD Strategy should be built on existing knowledge. Mechanisms must be developed to mobilize a country's capacity, and then to maintain and retain this expertise. In the effort, traditional, indigenous, and local institutions should be considered key sources of knowledge in strategy development process (United Nations Division for Sustainable Development, 2002)

In its aim to achieve concrete results, the final component necessary for an effective sustainable development strategy is a focus on outcomes and means of implementation. An NSDS should build on existing strategies, policies, and processes, and work towards convergence, complementarity, and coherence with the various

planning frameworks and institutions embedded in the country. Developing improved coherence between the budget and strategic priorities in all levels and sectors of government, nations must also create mechanisms for monitoring, follow up, evaluation, and feedback. Throughout the policy cycle, the NSDS should be anchored in sound technical analysis, recognize external and public pressures, and include realistic but flexible targets (United Nations Division for Sustainable Development, 2002)

Since the publication of the UN guidebook in 2002, “research and analysis, the DAC dialogues and international experience captured through numerous workshops show that a number of principles and elements appear to be common to the more successful strategies” (Dalal-Clayton & Bass, 2002, p. 35). These five principles established by the UN offer a broad outline and general guidance on the effective components of a National SD Strategy. At its core, each NSDS should serve as a means to integrate the environment, social, and economic pillars throughout the decision making processes in the nation.

For over two decades now, the United Nations has been asking countries to pursue strategic and coordinated action for sustainable development through the creation and implementation of National SD Strategies. Research has followed the efforts of government during this time, working to evaluate, analyze, and improve the NSDS processes. The past twenty years of research on National Sustainable Development Strategies, though, has left more questions than answers regarding the implementation of this integrated policymaking paradigm.

Evaluating National Sustainable Development Strategies

In 1994, only two years after the Earth Summit, a report published by the International Institute for Environment and Development identified early dilemmas and solutions in the development of a National Strategy for SD. In their discussion of the need for integration and compatibility, the authors find that it is “at the stage of policy implementation that any strains become obvious” and that participative decision making can alleviate some of these unforeseen conflicts in the application of a policy (Dalal-Clayton, 1994, p. 51). To face these inherent difficulties in the implementation of National SD Strategies, nations must develop an enabling environment and ensure the capacity to think and perform strategically with all actors involved.

A United Nations progress report in 1997 found that what was lacking was the creation and development of the social, governmental, and institutional arrangements that are necessary in order to meet the “policy, regulatory and service demands arising from rapid population growth, increased complexity and the changes in technology; and underlying this gap is the issue of good governance and its impact on building capacities and developing performance standards for sustainable development” (United Nations Economic and Social Council, 1997, p. 8). To shift towards sustainable development, this report recommended expanding capacity-building efforts, increasing technical assistance in developing countries, and improving stakeholder participation. Essential to the effective implementation of National SD Strategies is the groundwork of stakeholder engagement, institution building, and capacity development.

A study by the Earth Council reviewed the establishment, growth, and development of National Councils for Sustainable Development (NCSD) in 26 countries. On the basis of this analysis of these specific organizational arrangements, the authors concluded that the effectiveness of National Sustainable Development Strategy formation and implementation has been hindered by a number of factors, including varying definitions of sustainable development, difficulty in identifying and addressing sustainable development issues, and limited technical and financial capacities to undertake strategic management and planning (Earth Council, 2000). These limitations have been cited in more recent assessments as well, calling for capacity building efforts across the board (Brodhag & Taliere, 2006).

On the basis of the information shared at the 2001 International Forum on National Sustainable Development Strategies, a background paper from the UN found that very “few [National Sustainable Development] strategies have been adequately assessed and evaluated, especially in terms of their outcomes” and that, overall, the analyses garnered mixed results (United Nations Division for Sustainable Development, 2002, p. 15). The report identified several shortcomings that were common in many countries: lack of clear and pragmatic vision of development; limited national ownership; too much focus on document production; inadequate public participation; lack of integration between the strategy and the overall development policy; and putting too little emphasis on monitoring and evaluation. These conclusions reiterate those challenges identified by the Earth Council (2000) and the United Nations Economic and Social

Council (1997). Unfortunately, in some instances, these same shortcomings continue to plague National SD Strategies.

Commissioned by the German Federal Ministry for Economic Cooperation and Development, a 2004 report from the International Institute for Sustainable Development studied 19 countries from around the world to compile a list of basic challenges, approaches, and innovations in the strategic management of the NSDS process. The authors found that “despite the progress made, nations are only at the early stages of learning toward effective strategic and coordinated action for sustainable development”, few countries are truly acting strategically, and many challenges persist in the cycle of strategic management (Swanson & Pinter, 2004, p. ix).

As identified by the authors, the four key challenges include: feedback mechanisms, including monitoring, learning, and adaptation; coordination of strategy objectives and initiatives with the national budgeting process (interdepartmental cooperation); coordination with subnational and local sustainable development action (intergovernmental cooperation); and deployment of a full mix of policy initiatives. The study also classified four types of National SD Strategies: comprehensive, cross-sectoral, sectoral, and integrated (Swanson & Pinter, 2004).

In a later analysis of these case studies, the authors find that despite major advances in the passage of formal national SD policies, both developed and developing nations are still at the primary stages of learning toward effective efforts for sustainable development. The major unresolved shortcomings include: coordination with the national budget; coordination with subnational level sustainable development strategies; and

coordination with other national-level strategy processes (Volkery, Swanson, Jacob, Bregha, & Pinter, 2006, p. 2056). These coordination constraints remain a common problem, requiring greater integration and synchronization across and within government institutions and policies.

Contracted by the OECD in 2006, the authors updated the research on good practices of National Sustainable Development Strategies with a focus on six aspects of governance, including the nature of strategy coordination; placement of overall responsibility for the NSDS; legislative underpinning; integration with existing planning and budgeting processes; stakeholder involvement; and linkages with local sustainable development action (Swanson & Pinter, 2006). Using the guidelines from the United Nations and the OECD, effectiveness criteria specific to each of the governance elements were selected; these criteria are relevance and comprehensiveness, department involvement, top-level leadership, legislative embeddedness, integration, formality, multi-stakeholder guidance, and subnational coordination. These elements of governance and their associated criteria are presented in table two. The researchers found that, in most cases, “the NSDS is still not sufficiently linked to existing government planning, reporting and budgeting systems. This is a serious weakness because this type of integration can be a good proxy for the overall effectiveness of NSDS governance” (Swanson & Pinter, 2006, p. 31).

Table 2: Governance Elements and Effectiveness Criteria by Swanson and Pinter

Governance Element	Effectiveness Criteria
Nature of strategy and government coordination	<i>Relevance and comprehensiveness:</i> The more departments and levels of government for which the NSDS is relevant, the better. This implies that the NSDS is comprehensive with respect to economic, social and environmental issues

	<i>Department involvement:</i> The more involved individual departments and other levels of government are in the NSDS process, the better
Placement of overall responsibility	<i>Top-level leadership:</i> The more involved is the Prime Minister or President's office in NSDS process, the better
Legislative underpinning	<i>Legislative embeddedness:</i> The more embedded the NSDS process is in legislation, the better
Link to budget process	<i>Integration:</i> The greater the integration of the NSDS vision and objectives with the plans and budgets that departments submit to planning and finance departments, the better
Stakeholder involvement	<i>Formality:</i> The more formal the requirement for stakeholder involvement in the development and ongoing implementation of the NSDS objectives, the better <i>Multi-stakeholder:</i> The broader the perspective attained through stakeholder involvement, the better
Links to local levels	<i>Guidance:</i> clearer the recommendation in the NSDS for SD related strategies at the state,/provincial, and community levels is better <i>Sub-national coordination:</i> more coordination between NSDS goals and objectives of state,/provincial, and community levels is better

Source: Swanson and Pinter (2006) "Governance Structures for National Sustainable Development Strategies" and Swanson and Pinter (2006) "Good Practices in the National Sustainable Development Strategies of OECD Countries".

For an NSDS to be more significant and effective, they argue, the strategy must be integrated into the existing machinery of public planning, accounting, and communication: institutional embeddedness does matter. Broadly, the study finds that "greater attention should be paid to the content of national sustainable development strategies (policy dimensions, timeframes, analytical tools), governance aspects (institutions, stakeholders, local links), and the processes for improving them (indicators, targets, monitoring)" (Organization for Economic Cooperation and Development, 2006, p. 7).

A European-focused article, presented by Steurer and Hametner, offers an overview of the objectives and indicators employed in 24 National SD Strategies across Europe. They find "that environmental objectives and indicators are more coherent than social ones" and, therefore, National Strategies are not living up to their potential in coordinating policies vertically across different levels of government (Steurer &

Hametner, 2010, p. 224). The findings again highlight the need for increased integration and coordination, specifically in federal nations that face intergovernmental challenges.

In 2011, the United Nations Economic Commission for Africa published a review of the National SD Strategies from sixteen African nations in order to document experiences, lessons learned, and best practices. The appraisal identified a fair amount of diversity in NSDS policy approaches, selected priorities or foci, distribution and decentralization of authority, and the level of public awareness of sustainable development. For most of the cases studied, the key challenge that has been experienced in the NSDS development process relates to the coordination and integration of sustainability activities with those of other policies and strategies being developed at the same time, so as to minimize potential policy conflicts and enhance integrated planning (United Nations Economic Commission for Africa, 2011). The need for greater integration restates much of what has been identified in the research on the implementation of National Sustainable Development Strategies. Institutional and policy integration, participatory policy making, and intergovernmental cooperation are key elements to be addressed, regardless of the level of economic development of the nation involved.

Experience has shown that a clear and simple path to sustainable development cannot be plotted in advance. Instead, the pathway must be navigated through processes of learning and adaptation. The research in the field, though, has not yet provided a thorough analysis of these NSDS implementation efforts; this work has been mostly descriptive (Gathy, 2008).

The work of George, Kirkpatrick, Cherp, and Curran from University of Manchester's Impact Assessment Research Centre (IARC) is an exception. In 2001, the researchers introduced a methodology for assessing national progress in implementing an NSDS using the five key principles established by the UN, with a set of four assessment criteria proposed for each factor. Intended to provide an analytical framework rather than a fixed blueprint or template, the assessment methodology was designed to be flexible to fit different national needs, constraints, and capacities (Cherp, George, & Kirkpatrick, 2004). Bringing together more than a decade of research, especially the work of the OECD and UN, the IARC approach proposed the following framework to evaluate each of the five established principles:

Table 3: Proposed NSDS Assessment Principles and Criteria by the IARC

Economic, social, and environmental aims integrated	Participation and consensus	Country ownership and commitment	Comprehensive coherent policy process	Targeting and monitoring
<ul style="list-style-type: none"> • Integration • Social and poverty issues • Environmental and resource issues • Global commitments 	<ul style="list-style-type: none"> • Involvement of significant stakeholders • Transparency and accountability • Communication and public awareness • Long-term vision and consensus 	<ul style="list-style-type: none"> • High level government commitment • Broad-based political support • Implementation responsibilities • Coordination with donors 	<ul style="list-style-type: none"> • Build on existing processes • Analysis and information • Realistic goals • Decentralization 	<ul style="list-style-type: none"> • Budgetary provision • Implementation capacity • Targets and indicators • Monitoring and feedback

Adapted from Kirkpatrick, George, and Curran (2001) "Development of Criteria to Assess the Effectiveness of National Strategies for Sustainable Development" and Cherp, George, and Kirkpatrick (2004) "A Methodology for Assessing National Sustainable Development Strategies".

In their 2004 working paper, the IARC research team applied their framework to analyze the National SD Strategies of Belarus and Slovakia. Utilizing a four-point

scoring scheme, the authors evaluated the extent to which each criterion has been met by the NSDS.⁴ The report points out, though, that “the scores given for each criterion need to be based on a thorough understanding of the country’s strategic planning processes, as a strategy for sustainable development” and include a brief explanation for the score on each criterion (Cherp, George, & Kirkpatrick, 2004, p. 10). The approach uses qualitative analyses and then translates this into a quantitative scoring system to improve the study’s reliability and generalizability. These results are then gathered and evaluated to provide suggestions for improvement, as well as to draw general conclusions as to the effectiveness of the NSDS programs and activities.

In a review of comparative analyses in the field, Happaerts (2009) summarizes the assumptions, methodological choices, and analytical trade-offs of both qualitative and quantitative assessments of sustainable development policies. He states that most qualitative research identifies an implementation gap between policy statements and actions, and that various governments are still struggling with the same issues of policy integration, stakeholder participation, and forming a long-term perspective of policymaking. The review also indicates that several factors impact the shape and nature of a government’s sustainable development policies. The way in which SD is understood and conceptualized at the policy level has an important impact on its realization, as well as the political and electoral cycles and features of individual leadership. Additionally, Happaerts states, “the constitutional structure and the allocation of authority and

⁴ The following scoring system was used: “A- all of the requirements of the criterion are fully met; B- all the requirements of the criterion are satisfactorily met, although some further improvements are desirable; C- some requirements of the criterion have been satisfactorily or fully met, but others have not yet been satisfactorily met; and D- few of the requirements of the criterion have, as yet, been satisfactorily met” (Cherp, George, & Kirkpatrick, 2004, p. 10).

responsibilities need to be taken into account, just as economic conditions” when designing and implementing a National Sustainable Development Strategy (Happaerts, The Use of Comparative Analyses for Sustainable Development, 2009, p. 26). Lastly, he concludes that sustainable development policies are affected by the country’s experience with traditional environmental policy and their history of political culture.

A common discussion in the field of research is the advantages and drawbacks of qualitative and quantitative data, as well as qualitative and quantitative methods and methodologies. One recent piece of research has proposed a new mixed methodology for designing and evaluating environmental planning systems using “eight international best practice principles for environmental planning and 45 indicators” (Ellis, Gunton, & Rutherford, 2010). These best practices, indicators, and scoring methods are heavily based on the extensive previous work of the OECD, UN, IIED, EU, UN DESA, World Bank, Dalal-Clayton and Bass, and others.

Based largely on this previous peer review work, as well as the research of the past three decades, Canadian researchers Ellis, Gunton, and Rutherford (2010) sought to bridge the gap between qualitative and quantitative approaches to the evaluation of sustainable development planning systems, such as National SD Strategies. The authors proposed a new mixed methodology for creating and assessing environmental planning systems using eight international best practice principles. The authors also provide 45 individual indicators, framed as questions, in order to comprehensively evaluate the environmental planning system of Canada.

In their application of this new evaluation framework to the Canadian NSDS, the three researchers heavily reviewed government documents, with feedback, suggestions, and comments from several representatives of the federal environmental department, Environment Canada. The eight key criteria which provide the outline for the assessment are defined in table four. Regardless of the type of indicator (quantitative, qualitative, or dichotomous), the authors assigned an overall rating for each of the eight criterion using a four-level scale: 3) Fully Met (no deficiencies); 2) Largely Met (no major deficiencies); 1) Partially Met (no more than one major deficiency); and 0) Not Met (two or more major deficiencies). To calculate the final score (the concluding key step of quantitative interpretation of quantitative and qualitative data that has been lacking) for the national environmental planning system, Ellis, Gunton, and Rutherford aggregated the results for each questions and assign 3 to 0 points overall for each criterion, which was also aligned with the ratings of Fully Met, Largely Met, Partially Met, and Not Met, respectively (Ellis, Gunton, & Rutherford, 2010).

Table 4: Evaluation Framework Criteria for an Environmental Planning System

Best Practice Criteria	Detailed Definition and Description
Comprehensive Goals with Measurable Targets	There should be an integrated, comprehensive statement of goals that cover all aspects of environmental sustainability and include scientifically based measurable short, medium and long-term targets with timelines to achieve environmental sustainability. Measurable targets are necessary to assess progress.
Effective Strategy	EPS should have a strategy that quantitatively shows how sustainability targets will be met including how financial resources will be allocated to meet strategy objectives.
Integration	EPS should integrate economic, social and environmental objectives both sectorally and spatially.
Monitoring	There should be regular, independent public reporting to assess progress in implementing strategies and achieving targets. Monitoring is necessary to assess success and identify deficiencies that need to be addressed.
Leadership and Accountability	Responsibility for developing EPS should reside with the most senior levels of government to ensure that the plan is a priority and responsibility for implementation must be clearly delineated to ensure accountability.

Adaptive Management	There should be mandatory adjustments to EPS plans to address deficiencies identified in monitoring.
Stakeholder Collaboration	Development, implementation, and monitoring of the EPS should be collaboratively managed through permanent and institutionalized multi-stakeholder processes to ensure public support for the plan and to ensure that the plan meets public priorities.
Legal Framework	The process and requirement for EPS planning should be enshrined in legislation to provide transparency and certainty.

Source: Adapted from Ellis, Gunton, and Rutherford (2010) “A Methodology for evaluating environmental planning systems: A case study of Canada”, Table 2.

The approach by Ellis, Gunton, and Rutherford (2010) works to strengthen the evaluation methodology of sustainable development strategies, utilizing major international, environmental, strategic planning, and NSDS evaluation research over the last two to three decades. In doing so, the authors identify principles which form the major criteria, select a set of detailed questions to use as indicators for each of these criterion, assign a performance rating for each indicator question, and then allot an overall rating for each criterion based on these indicator scores (Ellis, Gunton, & Rutherford, 2010).

The framework from Ellis et al. is applied in only one nation, so the questions were developed for the specific nation’s institutions and policies, which may limit the replicability of the study. Additionally, the research pays little attention to subnational efforts, though intergovernmental cooperation (also called vertical integration) is identified as a key principle for effective policy implementation, specifically for an NSDS. The analysis of a National SD Strategy may be better suited to a more participatory approach, such as a peer review.

Though somewhat similar, there are key differences between the Canadian research and the work contained in this study. First, this research presents two detailed and in-depth case studies, Germany and South Africa, which illustrate a range of experiences of development and, specifically, sustainable development over at least the past two decades. Second, this study relies heavily on document analysis, supplemented by interviews with several high-level stakeholders from both nations. The interviews represent the perspectives of various social sectors (public, private, and NGOs) and various levels of government (municipal, state, and federal). Finally, the scoring method used by the previous Canadian research is improved upon to allow for more flexibility in the assessment of two very different countries with very distinct SD goals.

Peer Reviews of National Sustainable Development Strategies

The peer review mechanism coordinated by the United Nations Division for Sustainable Development is another avenue of assessment for National SD Strategies. Following the proposal by the European Union to develop a network to share NSDS experiences and information in 2002, then-President of France Jacques Chirac suggested that France would be prepared to submit its National Strategy for review by other countries. The project was initiated in 2004, and organized by the French Ministry of Ecology and Sustainable Development and Ministry of Foreign Affairs. Using the French National Strategy as the pilot, the program's objective was to create and test a methodology for peer review of NSDSs.

The peer review process, they argued, should be: cost effective, voluntary, relatively simple and replicable approach, relatively short time, non-judgmental, focused

on sharing of experience and lessons, options-based (non-prescriptive and non-standardized), and based on the five agreed upon principles for an NSDS as established by the United Nations (United Nations Programme of Action from Rio, 1992). The use of the UN's five factors in the peer review process highlights their centrality and import in the assessment of an effective National Strategy.

For the French review, four nations served as peers: Belgium, Ghana, Mauritius, and the UK; also, the International Institute for Environment and Development (IIED) was included as independent consultant. The four major steps in the peer review process were: 1) the preparation of a background report on the national contexts, based on surveys and structured interviews of key stakeholders; 2) a methodology workshop to review and agree on the procedures; 3) a peer review workshop, involving two representatives from each peer country (one government official and one civil society representative), 35 individuals from the French government and civil society, and observers from the European Commission, UN Division of Economic and Social Affairs, and Francophonie; and 4) the revision of methodology based on lessons learned during the process (Dalal-Clayton, 2004).

Following the French test case, the European Commission published a guidebook prepared by the Institute for European Environmental Policy for the peer review of an NSDS, reflecting the lessons learned during the pilot review. The six-month long preparation for the peer review procedure was organized by a two-person secretariat that managed the process, scheduled interviews and focus groups, gathered information and arranged background reports, and streamlined communication between parties. Led by

national government efforts, the French peer review workshop successfully utilized an existing cross-sectoral organization, the National Council for Sustainable Development (CNDD), to drive stakeholder participation in the process (Institute for European Environmental Policy, 2006).

Additionally, the pilot case highlighted the significance of the selection of peer countries. The peer reviewers for the French evaluation were chosen on the basis of existing contacts⁵, but this required simultaneous translation (English and French) for the entirety of the review and the printing of all documents in both languages, thus requiring immense costs for the host nation (Institute for European Environmental Policy, 2006). The guidance on the effective assessment of National SD Strategies provides an excellent foundation for the work presented in this research.

In April 2005, an interdisciplinary group of independent researchers and consultants from Germany and Austria was appointed by the Austrian Ministry of Agriculture, Forestry, Environment and Water Management to undertake the assessment of the Austrian NSDS and prepare a final report. The focus of the Austrian evaluation was “primarily on the implementation process rather than the strategy and policy goals themselves, with a distinction made between implementation mechanisms (institutions and instruments) and implementation activities (measures and projects to reach milestones)” (Institute for European Environmental Policy, 2006, p. 51). In the assessment of the implementation mechanisms of the strategy, the group focused on the

⁵ The UK and Belgium were selected due to contacts between the ministries; and Ghana and Mauritius were identified due to existing links with the independent expert chosen to lead the pilot peer review, Dr. Barry Dalal-Clayton (Institute for European Environmental Policy, 2006).

processes of policy execution. Including both internal and external representatives in the participatory review process, the findings emphasized the integration of embedded institutions and instruments of the National SD Strategy.

In 2006, the Netherlands decided to undertake a peer review of its National SD Strategy. The process was managed by the Netherlands Council for Research on Spatial Planning, Nature, and the Environment, and 12 experts from three countries (Finland, Germany, and South Africa) were asked to serve as peer reviewers. A summary of 46 recommendations was presented to and discussed with the Dutch Prime Minister and key ministers in May 2007, and the final report was launched one month later. This report, titled “A New Sustainable Development Strategy: An Opportunity not to be Missed”, recognized the urgent need for a sustainable development framework that is treated as a process, not a policy document. The move towards sustainable development requires a shift in policymaking processes towards a system that effectively coordinates stakeholders, balances objectives, and integrates a long-term vision of national development (Dalal-Clayton & Krikhaar, 2007).

As the study of sustainable development policy is relatively new, there is yet to be a widely-accepted evidence-driven theory on the successful implementation of these National Sustainable Development Strategies. Much of the research on National SD Strategies is descriptive not analytical (George & Kirkpatrick, 2006). Often offering “lessons learned” from past experiences, this body of literature is not driven by rigorous theory or well-established hypotheses regarding effective implementation of SD strategies.

Conclusion

Throughout the past two decades since the Earth Summit, research has described the efforts of government and various stakeholders throughout the processes of creating, implementing, monitoring, and revising National SD Strategies. Now, there is a growing consensus that A National Sustainable Development Strategy may be broadly conceived as “a set of processes which seek to integrate the economic, social, and environmental objectives of society... [and] an effective NSDS will be distinguished by adherence to a set of principles for strategic planning and sustainable development, and a coordinated set of measures to ensure their implementation” (George & Kirkpatrick, 2006, p. 146). Founded on the core principles of sustainability, a National Strategy can be regarded as the policy outcome and legal embodiment of the sustainable development concept at the national level.

But, given that “a strategy for sustainable development requires an enormous societal effort which will not be feasible within the traditional technocratic, instrumentalist, top-down pattern of public policy”, an NSDS may be the specific tool necessary to introduce a new policymaking paradigm required (Jänicke & Jörgens, 1998) The paradigm of sustainable development is likely to require an alteration of society’s general conception of the environment, current development trajectories, and policymaking structures. However, at present, the passage of sustainable development policies generally follows the traditional pattern of policymaking.

The implementation of public policy is a well-researched and widely-debated subject, though little consensus has been found. And, in the field of sustainable

development, the fundamental complexities of these policies serve to only increase these implementation challenges. The principles of sustainable development (intergenerational equity, polluter pays, low substitutability, precautionary approach, differentiated responsibilities, and participative decision making) are difficult aims to achieve. However, the heart of sustainability is integrated decision making, which acknowledges economic, social, and environmental concerns throughout the process and seeks to minimize the trade-offs between objectives. The call for an integrated process of decision making is “a direct response to the current tendency for governments to treat the social, economic and environmental aspects of an issue as separate problems” without the coordination of aims, efforts, and information (Dernbach J. C., 1998, p. 50). The traditional disintegrated process decision making and implementation illustrates the current paradigm of development, which is no longer maintainable.

Although difficult to conceive, operationalize, and execute, sustainable development is the sole “internationally accepted framework for making these broad goals mutually reinforcing. It is the only framework that exists for responding to massive environmental degradation all around the world and the growing gap between rich and poor” (Dernbach J. C., Achieving sustainable development: The Centrality and multiple facets of integrated decisionmaking, 2003). It is the notion of sustainable development that has the potential to usher in a new era of integrated and participative decision making. The new paradigm is embodied and institutionalized in the concept of a National Sustainable Development Strategy.

Chapter Three: Review of Policy Literature

Introduction

Generally, public policy is whatever governments choose to do or not to do (Dye, 1975). A specific policy “states an intent to achieve certain goals and objectives through a conscious choice of means” (Kraft & Vig, 2010, p. 4). This broad definition is intentionally vague and universal, but the precise methods and processes of formulating, passing, and executing public policy are unique to each policy area, and nation and the institutions therein. There are, however, some general models of policy development.

In this chapter, the following section explains the various processes and stages of policymaking, as well as approaches that do not rely on a process model. The research regarding policy implementation is then reviewed, illustrated by three generations of research. Regardless of generational labels, this body of literature works to identify those factors essential for implementation, which will be outlined. Finally, the chapter briefly reviews the literature regarding the implementation of international treaties, such as the Rio Declaration and Agenda 21.

Policymaking Processes

David Easton is often credited with first interpreting political dynamics in terms of a continuous process and system of interaction. To Easton, a political system is an interrelated set of activities, roles, and institutions that operates within an environment which provides inputs to the political system, and then translates these inputs into policy outputs (Easton, 1957). To understand a policy, then, one must look to the entirety of the

process and all factors and institutions therein. Clearly, this is an intricate method which, ideally, is performed via an in-depth study which can account of the high degree of complexity of such a system.

The active and dynamic view of policy progression is broadly adopted under the more general “process” or “policy cycle” model. The traditional policy cycle described five continuous stages; the first of these is problem identification and agenda setting. An agenda is defined as the list of subjects to which government officials are paying attention. John Kingdon’s work establishes that an agenda setting process is one that narrows the list of subjects to topics upon which those officials who make public policy actually focus. Following his analysis, Kingdon states that a subject’s rise onto the agenda is due to the convergence of three streams: problem recognition, policies proposed to deal with the problems, and the political willingness to act (Kingdon, 1984). Kingdon’s work presents the traditional policy cycle framework.

Following agenda setting, the second stage in the policy cycle is the formulation of policy alternatives to approach the problem. Policy formulation involves many actors, both within and outside of government. These stakeholders are those both affected by and effecting the making of a policy. The various interests of these actors often influence this legislation formulation process (Berman, 1978). Depending on the problem at hand, political and cultural contexts, and numerous other variables, these potential policies may involve radical changes or small steps away from the status quo (Carvalho, 2001).

Once the alternatives have been prepared, step three involves the legitimization and adoption of a specific policy. The “choice of policy instruments is rarely the result of a

purely technical selection process. It is the outcome of a political process that engages a myriad of actors with competing interests and priorities” (Hatch, 2005, p. 9). The notion reiterates Easton’s focus on inputs during the selection between policy alternatives. As the acceptance of a particular policy is almost always highly politicized, the early and ongoing mobilization of political support is often necessary when choosing a policy alternative. The engagement of key stakeholders has been seen as effective in this effort to create early “buy-in” of a policy option (Durlak & DuPre, 2008).

After the agreement on and acceptance of a policy alternative, the fourth stage of the process model is the implementation of that selected policy. The fourth step requires that programs be put into effect through complex administrative processes, requiring critical decisions which may ultimately determine the policy’s effectiveness (Vaughn, 2007). The enactment of a selected policy may also serve to mobilize a distinct network of stakeholders or produce newly interested actors; Hjern and Porter called these “implementation structures” (Hjern & Porter, 1981). After a policy is implemented, it is important to assess its effectiveness.

Therefore, the final stage of the traditional policy cycle is evaluation and change. The policy review may consist of both formal methods, like a cost-benefit analysis, and informal methods, such as gauging general public opinion. On the basis of the various evaluations of the policy, some changes and improvements may be made or the process of establishing additional policy alternatives may begin again (Kingdon, 1984). These stages in the policy process generally occur within broader circumstances governed by constitutional rules, political institutions, cultural norms, public opinion, and other

constraints and challenges. Although the general context may differ significantly both between and within nations, the policy process follows a fairly regular pattern.

Taken rigidly, the process model establishes that as an issue is taken up by the policy system, it follows a path that can be separated into discrete stages each involving distinct time periods and institutions, and a shifting set of policy actors (Vaughn, 2007). Although the process model offers important conceptual strengths, it has been criticized for its linear, well-ordered framework, similar to the rational approach to problem solving (Dernbach J. C., 2003). Real world decisions, critics say, are not made in such an organized and logical manner. Instead, these phases overlap and “options are rarely compared methodologically” (Sauerborn, 2000, p. 36). The gap between the constrained actuality of policymaking and this ideal model has led to the development of several theories offered as more realistic reflections of the process.

Charles Lindblom developed the notion of incrementalism, or “muddling through”, in contrast to the ideal type of the rational-comprehensive model of policy planning (Lindblom, 1959). Incrementalism is an alternative model of decision making which suggests a simplified policymaking process which produces change only at the margin as a result of limited successive comparisons of proposed policies with the current policy. The incremental form of policy change has been used frequently in many analyses of policy formulation and especially in the environmental policy arena (Dernbach J. C., 2003).

As a result of the scientific and technical knowledge required to effectively manage environmental issues, as well as the political complexity and resulting

controversy of these problems, much of the current legislation in the traditional environmental policy field is the result of marginal changes to current policy (Vaughn, 2007). The government plays a paramount part in this policy field because environmental services are public goods in that they are non-excludable and non-rivalrous. Therefore, no one can be effectively excluded from using and benefitting from the good, and consumption of the good by one individual does not reduce availability of the good for consumption by others (Kraft & Vig, 2010).

Environmental problems, then, are public goods problems which cannot be solved by purely private actions. Because of inherent limitations of the market and human nature, government policy is necessary to address these problems and provide these public goods and services. Once these policies are created, though, new challenges emerge as administrators execute the written legislation.

Policy Implementation

As previously described, the fourth and fifth stages of the policy cycle are, respectively, the implementation and evaluation/revision of the selected policy alternative. These stages of the policy process are regarded as highly critical to the success and effectiveness of the chosen policy. The intricacies of policy implementation and evaluation are so great, in fact, that decades of research on the topic have still left researchers with little consensus, save one: implementation research and analysis are crucial to the study of public administration and policy evaluation (Berman, 1978; Boulanger & Brechet, 2005; Elmore, 1979; Goggin, Bowman, Lester, & O'Toole, 1990;

Hjern & Porter, 1981; Majone & Wildavsky, 1978; Pulzl & Treib, 2006; Sabatier P. A., 1988).

To understand how and why a policy functions (or dysfunctions), research must detect the linkages between a formal policy as written by the legislature and its effects in practice. Simply put, “it is only in implementation analysis that a kaleidoscopic understanding of the relationship between policy intent and policy outcome can be achieved” (Pressman & Wildavsky, 1984, p. 217). The identification of these connections and causal relationships is at the heart of implementation research. Over the past several decades, scholars have studied the execution of public policy, and this research has evolved tremendously.

First Generation of Policy Implementation Research: Top-Down

In their review of the field, Goggin and others distinguished three generations of implementation research: top-down, bottom-up, and hybrid approaches (Goggin, Bowman, Lester, & O'Toole, 1990). The first generation, focused on the impact of top-down approaches, utilized a traditional approach which conceived implementation as the hierarchical execution of centrally-defined policy intentions. The founding fathers of the top down approach are considered to be Pressman and Wildavsky whose book,

Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as told by Two Sympathetic Observers who Seek to Build Morals on a Foundation of Ruined Hopes, seeks to understand the failed implementation of a large intergovernmental program in California.

In their analysis, the authors relay the concept of an implementation chain. The greater the number of links in the chain, Pressman and Wildavsky argue, the greater the degree of cooperation required for implementation. Without collaboration throughout the links, an “implementation deficit” may arise (Pressman & Wildavsky, 1984). Using a broad, rational model, Pressman and Wildavsky’s work sought to understand the failure to achieve policy goals by tracing the progression of a public program throughout the intergovernmental system, from the central decision makers to the daily administrators that execute the policy.

Building on this seminal work, Van Meter and Van Horn later offered a theoretical framework for implementation research. The model consisted of six major variables: policy standards and objectives, resources, inter-organizational communication, characteristics of implementing agencies, disposition of implementers, and the social, environmental, and political environment. Defining policy implementation as “those actions by public and private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions”, Van Meter and Van Horn suggested analyzing the level of goal consensus and the amount of change required over time in order to understand implementation difficulties (Van Meter & Van Horn, 1975, p. 447).

More normative in its approach than its predecessors, Bardach’s “Implementation Game: What Happens after a Bill Becomes a Law” utilized game theory to understand implementation as a political process of negotiation and bargaining. Though he notes that many implementation problems are inherently unpredictable, Bardach proposes that the

best approach to solving these control problems is “to design policies and programs that in their basic conception are able to withstand buffeting by a constantly shifting set of political and social pressures during the implementation phase” (Bardach, 1977, p. 5). Following his top-down analysis, Bardach conceives of implementation problems as control problems.

In the article “The Implementation of Public Policy: A Framework of Analysis”, Sabatier and Mazmanian argue that the task of implementation analysis is to identify those factors which affect the accomplishment of policy objectives throughout the entire process. These independent variables can be split into three categories: tractability of the problem, statute’s ability to structure implementation, and total effect of political factors on the support for policy goals (non-statutory variables). The framework identifies those independent and inter-dependent statutory and political variables that influence the implementation process.

The authors state that under the following key conditions, a policy is most likely to achieve its goals: clear and consistent objectives, law developed from sound theory and causal argument, implementation process structured by legislation, managerial and political skills and commitment, active support by constituency groups and legislators, and the maintenance of priority of statutory objectives over time (Sabatier & Mazmanian, 1980, pp. 554-557). Sabatier and Mazmanian offer that political environment and other macro-level factors must be taken into account in assessing the achievement of policy goals. It is this top-down approach that distinguishes the first generation of implementation research from those that follow.

Second Generation of Policy Implementation Research: Bottom-Up

In their analyses, this first generation of implementation scholars began with a centrally made government decision and assumed causal links between the policies and outcomes. At its core, this research was generally concerned with effective policy execution. The second generation of research in the 1970's and 80's leveled several critiques against their top-down predecessors. The new group of scholars rejected the assumption of direct causal links between policies and outcomes, and argued that a top-down approach could potentially ignore the influence of non-policymaking actors and lower level administrators (Elmore, 1979; Pulzl & Treib, 2006). Instead, the bottom-up framework recognized the interdependence and dynamism of the policy process. Therefore, these studies began their analyses by identifying networks of actors involved in the delivery of public services and goods. In doing so, researchers wanted to study the sincere sources that influence implementation action on the ground.

In his work, Richard Elmore criticized the assumption of top-down analysis (what he calls forward mapping) that decision makers control the political, organizational, and technological processes that affect implementation; he calls this the “noble lie” of traditional public administration. Instead of the conventional approach, Elmore introduces backward mapping which assumes that the closer one is to the source of the problem, the greater one's capacity to influence it.

Focused on ground level interaction, Elmore also stated that the system's ability to solve a particular policy problem “depends on maximizing discretion at the point where the problem is most immediate” (Elmore, 1979, p. 605). He went on to identify

four main elements for effective implementation: clearly specified tasks and objectives that accurately reflect the intent of policy; a management plan that allocates tasks and performance standards to subunits; an objective means of measuring subunit performance; and a system of management controls and social sanctions sufficient to hold subordinates accountable for their performance. He asserts that discretion and variability in service delivery can be seen as assets in the adaptation of responses to highly specialized problems. Failures of implementation are, by Elmore's definition, lapses of preparation, specification, and regulation (Elmore, 1983). Clear lines of responsibility, driven by the policy's objectives, are key to effective implementation.

Michael Lipsky (1980) propounds a theory of street-level bureaucracy which focuses on the discretionary decisions that each front-line worker, or street-level bureaucrat, makes in relation to individual citizens when delivering public services or goods. The discretionary role in delivering services or enforcing regulations makes street-level bureaucrats essential actors in implementing public policies. Indeed, Lipsky claims that street-level bureaucrats are the real policymakers through their daily encounters with citizens (Lipsky, 1980). Following this view, local public servants are the key actors in policy implementation and service delivery.

During the late 1970s and early 80s, Hjern and several colleagues (including David Porter, Ken Hanf, and Chris Hull) offered a comprehensive methodology for conducting implementation analysis. The approach by Hjern et al. begins by identifying the network of service delivery actors in one or more local areas and questions them about their goals, strategies, actions, and interactions. Then, the bottom-up method uses

the contacts for developing a network technique to identify the local, regional, and national actors involved in the relevant governmental and non-governmental programs; this is what the authors call a “snowball” approach to creating a multiorganizational unit of analysis known as an implementation structure (Hjern & Porter, 1981; Hull & Hjern, 1982). The network mapping approach is a diffused bottom-up method to identifying relevant policy actors.

Third Generation of Policy Implementation Research: Hybrid and Fusion

While hybrid approaches arose from the critiques of and discussions between the two previous groups of scholars, these following fusion frameworks also recognized the important contributions and literature gaps of the first and second generations. Third-generation scholars lay much emphasis on specifying clear hypotheses, selecting proper operationalizations, utilizing a longer timeframe, and producing adequate empirical observations to test these hypotheses (Lester, Bowman, Goggin, & O'Toole, Jr., 1987). They suggest a more formal framework for assessment which can be replicated over time and cases.

Following an extensive review of the literature, Goggin et al. (1990) aimed to offer a more scientific approach to implementation research. In the communications model presented by the authors, implementation research should focus on the complex negotiation and communication processes between various levels of government (Goggin, Bowman, Lester, & O'Toole, 1990). The framework, which draws upon both the top-down and bottom-up approaches, acknowledges the importance of constraints and inducements at all levels of government in the implementation process.

Some scholars, having rethought and revised their work, “switched camps” or created hybrid implementation theories. Wildavsky and Majone’s work (1978) envisioned implementation as a dynamic process. The core argument is that implementation is an evolutionary procedure in which programs are continually reshaped and redefined. The formation started from policy inputs defined by central policymakers, but the authors acknowledge that these inputs will almost inevitably be changed during implementation procedures. Thus, incremental learning processes are central to this hybrid approach. As the authors simply explain, “when we act to implement a policy, we change it” (Majone & Wildavsky, 1978, p. 191). As a policy is executed, it is necessarily and inherently changed by all those that touch it. Thus, policymaking is a highly iterative process influenced by individual administrators.

Richard Elmore’s advanced research combining backward and forward mapping offered a new framework called reversible logic. As Elmore explains, the forward mapping process starts with a standard set of implements and “the backward leg with a set of decisions that policy would have to affect in order to influence” policy outcomes (Elmore, 1983, p. 1). Using reversible logic means deliberately building into one’s narrow solution an anticipation of others’ solutions. He finds that the “value of reversible logic is not just that it helps us anticipate implementation problems, but more importantly that it affects the way we frame and evaluate alternatives” (Elmore, 1983, p. 24). Ideally, the whole system, including, but not limited to, objectives, actors, organizations, and policy incentives, must be taken into account to understand the aggregate effects of policy

implementation decisions. These elements cannot always be quantified due to their complexity and dynamic nature.

These complexities are in part the result of the blurred distinctions between the processes of policymaking and those of policy implementation. Sabatier's later work went on to distinguish between policy formation and implementation, offering the advocacy coalition framework. He notes that "top-downers have been preoccupied with (a) the effectiveness of specific governmental programs and (b) the ability of elected officials to guide and constrain the behavior of civil servants and target groups", but the second generation of scholars "are far less preoccupied with the extent to which a formally enacted policy decision is carried out and much more concerned with accurately mapping the strategies of actors" involved in the policy network (Sabatier P. A., 1986, p. 35). Sabatier suggests a synthesis of the best aspects of the top-down and bottom-up approaches; he titled it the advocacy coalition framework.

The advocacy coalition framework proposes a 10-20 year timeframe of analysis, which begins with the recognition of a policy problem, and then examines the strategies used by various actors to deal with that problem and the socio-economic conditions and legal instruments that constrain behavior. Using a policy subsystem as the unit of analysis, "it is assumed that actors can be aggregated into a number of advocacy coalitions composed of people from various organizations who share a set of normative and causal beliefs and who often act in concert. At any particular point in time, each coalition adopts" a set of strategies which will further their legislative objectives (Sabatier P. A., 1988, p. 133). As a result of negotiation and bargaining between

coalitions, a policy or program is produced with operational outputs and, eventually, targeted impacts and side effects. The engagement and influence of interested stakeholders helps to shape how a policy is written.

Factors Influencing Policy Implementation

Regardless of the generation label or methods, all of these scholars seek to identify those elements and factors that affect and influence policy implementation. For instance, as discussed, many authors have identified the degree of discretion as a key factor to be studied in implementation research (Bardach, 1977; Berman, 1978; Durlak & DuPre, 2008; Elmore, 1979; Goggin, Bowman, Lester, & O'Toole, 1990; Lipsky, 1980; McLaughlin, 1987; Pulzl & Treib, 2006; Sabatier & Mazmanian, 1980). Oftentimes, policies are intentionally vague as written by the legislature in order to permit flexibility in administration and ensure the law's passage (Lowi, 1986).

Discretion, as scholars point out, is both "inevitable and necessary" (Pressman & Wildavsky, 1984, p. 175). Therefore, administrators responsible for the execution of the policy must interpret the law in their day-to-day activities and decisions. As Lipsky stated, "policy implementation in the end comes down to the people who actually implement it" (Lipsky, 1980, p. 8). The actions, behaviors, and decisions of the civil servants that deliver public goods and services have an enormous impact on the effective implementation of a policy.

Concerns may arise from this discretion, given that administrators are unelected public officials wielding considerable decision making authority, which is often conceived as a principal-agent relationship (Weingast & Moran, 1983). The legislature,

given their role as the “principal”, must exercise control over the bureaucracy, as the “agent”, in order to ensure policy objectives are reached (McCubbins, Noll, & Weingast, 1987). In summary, though policy ambiguity is both necessary and desired, elected officials seek mechanisms to assure that the policy’s intentions are met in its execution (Berman, 1978).

The participation of various stakeholders is an oft-mentioned component in the study of implementation (Durlak & DuPre, 2008; Elmore, 1983; Sabatier P. A., 1988; Van Meter & Van Horn, 1975), as well as the very important element of intergovernmental relations and cooperation (Hjern & Porter, 1981; McCubbins, Noll, & Weingast, 1987; Pulzl & Treib, 2006; Sabatier P. A., 1986). These concepts are critical; as Elmore explained, effective “implementation consists of trading multiple objectives against one another to achieve desired outcomes” (Elmore, 1983, p. 1). In the research of policy implementation, scholars acknowledge the importance of various interests and actors throughout the enactment processes; stakeholder participation is an important element in policy execution. The maintenance of stakeholder engagement throughout the policymaking and policy implementation processes also helps to create public support and “buy-in” for the legislative programs.

Other work in the field has looked at the amount of change required by the implementation of a specific policy compared to the status quo (Goggin, Bowman, Lester, & O'Toole, 1990; Lindblom, 1959; McLaughlin, 1987), or the socio-political context in which a policy is to be implemented (Lester, Bowman, Goggin, & O'Toole. Jr., 1987; Sabatier P. A., 1986; Van Meter & Van Horn, 1975). As detailed, decades of

research have illustrated the significance of stakeholders, intergovernmental relations, degree of change required, and broader socio-political environments in the enactment of public policy.

Though scholars may disagree as to the best methods of implementation research, they agree that the study of policy implementation is crucial. Through a greater understanding of the contextual factors, mechanisms, and processes underlying a policy's execution, the analysis of implementation allows us to explore how, why, and under what conditions a policy intervention might succeed or fail. Generally, policy implementation research has been utilized to assess national policies and programs, but the literature also devotes attention to the national-level implementation of international treaties and agreements.

Implementation of International Treaties

Many studies on policy implementation focus on the national or local levels of government. But, these national and subnational policies are sometimes driven by international pressures or formalized commitments; this is especially the case with regard to the growing global challenge of sustainable development. Since the publication of the Brundtland Report in 1987, sustainable development issues and implications have been largely defined and delineated on a global scale.

The creation and ratification of these international treaties and protocols presents a new set of concerns and complexities for decision makers and public administrators at all levels of government. Although multilateral institutions and global agreements may “set goals and directions to steer global sustainable development, lower levels of

governance take the lead in terms of concrete implementation and context-specific solutions” (Happaerts, Are you Talking to us? How subnational governments respond to global sustainable development governance, 2012, p. 128). Often the outcome of worldwide conferences, it is the responsibility of national and subnational institutions to implement such international agreements, declarations, and directives.

International arrangements serve to formulate principles, norms, models, and guidelines which governments are encouraged (or, sometimes mandated) to incorporate in their policies. The set of informal influence, generally relying on normative pressure, is sometimes called “soft law” or “moral suasion”. More formal international agreements contain legally binding arrangements ratified by two or more states, called “hard law”. (Lehtonen, 2007; Marong, 2004; Skjærseth, Stokke, & Wettestad, 2006). Soft law instruments may often result in lower compliance levels than binding agreements. However, these less formal arrangements offer greater flexibility and are often seen as less politically divisive (Skjærseth, Stokke, & Wettestad, 2006).

In addition to the level of formality of the international environmental agreement, its effectiveness will also “depend on a wide range of other variables and parameters including characteristics of the countries involved, the environmental problem being addressed, and the international context” (Mitchell, 2003, p. 454). The international SD agreements in place, though non-binding, do emphasize the capacities and responsibilities of governmental and civil society institutions at all levels: local, regional, national, and international. The engagement of these key stakeholders, specifically at the local level, is

of vital importance to the successful implementation policies; this is especially true of sustainable development programs (Happaerts, 2012).

Given the global character of resource scarcity and environmental degradation, it is clear that international cooperation is necessary to address concerns of sustainable development; but action must be taken at the local and national levels, where strong governmental institutions can act decisively and effectively. Since the late 20th century, the global community has come together to debate, discuss, and decide upon environmental issues in both formal and non-binding agreements. At the international level, “strong norms and serious implementation are decisive ingredients in effective environmental governance” but national and subnational governments must steer the implementation of policy (Skjærseth, Stokke, & Wettstad, 2006, p. 105). The importance of subnational governments in managing policy implementation cannot be overstated.

Therefore, the objective of international environmental law should be “to promote the integration of environment and development policies through effective international agreements or instruments, taking into account both universal principles and the particular and differentiated needs and concerns of all countries” (United Nations Conference on Environment and Development, 1992). With these aims, the international community has generally utilized non-binding instruments thus far in the field of sustainable development. These soft law SD agreements include the Stockholm Declaration of 1972, Rio Declaration of 1992, Agenda 21 of 1992, and 2002

Johannesburg Declaration and Plan of Implementation. All of the international environmental agreements discussed below are considered non-binding arrangements.

Implementation of International Sustainable Development Treaties

In 1972, Stockholm hosted the first United Nations Conference on the Human Environment in order to address the “the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment” (UNEP, 1972). The outcome of this summit was the signing of the Stockholm Declaration, which included a list of 26 international principles⁶, an Environmental Action Plan with 109 recommendations⁷, and a Resolution. In discussing the implementation of these guiding principles, the Declaration recognized that “local and national governments will bear the greatest burden for large-scale environmental policy and action within their jurisdictions” (UNEP, 1972). However,

⁶ These 26 principles are: 1. Human rights must be asserted, apartheid and colonialism condemned; 2. Natural resources must be safeguarded; 3. The Earth’s capacity to produce renewable resources must be maintained; 4. Wildlife must be safeguarded; 5. Non-renewable resources must be shared and not exhausted; 6. Pollution must not exceed the environment’s capacity to clean itself; 7. Damaging oceanic pollution must be prevented; 8. Development is needed to improve the environment; 9. Developing countries therefore need assistance; 10. Developing countries need reasonable prices for exports to carry out environmental management; 11. Environment policy must not hamper development; 12. Developing countries need money to develop environmental safeguards; 13. Integrated development planning is needed; 14. Rational planning should resolve conflicts between environment and development; 15. Human settlements must be planned to eliminate environmental problems; 16. Governments should plan their own appropriate population policies; 17. National institutions must plan development of states’ natural resources; 18. Science and technology must be used to improve the environment; 19. Environmental education is essential; 20. Environmental research must be promoted, particularly in developing countries; 21. States may exploit their resources as they wish but must not endanger others; 22. Compensation is due to states thus endangered; 23. Each nation must establish its own standards; 24. There must be cooperation on international issues; 25. International organizations should help to improve the environment; and 26. Weapons of mass destruction must be eliminated (UNEP, 1972).

⁷ The 109 recommendations proposed by the Environmental Action Plan were grouped under one of the three main components of the international framework: the global environmental assessment program (Earthwatch), the environmental management activities, and the supporting measures (UNEP, 1972).

sustainable development issues are global in nature. Therefore, they require cooperation among nations, governments, and organizations.

According to the 1987 Brundtland Report, *Our Common Future*, sustainable development implies "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" (Brundtland Commission, 1987).

The 1992 Earth Summit in Brazil included the ratification of Agenda 21 and the Rio Declaration by 178 countries, which presented a policy model for sustainable development based on the three pillars of environment, economy, and society. The integrative policy model that came out of the 1992 Summit has continued to shape the legislative landscapes of national and subnational institutions. Agenda 21 anticipated that the necessary integration and harmonization of existing policies and programs would occur through the adoption of a distinct and identifiable sustainable development plan, called a National Sustainable Development Strategy (NSDS) (United Nations Conference on Environment and Development, 1992).

Conclusion

This chapter began by explaining the process model of policymaking, as well as other, more iterative approaches. As categorized by three generations of research, the literature on policy implementation was reviewed. This was followed by a brief review of the essential elements for effective implementation. Finally, the chapter concluded with

an examination of the literature regarding the implementation of international treaties, such as the Rio Declaration and Agenda 21.

The decades of research on National SD Strategies has been built on the foundation of policymaking and implementation literature. The third generation of implementation research, which promotes the fusion of top-down and bottom-up approaches within a formalized framework, provides sustainability studies with a greater understanding of how to evaluate complex public policies. With a better understanding of the contextual factors, mechanisms, and processes underlying the execution of a National SD Policy, implementation analysis helps us to comprehend the constraints, challenges, and enabling factors of such a major policy program.

Ten years after Rio, the 2002 Johannesburg Plan of Implementation clearly identified economic development, social progress, and environmental protection as equal pillars of sustainable development; this event marked a consensus on the three objectives of SD (Marong, 2004). By this time, all nations involved agreed to have an NSDS in place (or in the making) by 2005. The creation and implementation of these National Sustainable Development Strategies has been lacking; therefore, so has the research on this topic. As such, this study will fill the gap in the literature by presenting and testing a formal framework for the assessment of National Sustainable Development Strategies.

The following chapter closely examines the current gaps in the literature, and then presents those research questions which will be answered by this study. Then, several hypotheses are presented, as well as the related variables and indicators utilized to answer

these research questions. Finally, the next chapter provides a formalized framework for the assessment of the implementation of National Sustainable Development Strategies.

Chapter Four: Research Questions, Hypotheses, and Methods

Introduction

The vast and diverse research fields of sustainability policy making, sustainable development implementation, and, more broadly, public policy assessment have not yet offered a formalized approach to the assessment of National Sustainable Development Strategies. The literature currently lacks the linkages between the key principles of an effective NSDS and those specific questions used to evaluate the policy's implementation. By utilizing case study methodology and mixed methods of analysis, the present research will seek to begin to fill that gap in the literature. Thus, the study is both constructive, in that it formulates and tests hypotheses, and empirical, in that it provides an analytical assessment using evidence and data. The present research can, and should, be replicated to assess a nation's progress towards their established sustainable development objectives.

Chapter four will begin by presenting the theoretical framework, built upon the foundation of research in the subjects of sustainable development, public policy planning and implementation, and public administration. After pointing out the intersections between and gaps within these fields, the chapter then outlines the research questions to be answered and the hypotheses to be tested. Then, the study's research design is described in detail, including the processes of case selection and data acquisition. The next section offers a presentation of the analytical framework designed to assess an NSDS. Finally, the chapter concludes with a brief summary of ethical concerns and a review of the study's limitations and delimitations.

Theory and Framework

As previously mentioned, a great deal of research on NSDS is purely descriptive in nature, offering a summary of country efforts without much concern for the policy's efficacy at integration and shifting the policymaking paradigm. Other research has touched upon the changes required by the passage of an NSDS, pointing to the creation or combination of governmental institutions and structures. The reorganization, though a symbol of government commitment or avoidance of commitment to the cause, does not necessarily translate into new forms of decision making or provide individuals with the capacities needed to meet the new demands. The capacity of a National Strategy to alter the processes of policymaking to become more reflexive and integrative is one solid measure of success. However, the broad efficacy of National Sustainable Development Strategies "depends on many factors (economic, social, and environmental) and on effective governance within national circumstances" (United Nations General Assembly, 2011, p. 26).

It has been established that an NSDS "is not a regular policy instrument with a clearly defined place in the policy cycle. Instead, it aims to re-shape disjointed and incremental policy-making for SD into better integrated and systematic strategy cycles that identify, monitor and reverse unsustainable trends" (Steurer & Hametner, 2010, p. 228). Therefore, as previous research has found, the indicators and variables used to assess the impact of a National SD Strategy may be somewhat different from traditional environmental evaluation measures, including those constructed to gauge progress towards sustainability more generally.

National Strategies, and the specific programs and activities contained within them, are often considered relatively successful, or unsuccessful, on the basis of the outputs or outcomes as measured in quantitative data derived from the country's statistics or planning departments, international organizations such as the World Bank, United Nations, Organization for Economic Cooperation and Development (OECD), and various nongovernmental organizations which focus on sustainable development. However, the selection of data and the indicators by which to measure them can be a contentious process. In crafting their SD Strategy, each nation must choose objectives and the indicators used to measure progress towards these goals. Therefore, a universal quantitative indicator set is not appropriate for the study of these National Strategies (United Nations Division for Sustainable Development, 2012). The NSDS metrics selected should reflect the development priorities, resource constraints, and socio-political and cultural history of the country.

The United Nations Commission on Sustainable Development (UNCSD) published the third set of indicators in 2007, derived from the previous two (1996 and 2001) editions, which have been developed, revised, and extensively tested over the past twenty years. Grouped into a series of themes and sub-themes in a policy-oriented framework, this third indicator set consists of 50 main measures, with 46 additional indicators intended to allow for a more complete and differentiated assessment of SD where the data are available. Illustrating the multi-dimensional nature of sustainability, the major themes under which these UNCSD indicators are grouped are: poverty; governance; health; education; demographics; natural hazards; atmosphere; land; oceans, seas and coasts; freshwater; biodiversity; economic development; global economic

partnership; and consumption and production patterns (United Nations Division for Sustainable Development, 2001).

Countries are encouraged to consider these CSD indicators when revising or developing new national indicators, especially for use in the monitoring of the NSDS. While these measures are useful for gauging the outcome of policies towards achieving SD goals, “they are not suited for measuring the implementation of specific actions contained in these major agreements on sustainable development”, or for assessing a policy’s effectiveness (United Nations Division for Sustainable Development, 2001, p. 28). The broader context and national circumstances must be accounted for in the assessment of policy implementation. Finally, in order to assess effectiveness, an “evaluation also has to validate, and often to quantify, the assumed linkages between NSDS actions and development outcomes” (United Nations Division for Sustainable Development, 2001, p. 37). It is the National Strategy that must identify the linkages between the NSDS activities and developmental impacts; an evaluation of an NSDS should work to identify and explain these important links.

In the assessment of SD strategies, several approaches are available and researchers generally acknowledge that both qualitative and quantitative data is necessary for a comprehensive understanding of the policy (Cherp, George, & Kirkpatrick, 2004; George & Kirkpatrick, 2006; Happaerts, The Use of Comparative Analyses for Sustainable Development, 2009; Kirkpatrick, George, & Curran, 2001; Volkery, Swanson, Jacob, Bregha, & Pinter, 2006). Some sustainable development scholars and organizations have created and applied their own frameworks based on the principles set

forth by the United Nations Division for Sustainable Development. The work of Cherp, George, Kirkpatrick, and Curran led to the development of a set of NSDS Principles and Indicators for assessment (Cherp, George, & Kirkpatrick, 2004). Commissioned by the OECD, authors Swanson and Pinter (2006) created a set of governance dimensions and effectiveness criteria, as presented in table two of the previous chapter, to evaluate the National SD Strategies of 19 countries and the EU (George & Kirkpatrick, 2006).

In the application of these evaluation frameworks, many of the criteria define characteristics of strategic planning processes which are inherently variable and vague, rather than being clear-cut qualities. The authors state that “in forming judgments on whether a criterion is met satisfactorily, the assessment should take into account the following factors: is the action being taken relevant? Is it appropriate? Is it effective?” (Kirkpatrick, George, & Curran, 2001). The research also offer supplementary questions, derived from a review of the sustainable development policy literature, which can be used to gain information about a National SD Strategy. In assessing NSDS performance, they suggest the following four point scale: all requirements are fully met; all requirements are satisfactorily met although some further improvements are desirable; some requirements have been satisfactorily or fully met, but others have not yet been satisfactorily met; and few of the requirements have, as yet, been satisfactorily met (Kirkpatrick, George, & Curran, 2001). The four-point assessment scale is used in other NSDS assessments as well (Dalal-Clayton, 2004; Ellis, Gunton, & Rutherford, 2010).

Similarly, the early work of the pilot peer review of the French NSDS established the necessity of acknowledging and understanding national context in assessment of these

national policies. The report published by the UN Division for Sustainable Development determined that a final review report should describe the following various aspects of the NSDS: the administrative, governance and decision-making structures and systems in the country (supported by a diagram); the processes followed to prepare, develop, and implement the strategy; the content of the strategy; the outcomes; the quality of resulting plans, policies, regulations, incentives, etc. (clearly dependent on the stage of the policy's implementation); monitoring and indicators; and the main successes and challenges of the policy (Dalal-Clayton, 2004). As suggested by the author, countries could select to use the popular “traffic light” system to evaluate their progress on these NSDS elements or some type of progress mapping approach. As the author states, in the UK, traffic lights are also used to assess the progress on major government targets, programs, and plans (Dalal-Clayton, 2004). But the choice of assessment approach may be that of the nation under review, or a simple Likert scale may be adopted for a mix between qualitative and quantitative assessments, as other NSDS assessment literature has suggested (Dalal-Clayton & Krikhaar, 2007; Ellis, Gunton, & Rutherford, 2010).

The early peer review documents also present two important sets of evaluative questions and criteria. Built on the ongoing work of the OECD, UNDSO, UNDESA, and UNDP, the preliminary set of questions offered in this early assessment guidebook focus on the national context and background, including information regarding the enabling conditions; country context; quality of component plans, policies, regulations and incentives; and strategy implementation and participation. The answers to these contextual questions provide background information gathered prior to the interviews with NSDS stakeholders in order to lay the foundation for the discussion (Dalal-Clayton

& Bass, 2002; Dalal-Clayton, 2004). In the formal peer review process, the answers to these questions would be contained within the background report. The present research will present each case study in the recommended format.

The second set of questions in the peer review guide is posed as a framework for discussion with important stakeholders and groups, rather than a rigid questionnaire to be completed. These questions are categorized by four of the key themes in the background report: strategy process, content, outcomes, and monitoring. Within each of these four topics, several subthemes were identified to provide greater structure to the evaluation process (Dalal-Clayton & Krikhaar, 2007). It is these two sets of topics, subthemes, and specific questions which provide the groundwork for the analysis framework presented in this research study.

Although the UN and the OECD have provided guidance on the formation and management of National Sustainable Development Strategies over the past twenty-five years, little formal research has been conducted which analyzes and compares the application of these principles in light of the unique circumstances of diverse nations; even fewer analyses of the implementation of these SD policies work to bridge the gap between qualitative and quantitative data, methods, and methodologies. There is no linkage between the well-established NSDS principles and the questions suggested for evaluation of these strategies.

The peer review process discussed provides a good deal of guidance regarding how to answer this broad question. But these assessment frameworks are still in their early stages of development and are not yet formally linked to the questions or criteria

established by peer review guidebooks; the present study fills this vacuum in the literature. In the creation of a testable and replicable assessment framework and evaluation matrix, the research will bridge the gap between qualitative and quantitative data, and a comprehensive qualitative and quantitative analysis of the National SD Strategies in several key dimensions.

Research Questions and Hypotheses

In designing an assessment framework of the National SD Strategies along these dimensions, this research relies a great deal on the previous peer review evaluations that have been completed over the past decade. These vital factors drive the research questions, hypotheses, and evaluation framework presented in this study. The five key principles of an effective NSDS are:

1. Integrated economic, social, and environmental policies across sectors, territories, and generations;
2. Country ownership and commitment;
3. Broad participation and effective partnerships;
4. Development of the necessary capacity and enabling environment; and
5. Focus on outcomes and implementation (United Nations Division for Sustainable Development, 2002).

In its focus on principles 1, 2, 3, and 5, this research study applies a formal NSDS assessment framework to answer the following critical questions: How do nations

successfully identify, involve, and maintain the engagement of stakeholders throughout the creation, revision, and implementation processes of a National Sustainable Development Strategy? How does the national commitment of key resources influence the intergovernmental cooperation of a National Sustainable Development Strategy? How does the leadership of key NSDS institutions influence the level of inter-departmental cooperation at the national level? How do nations integrate current monitoring and enforcement institutions and approaches to design an effective evaluation and feedback system for a National Sustainable Development Strategy?

The following hypotheses are used to answer these questions and test the relationships between the core principles of a successful National Sustainable Development Strategy. In doing so, the present study is the first in the field to present a set of testable hypotheses that operationalize these elements into key variables, which are then linked to a set of specific questions to be assessed. The research will fill this gap in the literature regarding the formal assessment of National SD Strategies. The organized approach presented here can be replicated across time and space to evaluate national progress towards sustainability objectives. These hypotheses which link the key principles of an effective NSDS are presented below:

Hypothesis One: The use of formal and open communication measures by government during the policymaking phases will lead to the ongoing participation of engaged civil society stakeholders in the policy implementation phases.

The nine major groups of civil society, as defined by Agenda 21, include women, children and youth, indigenous peoples, non-governmental organizations, local

authorities, workers and trade unions, business and industry groups, scientific and technological community, and farmers' associations (Dalal-Clayton, 2004). To be successful, a Strategy must actively encourage participation by these groups and provide access to information on sustainable development issues and activities. With multiple engagement mechanisms, these stakeholders may participate in various stages of the sustainable development policy process; this includes the processes of identifying problems, designing and applying solutions, monitoring results, and revising policies and programs. Generally, this involvement may include formal or ad hoc partnerships between the public, private, and non-profit sectors, as well as the acknowledgement and utilization of traditional and indigenous knowledge (Dalal-Clayton & Krikhaar, 2007).

The independent variable is the use of formalized government communication practices, as measured by several features. The indicators include the existence of official governmental measures taken to increase public awareness of sustainable development, to communicate relevant information, and to encourage the development of stakeholder involvement in the strategic planning and policy writing process. The research will identify the key components and frequency of communication measures such as formal public comment periods, publication and dissemination of policy drafts and white papers, solicitation of stakeholder comments during the preparation of policy documents, and public debates and discussions on issues of sustainability and national SD policy (Dalal-Clayton, 2004). These channels of communication may be via traditional media, or more advanced online approaches to communication (Kirkpatrick, George, & Curran, 2001). For each major stakeholder group during the NSDS policymaking processes, the research will pinpoint the number and proportion of comments and revisions presented; degree of

influence or perceived impact on the final NSDS policy; and the types and frequency of communication methods and media utilized.

The dependent variable is the ongoing participation and engagement of these civil society stakeholder groups in the policy implementation process. The variable is measured by several key indicators, such as the number or proportion of representatives invited and selected from each of the major stakeholder groups on the major national SD councils and committees throughout the policy implementation processes. The research will also present the patterns and trends of the participation of stakeholder groups from the policy writing through the implementation and revision phases (Kirkpatrick, George, & Curran, 2001).

Hypothesis Two: Nations that provide a continued commitment of financial, human, and spatial resources specific to the National SD Strategy are more likely to exhibit higher levels of intergovernmental cooperation.

The independent variable is the continued commitment of adequate resources for the implementation of the NSDS at the federal level. Specifically, these resources necessary for the NSDS implementation include human, financial, and spatial resources. Human resources are seen as the formal provision of standing well-qualified, professionalized administrative staff for the NSDS; this may be in the form of a National Secretariat, an SD Ministry, or an Administrative SD Council (United Nations Division for Sustainable Development, 2012). The spatial resources require some permanent and separate office space for the administrative staff responsible for the day-to-day tasks and long-term functions of the NSDS; locations at the national, state, and local levels will be

taken into account. The financial resources require that the sustainable development strategy is formally integrated into the budget process, such that plans have the necessary financial resources to achieve their objectives. The key here is not so much the amount of money allocated to the implementation of the NSDS, so much as the broad and deep integration of SD concerns and the NSDS policy into the budgetary, financial, and lending processes of government. The continued provision of these resources is one indicator that the national government acknowledges the need for sustainable development as a new paradigm of development decision making (Kirkpatrick, George, & Curran, 2001).

The dependent variable is the degree of intergovernmental cooperation, called vertical integration in the field of sustainability, which can be measured by the clarity of the formal NSDS recommendations and requirements for NSDS programs and efforts at the state, provincial, and local levels as identified in legislation. For the purpose of this analysis, vertical integration will be illustrated by several features, founded on the current literature in the sustainable development policy field. Vertical integration arises if decision makers at various points in the organizational hierarchy are working in different ways for the same objective. This will be measured by the clarity of the formal NSDS recommendations and requirements for sustainable development related programs and efforts at the state, provincial, municipal, and local levels as identified in legislation (Swanson & Pinter, 2004). The policy should clearly establish the authority and responsibilities of each level of government in processes of NSDS policy implementation, monitoring, feedback, and revision.

Hypothesis Three: Nations which display ongoing political and administrative top-level leadership in NSDS processes and institutions are more likely to exhibit higher levels of inter-departmental cooperation.

The independent variable is political and administration top-level leadership involved and spearheading the NSDS processes. The variable is measured by the leadership level of the members, and specifically the Chairpersons, of the major national SD councils and committees, as well as the position of SD councils and committees within the hierarchy of governmental organization. The dependent variable is the degree of inter-departmental cooperation, known as horizontal integration in SD research, which is illustrated by the number of individual departments and ministries of government represented in the NSDS processes. Horizontal integration occurs among multiple decision makers on similar hierarchical levels through coordination and cooperation. The variable is measured by the number of individual departments and various levels of government represented in the NSDS processes and governing structures; the perceived levels of cooperation and engagement between governmental institutions will be taken into account (Swanson & Pinter, 2006).

Hypothesis Four: In their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements will have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy.

The independent variable is the degree to which the nation has built upon the groundwork of previous measurement approaches and existing institutions. An indicator of this effort is that the NSDS is derived from existing strategic planning processes in the

country, with formalized and well-communicated coordination efforts between the responsible institutions, and well-known mechanisms to identify and resolve potential conflicts. The history of governmental performance measurement can be measured by a brief historical review of the past ten to fifteen years of formal efforts by the government in the area of performance management, especially with regard to development and sustainable development or similar policies (Dalal-Clayton & Bass, 2002). The study will include an exploration of the government entities traditionally responsible for performance measurement of the national government, and how the NSDS implementation processes have built on this foundation.

The dependent variable is the identification and utilization of effective monitoring, evaluation, and feedback systems for sustainable development. Taking into account national development priorities, the study will identify each nation's use of measurable targets, broader objectives, and specific indicators, including information and data at the local, regional, and national levels, taking note of data availability at each level. Another indicator is the existence and utilization of monitoring and enforcement systems for the implementation of strategies and the achievement of their defined objectives, for recording the results, and for reviewing their effectiveness as strategies for sustainable development, with effective mechanisms for feedback and revision within the planning process (Kirkpatrick, George, & Curran, 2001).

Research Design

The present study presents a constructive and empirical research assessment through the in-depth case studies of two National Sustainable Development Strategies.

There is no blueprint for a successful sustainable development strategy, and “the particular label applied to a national sustainable development strategy is not important, as long as the underlying principles characterizing a national sustainable development strategy are adhered to and that economic, social and environmental objectives are balanced and integrated” (United Nations Division for Sustainable Development, 2002). But the inherent uniqueness of National SD Strategies makes this specific type of policy inherently difficult to implement, assess, and evaluate.

Given its individual constraints and contexts, each nation must determine how best to seek this balance between the three pillars and progress towards a paradigm of integrated and sustainable decision making. Case studies work to explain “outcomes through the interpretation of a combination of characteristics and they argue that context matters. They thus pay attention to the specificities and settings of each case and they study processes and historical developments within cases” (Happaerts, 2009, p. 10). Therefore, as the literature contends, in-depth case studies are the most appropriate method for an analysis of the implementation of these National SD Strategies (Dernbach J. C., 2003; Happaerts, 2009; Swanson & Pinter, 2006; Volkery, Swanson, Jacob, Bregha, & Pinter, 2006).

Taken together, this body of research advises that the following aspects be covered in a report on a National SD Strategy: administrative, governance, and decision making structures and systems in the country; processes followed to prepare, develop, and implement the Strategy; content of the Strategy, such as its structure and main themes; discussion of the international context (i.e., multilateral agreements, regional

undertakings, international networks, etc.); outcomes of the Strategy; monitoring and evaluation efforts and requirements; main successes and challenges; and the views of the major stakeholders (Dalal-Clayton, 2004). In the present study, each case will include a brief review of the nation's history and development, a detailed description of the processes undertaken in the creation and implementation of the NSDS, and a formal assessment of the National Strategy based on the framework outlined in the following section.

Case Study Selection

The case study method is particularly apt for a deeper analysis of an NSDS because these types of policies “are embedded in a specific cultural, political and historical setting and cannot be interpreted without an understanding of that setting” (Happaerts, 2009). The methodological choice of a case study approach also speaks to David Easton's focus on the influence of those activities, roles, and institutions which are considered key in the creation of policies. Considerable effort will be taken to identify unique country circumstances, offering greater comparability of the findings over time and facilitating a deeper understanding of the national contexts that shape these policies. These case studies will also serve to test the NSDS assessment approach presented in this research. Utilizing a formal and focused application of the new method, this work presents and tests an innovative framework for the evaluation of National SD Strategies.

The structured, focused comparison method asks of each case study general questions reflecting overall research objectives, so as to “guide and standardize data collection, thereby making systematic comparison and cumulation [sic] of the findings of

the cases possible” (George & Bennett, 2005, p. 68). The structured, focused comparison approach was utilized throughout the study, as a standard set of questions was crafted and applied to the examination of both cases during the interview and the document analysis. These questions are used as indicators for each of the variables identified, as illustrated in the table below.

In 2002, the World Summit for Sustainable Development (WSSD) urged countries not only to take immediate steps to make progress in the formulation of National Strategies but also to begin their implementation by 2005. As of 2009, 106 Member States of the United Nations were implementing a National Strategy (United Nations Division for Sustainable Development, 2009). Of these 106, the case selection will be limited to those nations that had passed an NSDS (or its equivalent or predecessor) by 2005. One well-developed and one less developed nation were selected in order to enhance external validity and provide a wider view of experiences. Thus, selecting a nation from Europe and a nation from Africa provides this breadth of experience and knowledge, as well as increasing the research’s global significance.

Originally, several nations were selected for potential case studies. After an initial review of the relevant literature and specific National SD Strategies, several countries were eliminated. After review, the two nations selected were Germany and South Africa. This choice was made for several reasons. First, both of these countries have a federal structure, in which subunits of the central government enjoy some degree of autonomy and power. The importance of this federal structure cannot be overstated, as intergovernmental cooperation is a vital factor in the effective implementation of any

policy. Second, these two nations are among the leading economies of their continents⁸. Third, the countries have a history of policies of inequality. In Germany, this system of disparity was enforced under the Nazi regime and World War II, with Eastern Germany suffering lasting inequities. In South Africa, the arrangement of apartheid imposed a race-based caste system built upon discriminatory colonial legacies in the region. Though these institutions of inequality have been demolished, both nations still work to correct the effects of these injustices and the scars that these systems have left behind.

Data Collection

Document Acquisition

Previous evaluations of National SD Strategies have advocated that initial assessments begin with a desk study of key documents. These key documents include the Strategy itself (in all of its forms and revisions), Presidential press releases, vision statements, five year development plans, donor-sponsored documents, World Bank country reports, budget policies, development planning regulations, land use regulations, environmental laws, and state of the environment reports. Following the initial analysis of these key documents, a more detailed assessment of secondary documents will include an evaluation of sectoral development plans, local development plans, local government laws, national and local planning procedures, economic and social statistics, and environmental monitoring data (Kirkpatrick, George, & Curran, 2001).

⁸ According to 2013 data from the International Monetary Fund (IMF), Germany is the largest economy in Europe and South Africa is second behind only Nigeria in the size of the African economies (International Monetary Fund, 2013).

Following previous research of NSDS peer reviews, external policy assessments, and national-level evaluations, a table of semi-structured questions was created and then drawn upon during both in-person interviews and document analysis. These questions are provided below in table five, following a brief description of the interview protocol. The specific list of documents analyzed and assessed for each case study is presented in the appendix. The documentary information was obtained from publicly available sources (e.g., government strategy documents, Internet sources, literature sources, organizational reports, etc.), and through interviews with stakeholders and government officials where possible in order to fill data gaps and to improve the accuracy of the case study research. Every effort was made to ensure that official national SD contacts had the opportunity to provide feedback on the research conducted for their respective country, but such contact was not successful in all cases.

Semi-Structured Interviews

In addition to documentary analysis, the assessment has also included targeted semi-structured interviews with government officials, as well as representatives of civil society organizations and industry delegates. These semi-structured interviews, as mentioned, have been built upon the pilot peer reviews of National Strategies conducted on behalf of the United Nations by the International Institute for Environment and Development (Dalal-Clayton, 2004) as well as the methodology presented by Kirkpatrick, George, and Curran (2001) and Ellis, Guton, and Rutherford (2010). The guide for peer reviews was very well-received by the international community, as well as political actors in the sustainable development arena (United Nations General Assembly,

2011). These assessment questions have now been utilized for over a decade, but have not yet been empirically or formally linked to the principles of an NSDS; there exists no real NSDS assessment framework which can replicated across countries and over time (Ellis, Gunton, & Rutherford, 2010).

In the recent past, the interview protocol has been pilot tested by the previous peer reviews. Previous research in sustainable development generally, and NSDSs in particular, suggests that interviews be organized by the four main topics of the NSDS process, content, preparation, implementation, outcomes, and monitoring stages. As seen in the table below, the investigative questions have been divided into these topics and then further organized by sub-theme.

As expected, a great deal of the same questions were used during the interviews and the document analysis; this is the case for several reasons. First, the comparison between information provided by documents and interviews allows the researcher to assess the reliability of the knowledge of the interview subject. The comparison also helps provide a more comprehensive picture of the national trends over time, as circumstances may have changed since the publication of the documents under study. In addition, several of the interview subjects were authors of many of the documents analyzed in this research. Therefore, the interviews provided an opportunity for follow up on key items that may have required more clarification (Ellis, Gunton, & Rutherford, 2010).

After an extended collection and then brief review of documents, a short list of 10-12 individual stakeholders from each nation was created. The lists included key

government officials at all levels, individuals from the non-profit sector, academics or researchers, and industry representatives. Each of the case studies will include a detailed list of all of the stakeholders contacted and subjects interviewed throughout the research process. The lists of final interview subjects, as well as a brief biographical sketch of each individual, will also be provided in the case study chapters.

All individuals were contacted electronically in order to schedule face-to-face interviews, at the convenience of the interviewee. Each of the subjects was also provided the interview protocol, or list of potential questions, prior to the formal interview as requested. These interviews were digitally recorded, with written and oral consent from the subject, and notes were taken during the discussion. Each interview lasted approximately one hour. Following nearly every interview, the subject provided additional documents or archival resources for evaluation. In some instances, these documents were not available electronically or were not yet translated into English. As such, the documentary analysis was further enhanced by the interview process, which is one type of data triangulation that was used.

Table 5: Questions for Interviews and Document Analysis

1. NSDS Process	
a. Initiation	i. In what capacity were you involved in the development or implementation of the strategy?
	ii. What previous strategies (or near equivalent) and processes have been undertaken, and how did the current strategy build on or link/related to these?
	iii. What was the prime motivation/stimulus for it?
	iv. Was an official mandate for the strategy set?
b. General	i. When was the strategy initiated, and by which institution?
	ii. Who was responsible for the SDS development process, (e.g. which agency, institution(s)/individual(s), independent secretariat)?
	iii. What structures and strategy management systems were established, e.g. committees, working groups, communication/information mechanisms?

	iv.	What roles were played by different agencies?
	v.	How long did the process take? (start – finish)
c. Strategy management	i.	Did a strong institution or group of institutions spearhead the process?
	ii.	Was there continuity of the strategy process (or was it interrupted or delayed)?
d. Participation	i.	Which stakeholders were involved and how?
	ii.	To what extent was the process consultative (e.g. who was asked to comment on drafts or proposals – both orgs and individuals); and/or genuinely participative (e.g. orgs and individuals able to be directly involved and influence the process itself and make inputs to the development/ implementation of the NSDS)?
	iii.	Was the process transparent and was there accountability?
	iv.	Was there trust between stakeholders and mutual respect?
	v.	Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?
e. Information and communication	i.	Were there effective institutionalized channels for communication?
	ii.	Was there access to information for all stakeholders and effective networking?
	iii.	How was the process and the product (i.e. the strategy document) received by different stakeholders?
f. Problems and conflict solution	i.	Were there any difficulties in resolving different opinions about particular issues? a. How were such difficulties resolved? b. How were trade-offs negotiated and choices made? c. What were some of these outcomes?
	ii.	To what extent is there consensus about the process and content of the NSDS (a) within the national government, (b) at regional and local levels, (c) amongst broader stakeholders?
g. Capacity	i.	Did the strategy build capacity and build on existing knowledge and expertise?
h. Successes and improving	ii.	What were the good/successful aspects of the process, and what were the constraints?
2. NSDS Content		
a. Focus and integration	i.	What was the main focus of the strategy?
	ii.	Did it provide balance across (a) sectors, (b) territories and (c) generations?
b. Linkages and coherence	i.	How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?
	ii.	Was there coherence between budget, capacity, and strategy priorities?
	iii.	Were realistic, flexible targets set within these linked strategies?
3. Preparation and development of the NSDS		
a. Priorities of governments	i.	What have been the related SD priorities of present and recent past governments?
	ii.	What key policies, strategies, and initiatives have been put in place?
	iii.	What are the historical, political, and admin contexts in which previous attempts at integrated strategies have originated, developed, and implemented?
b. Political commitment	i.	Was there political commitment in budget terms?
	ii.	Was the political commitment partisan or broad-church?
	iii.	What were the sticking points in the NSDS process?
c. Responsibilities	i.	Was it clear where responsibilities lie for building on existing

and resources		strategies and their activities, for formulating new strategies where relevant, for implementing them, and for monitoring them?
	ii.	Do the institutions concerned have sufficient rights, resources and effective relationships to undertake this?
d. Institutional coordination	i.	Was there effective coordination (a) between these institutions responsible for the NSDS, (b) between strategic initiatives, and (c) between these NSDS institutions and those central to planning and investment?
e. Links with other levels	i.	How do regional, national, and local strategies relate and how do existing strategies link into the planning and decision-making systems?
f. Other contextual issues	i.	What key factors assisted the development of the strategy (e.g. past strategy, public pressure, government commitment) and what were the key issues to resolve (e.g. land tenure, resource depletion, poverty)?
	ii.	From what perspective has the process been driven (e.g. environmental, economic, or interdisciplinary)?
4. Implementation of the NSDS		
a. Quality of analysis on SD dimensions	i.	At the time of developing the strategy, was there adequate understanding of the state of resources, trends in quality and quantity, and the pressures upon them?
	ii.	Was there adequate analysis of the state of the main sectors and livelihood systems, their interactions with resources (as above), and consequent winners and losers?
	iii.	Has full use been made of existing studies on poverty and environment, and the opportunity taken to strengthen the body of knowledge in concerned areas?
b. Quality of participation	i.	Is there continuing identification and participation of concerned stakeholders at different levels, and representatives of global environmental interests - in strategy preparation, planning, implementation, monitoring and review?
	ii.	What pro-active mechanisms been used to engage marginalized stakeholders
	iii.	What role did public awareness campaigns have in encouraging stakeholder involvement in the process?
	iv.	How has the process strengthened people's participation in, and influence over, the decision making process?
c. Quality of integrative policies and plans	i.	Have clear policies, plans, principles, standards, and/or targets been derived from the NSDS, in forms which can best elicit positive responses from those institutions responsible for implementing the NSDS?
	ii.	Have the directions of the strategy been picked up in other strategic or planning documents? In economic development policies?
	iii.	Have opportunities for win-win activities supporting poverty alleviation, economic growth and environmental conservation been well defined with those institutions best placed to act on them? Have they been acted upon?
d. Procedural aspects	i.	Are there systems for defining priorities in environmental, economic and social terms, so as to keep the number of strategy objectives manageable?
	ii.	Are there systems for addressing the hard trade-offs – identifying them, debating them, planning action or compensating for the costs of inaction?
e. Effectiveness of	i.	Is there any possible distinction in the strategy between regulatory and

and assessment of regulations and incentives		market mechanisms?
	ii.	What are the aims fixed to these tools (internalization of the external costs, deterrent effect, creation of financial resources for corrective actions, etc.)?
	iii.	Are these frameworks efficiently monitored and enforced? At what levels?
f. Awareness and SD education	i.	Are measures taken to increase public awareness of SD and encourage the growth of consumer- or society-driven incentives?
	ii.	Are measures planned to widen the general public's education on SD? By which methods?
g. NSDS process management and capacity effectiveness	i.	What tools or methods were useful in enhancing understanding (e.g. poverty assessments, SEA)? How is progress in understanding being monitored?
	ii.	Is capacity being efficiently and equitably utilized, and improved, to: <ul style="list-style-type: none"> a. Develop strategies with strong local ownership? b. Coordinate existing sectoral or issues -based strategies to improve their coherence and efficiency in achieving SD? c. Encourage institutions to make their responses to relevant strategies? d. Implement strategy-related activities, in a way that is consistent with the broader strategy goals? e. Monitor the impact of strategic mechanisms and activities? f. Maintain the "big picture" of strategy evolution? g. Review and improve upon the NSDS?
5. Output and Outcome Questions		
a. Implementation	i.	Did the strategy focus on outcomes and the means of implementation?
	ii.	What parts of the strategy are being implemented – and how?
	iii.	What parts are not being implemented – and why?
b. Innovation and change	i.	Did it lead to new ways of government departments working together? How so?
	ii.	Did it lead to better communication pathways?
	iii.	How has it improved awareness of sustainable development issues?
	iv.	Is there clarity (within government and across society) on the goals of the strategy?
	v.	Did the assumptions and objectives of the strategy change?
	vi.	Did behaviors change, and whose?
	vii.	Is it making a difference at the level of local authorities?
	viii.	Is it making a difference in individual sectors?
	ix.	What is the role of the private sector in delivering/implementing the strategy?
	x.	Is the private sector investing in sustainable development activities, with or without the help of government?
6. Monitoring and indicator questions		
a. Mechanisms	i.	What mechanisms and systems have been established to track and monitor strategy development processes?
	ii.	What mechanisms and systems have been established to track and monitor strategy implementation – overall, and individual commitments?
	iii.	What indicators have been included to measure progress in respect of strategy development and implementation?
	iv.	How effective, meaningful, adequate, and efficient are these progress measures?
	v.	Is there available and adequate data to support the selected indicators?

b. Progress reports	i. How and how often is progress being reported, and to whom?
	ii. Did the strategy establish the means to assess priority issues?
	iii. Were integrated mechanisms for assessment, follow up, evaluation, and feedback established?

Source: Adapted from Dalal-Clayton and Bass (2002) “Sustainable development strategies: A Resource book”.

Analytical Framework

The series of questions previously provided in the table above has been utilized in some form or another for over a decade in the peer review process (Dalal-Clayton & Bass, 2002; Dalal-Clayton, 2004; Kirkpatrick, George, & Curran, 2001; Lyytimaki, 2012). But research has not yet converted this list of key questions into indicators, which are then linked with viable and testable hypotheses regarding the critical components of National Sustainable Development Strategies. The present study will fill that gap in the literature by presenting a formal NSDS assessment framework that aligns qualitative and quantitative data via a case study methodology. And, in so doing, this research will help to answer the ongoing demand for more rigorous analysis of sustainable development policy implementation (Ellis, Gunton, & Rutherford, 2010). Table six is the first formalized step towards connecting the in-depth questions and clearly delineated hypotheses available for testing.

This research has derived testable indicators from the specific questions which have been used to assess National Sustainable Development Strategies for over a decade. Though built on years of previous research from various academic areas, the mixed methodological framework presented in this research is the first of its kind to be applied to two in-depth case studies at the national level. The link between these questions (used

as indicators for the study), the four major hypotheses, and the variables by which they shall be examined are all provided below in the table.

Table 6: Linkages between Hypotheses, Variables, and Questions as Indicators

Hypotheses	Variables	Questions
The use of formal and open communication measures by government during the policymaking phases should lead to the ongoing participation of engaged civil society stakeholders in the policy implementation phases.	Independent <ul style="list-style-type: none"> - Government efforts to increase public awareness of SD - Formal public debates, dialogues, and comment periods on NSDS policymaking - Stakeholder participation during NSDS policymaking 	Who was responsible for the SDS development process, (e.g. which agency, institution(s)/individual(s), independent secretariat)?
		What structures and strategy management systems were established for communication and information mechanisms?
		Which stakeholders were involved and how?
		To what extent was the process consultative (e.g. who was asked to comment on drafts or proposals – both orgs and individuals); and/or genuinely participative (e.g. orgs and individuals able to be directly involved and influence the process itself and make inputs to the development/ implementation of the NSDS)?
		Was there trust between stakeholders and mutual respect?
		Were there effective institutionalized channels for communication?
		Was there access to information for all stakeholders and effective networking?
		What pro-active mechanisms been used to engage marginalized stakeholders?
		What role did public awareness campaigns have in encouraging stakeholder involvement in the process?
	Dependent <ul style="list-style-type: none"> - Ongoing participation of stakeholders during the NSDS implementation phases 	Which stakeholders were involved and how?
		Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?
		How has the process strengthened people's participation in, and influence over, the decision making process?
		Did it lead to better communication pathways?
		How has it improved awareness of sustainable development issues?
Nations that provide a continued commitment of financial, human, and spatial resources specific to the National SD Strategy are more likely to exhibit higher levels of intergovernmental cooperation.	Independent <ul style="list-style-type: none"> - Commitment of financial, human, and spatial resources for NSDS implementation 	Was there coherence between budget, capacity, and strategy priorities?
		Was there political commitment in budget terms?
		Do the institutions concerned have sufficient rights, resources and effective relationships to undertake this?
	Dependent	Were there effective institutionalized channels for

	<ul style="list-style-type: none"> - Vertical integration - Intergovernmental cooperation 	communication?
		To what extent is there consensus about the process and content of the NSDS between the national government and those at regional and local levels?
		Did it provide balance across territories?
		How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?
		Is it making a difference at the level of local authorities?
Nations which display ongoing political and administrative top-level leadership in NSDS processes and institutions are more likely to exhibit higher levels of inter-departmental cooperation.	Independent:	When was the strategy initiated, and by which institution?
		What structures and strategy management systems were established, e.g. committees, working groups, communication/information mechanisms?
		What roles were played by different agencies?
	Dependent	To what extent was the process consultative (e.g. who was asked to comment on drafts or proposals – both orgs and individuals); and/or genuinely participative (e.g. orgs and individuals able to be directly involved and influence the process itself and make inputs to the development and implementation)?
		Did it develop or build on partnerships between government, civil society, private sector and external institutions?
		Have the directions of the strategy been picked up in other strategic or planning documents? In economic development policies?
In their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements are most likely to have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy.	Independent	What previous strategies (or near equivalent) and processes have been undertaken, and how did the current strategy build on or link/related to these?
		Did the strategy build capacity and build on existing knowledge and expertise?
		How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?
		What have been the related SD priorities of present and recent past governments?
		At the time of developing the strategy, was there adequate understanding of the state of resources, trends in quality and quantity, and the pressures upon them?
	Dependent	Are these frameworks efficiently monitored and enforced? At what levels?
		What mechanisms and systems have been established to track and monitor strategy development processes?
		What mechanisms and systems have been established to track and monitor strategy implementation – overall, and individual

	and national levels	commitments?
		What indicators have been included to measure progress in respect of strategy development and implementation?
		How effective, meaningful, adequate, and efficient are these progress measures?
		Is there available and adequate data to support the selected indicators?
		How and how often is progress being reported; and to whom?
		Did the strategy establish the means to assess priority issues?
		Were integrated mechanisms for assessment, follow up, evaluation, and feedback established?

Data Analysis

After the collection of documents and transcription of the interviews, all of these items were uploaded into the NVivo software program. This software, complemented by manual methods, was used to organize the documents and identify recurring themes in the data. Previous research has referred to a similar process called Summary Oral Reflexive Analysis (SORA), in which the context of data is retained by actually “hearing” what the data have to say (Welsh, 2002). In utilizing this method to identify themes, the literature suggests that the use of analysis software be complemented by manual techniques (Srivastava & Thomson, 2009; Yanow, 2007). After reviewing the documents and establishing the hypotheses to be tested, significant keywords were selected. This process led to the selection of six to seven keywords for each hypothesis. These selected themes were each then used to create “nodes” in NVivo. These keywords, and their associated hypotheses and variables are provided in the following table.

Table 7: Hypotheses, Variables, and Keywords

Hypotheses	Variables	Keywords
The use of formal and open communication measures by government during the policymaking phases should lead to the	Independent - Government efforts to increase public awareness of SD	Communication Participation Stakeholder

ongoing participation of engaged civil society stakeholders in the policy implementation phases.	<ul style="list-style-type: none"> - Formal public debates, dialogues, and comment periods on NSDS policymaking - Stakeholder participation during NSDS policymaking 	Representatives Engagement Involvement
	Dependent <ul style="list-style-type: none"> - Ongoing participation of stakeholders during the NSDS implementation phases 	
Nations that provide a continued commitment of financial, human, and spatial resources specific to the National SD Strategy are more likely to exhibit higher levels of intergovernmental cooperation.	Independent <ul style="list-style-type: none"> - Commitment of financial, human, and spatial resources for NSDS implementation 	Resource Budget Province Municipality State Local Integration
	Dependent <ul style="list-style-type: none"> - Vertical integration - Intergovernmental cooperation 	
Nations which display ongoing political and administrative top-level leadership in NSDS processes and institutions are more likely to exhibit higher levels of inter-departmental cooperation.	Independent <ul style="list-style-type: none"> - Top-level leadership in and spearheading of the NSDS processes and institutions 	Leadership Organizational Hierarchy Integration Department Ministry Federal
	Dependent <ul style="list-style-type: none"> - Horizontal integration - Interdepartmental cooperation 	
In their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements are most likely to have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy.	Independent <ul style="list-style-type: none"> - History of performance management approaches and existing institutions 	Statistics Indicator Data Monitoring Evaluation Target Feedback
	Dependent <ul style="list-style-type: none"> - Measurable targets, objectives, and indicators - Data availability at the local, regional, and national levels 	

This type of use of the NVivo software is meant to improve accuracy by using the search facility which is seen as one of its main advantages that facilitates the examination of the data (Welsh, 2002). The keywords were used as “queries” in the software, allowing for the documents and data to be organized and search by hand much more easily. The frequency of these selected words is not so important, but their constant and continued use throughout the documents, specifically the National SD Strategies and related sustainability policies, could be interpreted as a symbol of government

commitment to the increased awareness of this issue, as well as the significance and validity of these selected words.

Measurement Considerations: Validity and Reliability

Broadly speaking, validating an argument or research process basically means showing that it is well founded and sound, whether or not the results generalize to a larger group. On the other hand, when a procedure or result is reliable, it means that we can depend on it repeatedly. The various dimensions of reliability and validity have been addressed throughout various stages and process of the research.

Construct validity, known as the identification of the correct operationalization of concepts, has been addressed by the triangulation of data and the use of multiple evidentiary sources (Yin, 2009). Each individual type of source offers inherent strengths and weaknesses and, therefore, a good case study will use several complimentary sources. The triangulation helps the researcher “address a broader range of historical and behavioral issues” concerning each case study (Yin, 2009, p. 115). Most importantly, by triangulating the data, the research can develop “converging lines of inquiry” to bolster the explanatory value of the findings. Additionally, the research questions, hypotheses, and variables, and their respective selected indicators, were all derived from over two decades of international research supporting the core principles of an NSDS and the peer review process used to evaluate these strategies. The present study is the first to consolidate and apply all previous research together in a formalized evaluative framework for an NSDS.

Internal validity is defined as the correct establishment of causal relationships by identifying conditions and independent variables that are necessary and sufficient for a respective shift in the associated dependent variable under study (Yin, 2009). The issue is tackled within the complex analysis and evaluation processes, as explained in detail in each case study (Yin, 2009). External validity, or generalization, is critical in this research. On the basis of well-established SD principles and peer review processes, the formalized framework presented in this research is both broad enough to be replicable across nations and specific enough to be used in one country over time to assess national progress towards sustainability objectives.

The assessment protocol and processes are established and tested transparently so as to allow future research to replicate and build upon this model of evaluation. Thus, this study also provides high degree of reliability of the research. The case study protocol, interview and document questions and indicators, NVivo keywords and queries, and all other evaluative decisions are carefully detailed within each case study. With a high degree of transparency throughout the research process, reliability is greatly improved (Yin, 2009).

Ethical Considerations

As required by University protocol, the Institutional Review Board (IRB) process was completed under exemption number five (categorized for public officials and representatives as research subjects). On May 25, 2012, the Social and Behavioral Institutional Review Board of Florida International University reviewed the proposed study for the use of human subjects via the Exempt Review process; this exemption was

granted exemption number 050812-00. Consent was formally provided by interview subjects, and this consent has been recorded and/or documented. The interviews were digitally recorded and notes were taken by hand throughout the interviews.

Conclusion

There are very few assessments of National SD Strategies at all. As yet, no research offers a formal framework that can be replicated and applied to other nations and across time. In part, this is because of the ambiguity of the very concept of sustainable development; the variety in operationalizing and measuring sustainable development; and the confusion of terminology, data, and methods of measurement (Parris & Kates, 2003; Swanson & Pinter, 2006). Consequently, the analysis and evaluation of government-led sustainable development efforts, and especially of National SD Strategies, is still highly subjective and in its very early stages.

The present research consolidates two decades of sustainability literature to create a replicable NSDS assessment framework. The broader research questions and hypotheses are driven directly by the UN-established principles for an NSDS. The study's variables and indicators are derived from the global NSDS peer review process. In bringing together all of this work, this research is the first to present and test a formalized framework for the assessment of National Sustainable Development Strategies. This has been a key gap in the literature and research which is finally being addressed. For all stakeholders involved in the NSDS, from policymakers to practitioners to indigenous peoples to industrialists, the repeated use of this evaluation approach allows for the identification of trends and patterns in the progress towards sustainability.

Chapter Five: Historical Background of South Africa

Introduction

The nation of South Africa had a long history of legalized racial inequality, starting from the arrival of European colonists in the 15th century. As colonists came to power in the Cape Colony, they seized possession of the key commodities of land, minerals, and natural resources in order to satisfy growing global demands. These resources were, and continue to be, important drivers of the nation's economy. Therefore, the legal ownership of these commodities was, and still is, central to the socioeconomic evolution of South Africa and its people.

Acknowledging this significance, the rights to land, resources, and minerals were exploited by the white minority to subjugate and overpower the native African population for centuries. South African society developed a racial stratification system that was legally entrenched and steered by economic interests. The system of apartheid, which thrived in the 20th century, epitomized the institutionalized racism that characterized the country for so long. However, in reaction to growing international criticism and the aftermath of World War II, South Africa acknowledged the need for change and began its transition towards democracy.

While the nation's shift to democracy was often turbulent and violent, in 1996, South Africa emerged from this political evolution with a new Constitution that provided for an independent, democratic, and nonracial state. In this new South Africa, all citizens were guaranteed the right "to have the environment protected, for the benefit of present and future generations, through reasonable legislative" and policy measures (Republic of

South Africa, 1996). With this constitutional protection of the principle of sustainability, South Africa began to create and implement policies designed to ensure the sustainable development of the nation. These initial environmental management policies paved the way for South Africa's first National Sustainable Development Strategy in 2008.

This chapter offers a historical background of South Africa, specifically focused on the ways in which land and natural resources were monopolized and leveraged by dominant political groups in order to maintain authority and power. The next section offers an account of the nation's environmental protection policy and strategic development planning evolution. This legislative history provides the policy foundation for the development and implementation National Sustainable Development Strategy which is discussed in the following chapter.

Early European Exploration and Exploitation of the African Coast

In the late 15th century, European explorers came to the southern coast of Africa in search of a sea-route to India. The Portuguese, the first European nation to reach the new lands, set foot on South African soil in 1497. The Portuguese quickly gained European competition, as English and Dutch merchants entered the markets and economies of West Africa and Asia, and saw the Cape peninsula as a source of a variety of critical and profitable natural resources which they could obtain through trade with locals (Butler, 2009). This rapid expansion of immigrants and the entrance of the region into the global market of minerals and natural resources changed forever the development of the African continent and its people.

By the 16th and 17th centuries, settlers from several European nations, including the Netherlands, France, Portugal, Germany, and Great Britain, were well-established in the southwest regions of South Africa, which was then called the Cape Colony. In 1657, European farmers were formally allocated new land by colonial authorities in order to produce wine and wheat, two commodities in growing demand. With new land to till, the European colonists required more labor. The Dutch East India Company (VOC) answered the call by importing slaves from other areas of Africa, Madagascar, and the East Indies (South African History Online, 2009).

In addition to slave labor, the colonists brought with them diseases, such as smallpox, and increased demand for water, food, and livestock (Beck, 2014). These social, economic, and environmental pressures would continue to impact the South African nation, and specifically the Cape, as development spread and colonists continued to prosper. From the start, colonial South Africa illustrated a society stratified along racial lines as European colonists consolidated their power and wealth; this legacy would continue for four centuries, shaping the social challenges and developmental path of the nation and its people.

As Europeans further intruded onto the western lands of South Africa, those natives that survived the land conflicts were nearly decimated by smallpox and the overwhelming social and cultural changes the disease represented. By the middle of the 18th century, the Cape Colony recorded a greater number of slaves from the Asian and African continents than of European colonists. From the year 1710 onwards, the adult slave population in South Africa “outnumbered the adult colonial population by as much

as 3:1” (South African History Online, 2005)⁹. With the racial makeup of the Colony evolving as slaves were continuously brought into the area, coalitions were quickly formed based on skin color and racial disposition with the white European colonists able to monopolize political and economic power. The economy’s reliance on and increased demand for slave labor served to expand the power of the white minority, as their economic interests aligned with social anxieties regarding racial insurgency (Antin, 2013).

With the re-capture of the port city of Cape Town by the British from the Dutch in 1806, the Cape Colony was thrust into the growing global trade-based empire of a rapidly industrializing Britain. The social challenges of the Cape Colony increased with the expanding needs of the growing economy. The legal system, maintained by white authorities, struggled to cope with these new and increasing economic and social demands (Nattrass & Seekings, 2010).

Thus, new laws were passed to provide legal stability and maintain European authority over the land, and its resources and people. The Cradock Proclamation of 1813 reserved the “the ‘right to mine’ precious stones, gold and silver for the Government of the Cape Colony” (Cawood & Minnitt, 1998, p. 370).

With the evolving global sentiment against slavery, the British Parliament passed the Abolition Act in 1833. Though this law eliminated the institution of slavery which had been created, it also put into place an indentured labor system, called an

⁹ All demographic data from the colonial period of South Africa, though critical information, suffers from issues of validity and reliability; this is especially true when dealing with historical data on people of color during colonization (De Kock, 1971).

apprenticeship¹⁰. In reality, the former slaves of the colony of South Africa were now simply called apprentices and they remained under the legal, economic, political, and social control of the white European landowners and policymakers (Republic of South Africa, 2014).

Factions Fight for the Colony and its Resources

The mid-1800s witnessed various ongoing conflicts between several racial groups in the area, including the western Khosian people, eastern Xhosa tribe, Muslims known as Cape Malays, various European factions, and the original Dutch colonists known as Boers or Afrikaans (later to be called Voortrekkers). In what is now referred to as the “Great Trek” of 1835, thousands of these original Dutch colonists moved northwards to the Highveld and Natal areas in search of lands that were not under British rule (Worden, 2012).

The Voortrekkers established two republics in the mid-19th century: the South African Republic (to the north of the Vaal River, and also called Transvaal or the Zuid-Afrikaansche Republiek) and the Orange Free State (between the Orange and the Vaal rivers).¹¹ About five thousand Boers settled in the area known as the Orange Free State, and the rest of the Voortrekkers headed for Natal and appointed a delegation to negotiate over land and resources with the Zulu king in the area (Library of Congress, 2010).

¹⁰ The British justified the creation of an apprentice system to ensure that the slave-based economies of the British Empire didn’t breakdown as a result of the abolition of slavery (South African History Online, 2005).

¹¹ The two states featured a classical republican structure, with a written constitution, president, and an elected legislature; voting, however, was restricted to white males. Native Africans and colored people could not vote, or own land, or carry guns under the laws of the South African Republic or the Orange Free State (Republic of South Africa, 2014).

Partly in reaction to ongoing frontier warfare, population pressures, and the actions of slave traders in Portuguese territory to the east, the Zulu kingdom developed as a highly centralized state (De Kock, 1971). When a Boer delegation approached the Zulu King to request a portion of his territory, they unknowingly set off a series of skirmishes which ended with the “Battle of Blood River” in 1838; the Boers, victorious, went on to found the first Boer Republic in Natal ¹² (Thompson, 1995).

Often supported by factions of Europeans seeking their own gains, these territorial and political battles led to a series of expansions and reorganizations of the Colony throughout the 19th century, with lines drawn based on racial and cultural differences, as well as the commercial pressures of growing global industrialism. When the British annexed the northern Port of Natal in 1843, it further deepened the rift between the colonists and the previously-established local African communities (Reid, 2012).

In order to maintain peace in the growing British territory of Natal, the community developed a legal and political dualism, “whereby chiefly rule was entrenched and customary law was codified” in formal policies and legislation. This dualistic system is regarded as having provided a model for the South African system of segregation, known as apartheid, that would prevail in the 20th century (Thompson, 1995). The official separation of the races would continue in South Africa for more than a century, legally enshrined in various and vast economic and political statutes.

The majority of South Africa's black inhabitants continued to live in independent African states ruled by their own kings and chiefs, largely separate from the growing colonial interests along the Cape. This sovereignty would soon be a source of concern for

¹² This Dutch republic of Natal would not last long, however, as the British would defeat the Voortrekkers in 1842 and force them to settle farther along the Vaal River (Beck, 2014).

European merchants and businessmen. The situation was further exacerbated by the growing tension between the British and Dutch colonists (Library of Congress, 2010).

The discovery of precious minerals in the colony, specifically diamonds 1867 and gold in 1886, pushed the British to further limit the independence of the Boers and the African natives while still ensuring that the global demands for these resources was met (Beck, 2014). Acknowledging the import of these natural resources and minerals, the British colonists used official governmental powers to ensure their hold on the Cape's resources, economy, politics, and social order.

Importantly, the “supply of the mine labour became the victorious British colonial authority's priority, and policies were formulated to drive the African population into the developing urban mining centres (without effectively integrating them into society)” (Antin, 2013, p. 3). The fights for these valuable natural resources deepened the divides in the growing economies of Europe and Africa, and the debate over ownership of these resources and lands has caused strife in the mineral-rich lands of South Africa since then (Butler, 2009).

Institutionalizing Racism and Consolidating Power in the 19th Century

As those in power sought to consolidate and expand their authority, the white office holders began to institutionalize segregation based on economic and social factors. In 1872, white business owners from the wealthy and mineral-rich city¹³ of Kimberley persuaded British administrators to introduce a “pass law”. This policy required that all “servants be in possession of passes that stated whether the holders were legally entitled

¹³ In the 1870's and 1880's, the mines within the South African town of Kimberley produced 95% of the world's diamonds, resulting in enormous wealth and fierce rivalries in the area (Antin, 2013).

to work in the city, whether or not they had completed their contractual obligations, and whether they could leave the city” (Library of Congress, 2010). Limiting the mobility and bargaining power of migrant laborers and native Africans, this law was enforced only for people of color, further formalizing the racial divisions in the region.

This first “pass law” was a key step in formally dividing the nation through legislation and government institutions. Though it was South Africa's first industrialized city, the town of Kimberly developed into a “community in which discrimination became entrenched in the economic and social order” with the enforcement of the “pass law” (Beck, 2014). This institutionalized segregation was originally driven, in part by racism and cultural superiority, but even more by the renewed desire for cheap manual labor and the expansion of land-based economies with the discovery of diamonds and other resources in the area. Land and natural resources provided influence, and the powerful white minority sought to attain, maintain, and consolidate this source of control.

To provide this much-needed source of cheap labor to mine these mineral-rich lands, the British embarked on a large-scale program of conquest in the 1870s and the 1880s, fighting wars against the native Zulu, Griqua, Tswana, Xhosa, Pedi, and Sotho tribes, and conquering all but the last (De Kock, 1971). The land dispossession of the African peoples would continue into the 20th century, just as it had for the two centuries prior.

By the end of the 1880’s, the majority of the native South African population had been overpowered, their lands seized and awarded to European settlers, and had disproportionate taxes imposed upon them. As their land was taken, these people were forced to live in rural locations outside of the major economic zones in which they

worked. To obtain food and earn cash to meet these growing costs, people of color now had to migrate to work on farms, mines, and in the rapidly industrializing towns of South Africa. The racial divide in the colony became increasingly apparent as the British pushed the black populations to resettle on the outskirts of town on mineral-poor lands with little to no infrastructure, consolidating each of the racial groups in their appropriated areas, called “homelands” (Worden, 2012).

In addition to consolidating and relocating the native population, the British colonists also sought to minimize the potential threat of the Dutch settlers in the region. The British wished to unite the Transvaal Republic and Orange Free State to gain control of the minerals and natural resources in the areas and diminish the economic and political power of these settlers. The Boers resented this encroachment by the British authorities and the Anglo-Boer War, also called the South African War, broke out at the turn of the 19th century (Reid, 2012).

The war was particularly violent and included the use of concentration camps, guerilla warfare, and scorched earth policies, amongst other horrific battle strategies. The war ended in victory for Britain and the annexation of the Transvaal and Orange Free State Republics, both of which would eventually be incorporated into the Union of South Africa in 1910 (Republic of South Africa, 2014). This war permanently damaged the relations between the British, Dutch, and native Africans in the region. Driven by the demand for minerals, natural resources, and the cheap labor needed to extract them, the legalized institution of racism would continue under the Union of South Africa.

The 1909 Union of South Africa and Pre-Apartheid Policies

The formation of the Union of South Africa was a difficult endeavor, heavily influenced by the ongoing tension in the region following the Anglo-Boer War. The passage of the 1909 South Africa Act brought together the four British colonies and created a new constitution founded on three guiding principles. First, the constitution held that English and Dutch would be the official national languages. Second, each of the four self-governing colonies (Cape Colony, Natal Colony, Orange River Colony, and the Transvaal Colony) would decide for themselves the issue of voting rights for people of color. Finally, the nation of South Africa would become a unitary state under the Westminster-style of government (De Kock, 1971).

With the new unitary structure set in place, each colony's parliaments were abolished and replaced with provincial councils. A national bicameral parliament was created, comprised of a House of Assembly and Senate, and its members were elected by the country's white minority. Determining the location for the Union's capital was also a political battle. It was finally decided that the administration would be seated in Pretoria (Transvaal Colony), Parliament would be in Cape Town (Cape Province), the Appellate Division would be in Bloemfontein (Orange Free State), and Pietermaritzburg (Natal) was given monetary payments. The legacy of this arrangement is still visible in modern-day South Africa, as the Parliament meets in Cape Town, the administrative capital is found in Pretoria, and various court offices are located in Johannesburg (South African History Online, 2009).

Despite vocal opposition from native African groups that were excluded from the policymaking process, the 1909 South Africa Act was passed, and the British

consolidated their power in the region and further weakened the potential for racial equality¹⁴. The Anglo-Boer war, however, had polarized South African politics into liberal and conservative camps, in addition to the historical divides over racial segregation, land dispossession, and labor laws. Despite the peace treaty and the new constitution, whites “continued the subjugation of traditional African structures of governance through its policies of indirect government” while the nation remained under the authority of the British Crown (De Kock, 1971).

The first Prime Minister of the South African Union, Louis Botha, introduced the initial formal policy of racial segregation under the new government. Policies continued to be passed which further limited the social mobility and independence of people of color in South Africa. For instance, the Mines and Works Act of 1911 legislated that blacks could only be hired for unskilled or semi-skilled positions; numerous pieces of legislation served this same purpose (Republic of South Africa, 2014).

According to the Native Labor Regulation Act of the same year, blacks (but not whites) were legally prohibited from breaking a labor contract. The Dutch Reformed Church Act of 1911 forbid Africans from becoming full members of the church, thus limiting their local leadership and engagement in the community (Jacobs, 2003). In the following year, the Land Settlement Act of 1912 “specifically reserved ownership of all mineral rights, and not only the right to mine, for the State” (Cawood & Minnitt, 1998, p. 371). This law maintained ability of the South African government to appropriate not just control of privately-owned land, but the resources and minerals contained therein.

¹⁴ The new Constitution of South African also allowed for the future incorporation of four other British territories: South Rhodesia, Basutoland (present-day Lesotho), Bechuanaland (present-day Botswana), and Swaziland (South African History Online, 2005).

Considered one of the most important pieces of segregation legislation at the time, the Native Lands Act of 1913 delineated the areas of South Africa in which either blacks or whites could own land. While making up two-thirds of the population, blacks were restricted to only about seven percent of the land; these areas were called reserves, and Africans could only live on lands outside of these borders if employed as laborers by whites and given explicit permission to do so. Whites, who constituted one-fifth of the South African population, were allotted 93 percent of the land. This Act also made it illegal for Africans to work as sharecroppers in the territories. Continuing the history of land dispossession of the African people, the creation of these reserves also served to consolidate the labor pool for white-owned farms and rapidly growing urban industries¹⁵ (Jacobs, 2003).

After being ignored during the creation and passage of the South Africa Act and the later passage of the Native Lands Act, native Africans formed the South African Native National Congress in January 1912 (later renamed the African National Congress, or ANC) in order to challenge the white governmental authority. This group itself was exclusive and elitist, rather than a mass movement, in its early days and, as such, the ANC would see little political impact from their protests during this time (South African History Online, 2009).

In response to the creation of the ANC and South Africa's entry into World War I, the National Party of South Africa (also called the Afrikaner National Party, or NP) was formed in 1914. The NP was developed to advocate for racial separation, social

¹⁵ Many white farmers opposed the Land Act because it forced the removal of black tenants and sharecroppers from their farms in order to be moved to the reserves. Instead, these farmers wanted the African tenants to be redistributed as cheap farm labor and remain on the land (South African History Online, 2009).

stratification, and traditional republicanism; voting rights, the NP argued, was a privilege belonging only to white people (Worden, 2012). The white population in South Africa was far from united, however, as economic and ethnic issues continued to produce conflict amongst the powerful European minority.

In order to protect the privileged position of whites and unite them towards a common racial enemy, the South African government passed additional laws which enabled greater control over the native population. Passed by the white-majority coalition government of the National Party and the Labor Party, the Industrial Conciliation Act of 1924 legally recognized white trade unions, but not black. The 1927 Native Administration Act introduced pass laws nationwide to control the movement of rural blacks and provided for forced removals. The 1936 Native Trust and Land Act reinforced the institutionalized segregation and subjugation of people of color with the creation of a South African Native Trust (SANT), which was tasked with the administration of African reserve areas, division of arable and grazing lands, and distribution of laborers, tenants, and squatters amongst the reserve areas¹⁶ (Beck, 2014). Once again, in order to monopolize valuable land and resources, discriminatory legislation was used to overpower and suppress people of color in South Africa.

¹⁶ This Act also served to increase the amount of land set aside for blacks from 7 percent to 13 percent, though this figure is still hugely disproportionate to the needs of the population. Other legislation during this time included the Wage Act of 1925, which allowed the Minister of Labor to require that employers give preference to the hiring of white employees. Also, the Mines and Works Amendment Act of 1926 reinforced the mining industry's "color bar" which restricted jobs and salaries based on race (South African History Online, 2012).

World War II, its Aftermath, and Apartheid

After World War II broke out in 1939, South Africans were divided as to whether or not they should join the war; and, if so, on which side they would fight¹⁷. This topic caused lasting cleavages in white South African politics, which would remain throughout the end of the 20th century¹⁸. In addition to politics, South Africa was also deeply impacted by several social and economic challenges as a result of the war. Manufacturing in the nation increased considerably, though gold and mining remained the largest industries. This led to a sharp increase in living costs, but not an appropriate increase in wages and income. The raised cost of living, particularly for people of color, was driven by greater transportation fees, rigorous enforcement of “pass laws” and liquor laws, and increased rental and transit costs due to mass housing plans institutionalized in the country¹⁹ (Reid, 2012). The quality of life of the native South African population continued to diminish.

The 1948 South African election was seen as “a contest between white political parties over the most effective strategies of containing Black resistance to white rule and keeping them away from” cities and white populations (South African History Online, 2009). In 1948, the Reunited National Party, in coalition with the Afrikaner Party, was

¹⁷ Although it was still a British colony, many Afrikaners were of German ancestry and identified with Germany’s fight against the British in the war (South African History Online, 2009).

¹⁸ One such result of this debate was the creation of the Reunited National Party (or Herenigde Nasionale Party, HNP) by Afrikaner intellectuals and politicians in 1939 (Beck, 2014).

¹⁹ Following World War II, the provision of mass housing intensified. Old living locations on the edge of town were destroyed and these residents were moved to new townships outside of the center of the city, where they worked; thus, the costs of daily transportation to and from work, considered part of the family’s expenses, sharply increased (Reid, 2012).

elected on a platform that promoted segregation and separation of the races; this coalition of the two groups changed its name to the National Party once in power (Beck, 2014). This nationalist white regime institutionalized and augmented the existing segregation policies in South Africa, furthering the legal framework of apartheid. The political regulation of racial groups was now formally entrenched as a key feature of South Africa's apartheid regime, though unofficial control of the races had been enshrined in various legal systems and statutes for hundreds of years.

As new laws were passed, this inequality was extended to the allocation public goods and services, functioning as a government-imposed system of segregation. The Bantustan Self-Government Act of 1959 delegated greater autonomy to African local administrative authorities, as well as the responsibilities of social welfare costs, unemployment programs, and political administration. Carved out of the former "reserve areas", each homeland was expected to become economically self-sufficient, despite the lack of natural resources or basic infrastructure in these regions. Additionally, the local leaders often ruled in a very corrupt and violent manner, with the complete support of the South African government. The Reservation of Separate Amenities Act of 1953 established that all races should have separate public amenities, and these separate resources need not be equal in quality. In enactment of this law, apartheid signs were placed throughout the nation; these signs served as a symbol of the political and economic control of the white minority (Republic of South Africa, 2014).

Under legislation such as the Suppression of Communism Act and the Unlawful Organizations Act, the apartheid government "banned" thousands of people opposed to

racial segregation. In response, the nation's major liberation groups (African National Congress, ANC, and the Pan-Africanist Congress, PAC) moved underground and away from the nonviolent ideology of their origin. Prohibited from operating peacefully or even legally existing, these groups took up arms against the government in their fight for equality. The government retaliated with the passage of stricter apartheid laws and increased enforcement of existing segregation policies (De Kock, 1971). The tension between equality advocates and the apartheid government increased with the passage of these laws. Thus, the resistance movements grew, along with the severity of the government's responses.

In March 1960, protestors gathered in Sharpeville to demonstrate against the pass laws and other apartheid policies, congregating at the township's local police station. In response, approximately 300 police officers opened fire on the crowd of demonstrators; 69 people were killed and 186 were injured (Reid, 2012). This event, known as the Sharpeville Massacre, made international headlines while the South African government continued to suppress these liberation groups. The criticism and disapproval from the international community continued to grow as greater publicity was given to the ongoing violence in South Africa.

Following the Sharpeville incident, the early 1970s witnessed an intensified economic dimension of the resistance movement. Labor strikes and stoppages became commonplace in manufacturing cities like Durban where black workers were not granted union rights. In the first three months of the 1970s, 160 strikes were undertaken, involving more than 60,000 workers. As a result of these efforts, independent labor

unions were formed, forcing “the government to extend some labour rights to workers (e.g. the right to strike), thus conceding the central importance of Black workers to apartheid capitalism” (Worden, 2012). As these difficulties arose, the tensions between the government and South African society also grew.

In June 1976, a group of 15,000 secondary school students demonstrated in the streets of Soweto. The students were met by a very aggressive police force which, after deploying tear gas, fired into the group of young protestors, killing two children and injuring dozens (Republic of South Africa, 2014). In the aftermath of the Soweto and Sharpeville incidents, an era of increased conflict between the state and liberation groups began. Though they were forced to work in secret, a new generation of anti-apartheid activists became politically active in their communities, both within South Africa and throughout the African continent.

At the end of the 1970s, the power and control of the state increased with the rise to power of Prime Minister P. W. Botha. Botha’s administration imposed greater censorship of the press and stricter enforcement of security policies, which resulted in hundreds of detentions (frequently without trial) and banning of many individuals. The rigorous implementation of these apartheid policies deepened the nation’s legacy of racial conflict and segregation, institutionalized inequality, and land dispossession. However, hoping to ease the escalating national opposition and international criticism, Prime Minister Botha introduced a new Constitution in 1983 (Beck, 2014).

President Botha and the 1983 Constitution

The 1983 Constitution presented several significant changes. First, it proffered a three-chamber parliament, one house each for whites, blacks (called coloreds in the policy), and Indians²⁰. The ratio of these representatives was established as 4:2:1, formally securing the concentration of power in the hands of the white government officials. Second, the position of Prime Minister was eliminated and the powers of the office were consolidated under Presidential authority²¹. Finally, a Presidential Council of 15 individuals was created to arbitrate conflicts between the houses of parliament. Not surprisingly, this new constitution was unpopular with the Indian and black populations. Groups of white conservatives were also unhappy with these shifts; they worried that the Constitution granted too many rights to blacks and Indians, moving away from the principles of strict apartheid and Afrikaner nationalism, while consolidating too much power in the Office of the President (Butler, 2009).

Recognizing the potential for a nationwide alliance in opposition to this new Constitution, the United Democratic Front (UDF) was created in 1983 as an umbrella organization of anti-apartheid groups²². With more than 1.5 million supporters, the UDF organized a national resistance movement, led a series of boycotts and strikes, and

²⁰ The houses of parliament were classified as follows: the House of Assembly for white people, the House of Representatives for Colored people and the House of Delegates for Indian people (Beck, 2014).

²¹ The Office of the President was also granted additional authority, such as the ability to convene and dissolve Parliament, appoint special committees and Cabinet members, etc. (South African History Online, 2009).

²² Many of the UDF group's major leaders were drawn from the higher ranks of the ANC, which had been operating in exile underground (Beck, 2014).

advocated in support of labor issues. By the mid-1980s, the ANC and UDF were banned, and Nelson Mandela and many other opposition leaders were in prison or exile²³. In part, because of these governmental crackdowns, the anti-apartheid sentiment continued to grow throughout the nation and the continent (Butler, 2009).

The President continued to ignore the South African community's call for democracy, and well-organized uprisings and civil unrest increased in the townships and homelands. On July 25, 1985, Botha declared a state of emergency in parts of the Eastern Cape and the Transvaal region, comprising 36 of the country's 260 magisterial districts. In March of 1986, President Botha lifted the state of emergency, but it was reinstated and extended to the entire country by June 12; this system would be in place for the remainder of apartheid rule until June 1990 (Worden, 2012).

As the government became increasingly repressive in their methods, anti-government sentiment also grew. Local and national opposition leaders were sometimes forced to seek refuge outside the townships, and "the administrative structures of most of the [local] Community Councils disintegrated" in the absence of their critical leadership (South African History Online, 2012). Having seen first-hand the struggle between the black opposition and government forces, much of the white community realized that the status quo could no longer be maintained; with that realization, the political momentum shifted away from the South African government and towards the resistance movement.

Well-regarded white leaders from various organizations began meeting with exiled

²³ In early 1985, President Botha offered to free Nelson Mandela from prison if he denounced the use of violent methods of protest. Mandela turned down the conditional release, reaffirming his commitment to the end of apartheid and the rise of democracy. Emerging as a central figure in the struggle, Mandela's importance in the political process was confirmed by President Botha's failed exchange with the prisoner (South African History Online, 2009).

members of the ANC leadership despite government opposition and criticism (Beck, 2014).

End of Apartheid and the Introduction of Democratic Rule

President Botha was compelled to resign on August 14, 1989 due in part to a stroke he suffered in January of that year, as well as his failure to control the growing political violence in in country. Following Botha's resignation, Frederik Willem de Klerk was sworn in by the National Party as acting State President. At the opening of the Parliamentary session in February 1990, President de Klerk announced the unbanning of the various liberation groups, the release of political prisoners, and a series of measures to help begin the processes of negotiation (Butler, 2009).

Signed in May 1990, the Groote Schuur Agreement, also called the Groot Schuur Minute, outlined the following points of compromise between liberation leaders and government officials: the ANC committed to an evaluation of its policy of armed struggle; a joint working group was created to define the term "political offences", and negotiate the release of prisoners and the granting of immunity; and the government echoed its intent to review security laws, lift the state of emergency, and enable political exiles to return to South Africa. The Groote Schuur Agreement was hailed by international media outlets and this global attention placed additional pressure to develop a more democratic system of government (Jacobs, 2003).

The Pretoria Minute, signed in August 1990, reaffirmed the commitments of the ANC and government, while acknowledging the importance of other political organizations in the negotiation process. In early 1991, the D. F. Malan Accord removed

most impediments in the way towards a multi-party negotiation. Though political violence still flared due to the history of distrust between stakeholder groups, by September of 1991, the multi-party National Peace Accord (NPA) was signed, and political parties worked together to develop and present recommendations for an interim government (Carruthers, 2003).

Largely optimistic given the constraints at the time, the NPA required ratifying political parties and organizations to: publicly condemn violence and encourage greater democracy and tolerance; prevent organization members from killing, injuring, or threatening violence toward others due to political beliefs; and help police in investigating violent crimes. The Accord also mandated that security forces protect all individuals regardless of political beliefs, use as little force as possible, and work with the communities to rebuild trust and prevent crime. These activities would be implemented by multi-party institutions at the national, regional, and local levels, as established in the Peace Institutions Act, in order to form and implement a new democratic government (Republic of South Africa, 2014).

On November 13, 1991, Nelson Mandela announced that the first constitutional discussions would take place in Kempton Park in the Gauteng Province. One month later, the Convention for a Democratic South Africa (CODESA) gathered together representatives from nineteen political parties and organizations²⁴. At this meeting, a

²⁴ These 19 parties include: the National Party (NP), African National Congress (ANC), South African government, South African Communist Party (SACP), Inkatha Freedom Party (IFP), Labour Party, the Inyandza National Movement, the Transvaal and Natal Indian Congress, the Venda government, the Bophuthatswana government, the Transkei government, United People's Front, Solidarity Party, Democratic Party (DP), National People's Party, Ciskei government, Dikwankwetla Party, Intando Yesizwe Party, and Ximoko Progressive Party (Republic of South Africa, 2014).

Management Committee was created, as well as a Secretariat and five working groups. In January of 1992, these working groups, each of which contained about eighty people, began meeting twice a week to negotiate compromises and offer formal recommendations (Beck, 2014).

The second round of discussions, CODESA II, began in May 1992, but was quickly halted by the ANC's withdrawal from the negotiation process due to the Boipatong Massacre in June. During a September demonstration that followed, twenty-eight protestors were killed by security defense forces in Bisho, a strongly independent homeland located in the Eastern Cape. These violent events helped to encourage CODESA participants to resolve their differences peacefully and reach a political settlement which would help to quell the unrest by encouraging the transition to democracy (South African History Online, 2009).

Preferring to be called the Multi-Party Negotiating Process (MPNP), the 26 parties present drew up an interim constitution to last for two years during which a formal and final democratic constitution would be drafted. By April 1993, the Multi-Party Negotiating Process began, and agreement on many issues was reached. This diverse group adopted 34 constitutional principles to guide the Constitutional Assembly (CA), which was tasked with the creation of the final democratic constitution. An Interim Constitution for South Africa was initiated on November 18, 1993, and a Transitional Executive Council was created to ease the country's transition until democratic elections could be held (Butler, 2009).

Democratic Transitions into the 21st Century

On April 27, 1994, South Africa held its first democratic elections in which all citizens, regardless of race, sex, or ethnicity, could exercise their right to vote. In this election, the African National Congress (ANC) won a majority vote to spearhead the government of national unity during the transition to democracy. The nation also elected Nelson Mandela as its first democratic president. The newly elected Parliament, working as the Constitutional Assembly, quickly began the process of drafting, debating, and passing a final Constitution. After two years of work, in May of 1996, the CA presented a draft of the Constitution to the Constitutional Court for final approval (De Kock, 1971).

Though it observed many of the key principles established in the interim constitution, this draft also presented some more controversial changes as well. One such major shift was the redrawing of political boundaries to divide the nation into nine provinces, replacing the former system instituted by British colonists²⁵. Other changes included a shift in political structure to ensure greater representation for all citizens through a coalition government²⁶. Illustrating the important political symbol of sustainability, included in the South African Bill of Rights found in Article Two of the Constitution is the principle that each citizen has a right “to have the environment protected, for the benefit of present and future generations, through reasonable legislative

²⁵ This process included the renaming of geographic areas in order to make South African cities, streets, and towns seem more culturally-inclusive and less a reflection of the colonial and apartheid legacies; these changes illustrate the importance and influence of symbolic language and artifacts (Republic of South Africa, 2014).

²⁶ As established in the Constitution, the South African national government structure includes three branches: Executive, exemplified by the President and the Cabinet departments and ministries; Legislative, composed of the National Assembly and the National Council of Provinces; and Judicial, including the Constitutional Court, the Supreme Court of Appeal, and lower trial courts (Library of Congress, 2010).

and other measures that prevent pollution and ecological degradation; promote conservation; and secure ecologically and use of natural resources while promoting justifiable” socio-economic development (Republic of South Africa, 2014).

Once the new public officials were democratically elected in 1994, South Africa implemented the Reconstruction and Development Plan (RDP) as the primary socio-economic government program. In addressing the inherent inequalities of apartheid, the RDP aimed to create a strong and balanced economy; develop the human resource capacity of citizens; diminish discrimination; improve the regional economy of Southern Africa; and democratize the state and civil society (De Kock, 1971). The RDP was moderately successful in some areas, but failed to achieve its objectives in others; these challenges are understood to be the result of poor policy coordination, weak implementation mechanisms, and underdeveloped governmental and administrative capacity (Beck, 2014).

In 1996, the RDP was replaced with a neo-liberal macroeconomic policy called the Growth, Employment, and Redistribution (GEAR) Strategy. Several areas improved under the GEAR framework, such as decreased inflation, fiscal debt, and government consumption. However, the results in the areas of job creation, poverty reduction, GDP indicators, and private investment were extremely disappointing. In 2005, GEAR was replaced by the Accelerated and Shared Growth Initiative for South Africa (ASGISA), under the authority of President Thabo Mbeki, who had served as Deputy President under Mandela. ASGIDA sought the build upon the work of the RDP and GEAR policies.

Although reports detail some measure of programmatic success, the fate of the ASGISA policy was tied directly to President Mbeki, whose future was limited (Worden, 2012).

In 2005, amid a scandal of potential corruption, President Mbeki removed Jacob Zuma from his post as Deputy President. This caused a serious rift in the political party of the two men, the ANC. When Zuma was cleared of all corruption charges in 2008, the ANC called for Mbeki's resignation, which was delivered on September 21. Zuma then went on to bring victory to the ANC as their presidential candidate in the 2009 general elections (Butler, 2009).

After the election of President Jacob Zuma, the New Growth Path (NGP) framework was put in place in 2009. The NGP policies work towards enhancing growth, creating employment opportunities, and improving equity through its efforts in five key industries: agriculture, mining, manufacturing, tourism and high-level services, and the green economy. The NGP proposes several strategies to achieve these aims: infrastructure investments, policy coordination, public-private partnerships, bureaucratic streamlining, and technical skills development (South African History Online, 2012). Several governmental reorganizations were executed so that these public institutions could more easily fulfill their designated duties²⁷.

In 2013, Zuma's administration introduced the National Development Plan (NDP) 2030 as the long-term socio-economic strategy of the country. By "drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing

²⁷ One such shift was the establishment of the new Department of Environmental Affairs from the former Department of Environmental Affairs and Tourism (South African History Online, 2012)

the capacity of the state, and promoting leadership and partnerships throughout society”, the policy aims to eliminate poverty and reduce inequality by 2030 (National Planning Commission, 2013).

The national development frameworks of South Africa set forth the overarching objectives for growth in the country, including a prosperous and sustainable economy. These traditional economic development plans have been implemented alongside the nation’s sustainability strategies over the past twenty years, though the latter have become increasingly important as policy integration has become a focal point. While South Africa was still in its democratic infancy, the nation worked to develop a comprehensive national environmental management policy, acknowledging the significance of sustainability in a growing democracy.

Conclusion

South Africa’s history features a series of political and socio-economic struggles that are intimately related to the use and abuse of its land and natural resources. For centuries, politically powerful groups influenced the development path of the country, with little regard for democratic values, the maintenance of natural resources, or the preservation of the environment. Policies were passed by the controlling white minority in order to consolidate economic and political authority through the acquisition and maintenance of resources, land, and minerals. Thus, land dispossession and loss of resource and mineral rights are closely tied to the social and economic inequities that plagued South Africa. The extraction and mining industries, serving as a major driver of

the national economy, also produced enormous socioeconomic inequality and environmental degradation.

The legalized inequality and institutionalized racism of South Africa reached its peak with the apartheid system of oppression. In response to the aftermath of World War II and the ongoing criticism of the international community, South Africa undertook a tumultuous transition to a non-racial democracy that provided equal rights for all citizens. The new democratic constitution acknowledged the importance of the environment and efficient use of natural resources, a symbol of the country's commitment to a path of sustainable development.

The democratic transition of South Africa, signaling the initial shift of socioeconomic structures, the concept of sustainability found its foothold in the nation's new values system. Resource and land rights were used as tools for economic and social stratification for centuries. Therefore, when the legal dismantling of apartheid was undertaken, the country also had the opportunity to address the appropriate management of land, minerals, environment, and natural resources.

Chapter Six: Evolution and Assessment of South Africa's National Sustainable Development Strategy

Introduction

While the nation's shift to democracy was often turbulent, in 1996, South Africa emerged from this political evolution with a new Constitution that provided for an independent, democratic, and nonracial state. In this new South Africa, all citizens were guaranteed the right "to have the environment protected, for the benefit of present and future generations, through reasonable legislative" and policy measures (Republic of South Africa, 1996). With this constitutional protection of the principle of sustainability, South Africa began to create and implement policies that would ensure the sustainable development of the nation. These primary environmental management policies paved the way for South Africa's first National Sustainable Development Strategy in 2008.

This chapter begins with a history of South Africa's environmental protection and strategic development planning, which provide the policy foundation for the National Sustainable Development Strategy. Finally, a formal assessment of the South African NSDS is presented, as well as recommendations for policymakers and interested stakeholders based on the lesson learned from this analysis.

NSDS Predecessors and Precursors in South Africa

Throughout the history of South Africa, the legal ownership of land, natural resources, and minerals were used as tools for socioeconomic stratification. Thus, the inequalities that plagued the nation were rooted in the environmental and economic evolution of the country from colonialism, to the Union of South Africa, to its current

system as a democratic republic. Economic and social disparities are identified as both the cause and the result of resource dispossession and degradation. Therefore, as the nation sought solutions to these issues, South Africa acknowledged the necessity for a multidimensional development plan that could tackle the complex and integrated social, economic, and environmental difficulties the country faced.

As South Africa worked to dismantle the structures of inequality in place for hundreds of years, the country also established new national objectives that focused on environmental preservation, land conservation, and natural resource protection. While South Africa was still in its democratic infancy, the nation developed a comprehensive national environmental management policy, acknowledging the significance of sustainable development in a growing democracy that had spent centuries prioritizing economic growth over environmental sustainability.

The Bill of Rights, Section 24 (b) (ii), of the South African Constitution guarantees all citizens the right to have “the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (Republic of South Africa, 1996). In this fashion, South Africa constitutionally committed itself to a path of sustainable development and the protection of the environment and natural resources.

In May 1995, partially in response to the Earth Summit and the international commitment to a more sustainable form of economic development as well as the ongoing national transition towards democracy, the Department Environmental Affairs and

Tourism (DEAT) Deputy Minister Bantu Holomisa acknowledged the pressing need for a national environmental strategy. Along with the Committee of Ministers and Members of the Executive Councils: Environment and Nature Conservation (MINMEC) composed of the environmental ministers of each of the nine provinces, the DEAT organized a multi-sectoral technical study team to create a discussion document to present at a national consultative conference (Republic of South Africa, 1998).

In August 1995, over 600 representatives from across all sectors of society came together through a formalized comprehensive participatory process known as the Consultative National Environmental Policy Process (CONNEPP). The Management and Advisory Team (MAT) that organized the CONNEPP was composed of stakeholder representatives from business and industry, environmental organizations, national government, provincial and municipal governments, community-based organizations, and organized labor unions. The aim of CONNEPP was to provide all stakeholders the opportunity to contribute in the development of a new environmental and sustainable development management policy in the nation (Republic of South Africa, 1998). Prior to this effort, “policy formulation and administrative decision-making in South Africa was highly centralized, secretive, and dominated by the political executive and higher reaches of the bureaucracy” (Sowman, Fuggle, & Preston, 1995, p. 55).

This participatory CONNEPP procedure was undertaken as the nation was solidifying its transition to democracy. The policymaking and development process of CONNEPP is widely “regarded as being one of the most participatory national policy development processes experienced both locally and internationally” (Department of Environmental Affairs and Tourism, 2005). Within South Africa, the CONNEPP system

was unprecedented in its participatory nature and inclusive design. The reliance upon broad stakeholder participation, then, was both politically symbolic and culturally necessary to instill confidence in the new governmental processes and democratically-elected representatives.

Following this first public participation period, the DEAT led the creation of a drafting team which worked closely with national environmental experts, a multi-sector reference group of 30 individuals, several international experts, and a liaison group representing all national-level government departments. A list of the members of the initial document drafting team is provided in the table below.

Table 8: “Towards a New Environmental Policy for South Africa” Drafting Team

Name	Organization and Sector
Dick Cloete, editor	Umanyano Media Service (media)
Yernimm Katerere	International Union of Concerned Scientists (IUCN) (environmental NGO)
Graham Noble	Council for Scientific and Industrial Research (CSIR) (central government)
Kingston Nyamapfene	University of Fort Hare (academia)
Sue Posnik	Steffan, Robertson and Kirsten (business and industry)
Peter Pouplier	Danish Ministry of Environment (international expert)
Bob Scholes	CSIR (central government)
Rob Short	CRM International (business and industry)

Source: White Paper on Environmental Management Policy for South Africa, 1998.

In April 1996, the writing team issued a draft titled “Towards a New Environmental Policy for South Africa” and published 60,000 copies in eight languages which were distributed throughout the country. In order to ensure participation at the provincial level, multi-stakeholder steering committees were formed and meetings held through the summer of 1996. In government reports on the event, the Department stated that “millions of people” were kept abreast of policy developments via regular newsletters (Department of Environmental Affairs and Tourism, 1996). In addition to the

policy discussions held at meetings, all written comments were captured in an electronic database and utilized in the creation of the Green Paper²⁸.

Closely following the nation's democratic rebirth, this environmental management policy draft emphasized that social, economic, and environmental principles must be simultaneously addressed throughout the policymaking and implementation processes in a transparent and participatory manner, all under the heading of sustainable development. As the nation labored towards democracy, it also worked towards a sustainable path of socio-economic development.

After its creation by the drafting team, the composition of which is delineated below in the table, the DEAT formally issued the Green Paper on an Environmental Policy for South Africa for public discussion and comment in October 1996, distributing over 40,000 copies of the policy draft nationwide. Individuals had from October 1996 to December 16, 1996 to submit their comments on the Green Paper to the CONNEPP Secretariat. These comments, along with all written comments received, were stored in an electronic database. The goal of the Green Paper was to identify and debate those issues which should be addressed in the formulation of the White Paper on Environmental Management (Republic of South Africa, 1998).

This draft document established South Africa's vision and understanding of the concept of sustainable development, and its' transition from singular environmental or poverty-reduction programs towards an integrated policymaking paradigm. The Green Paper stated that "sustainable development requires that there is participation, equity and

²⁸ A Green Paper, as the term is used in South Africa, is the precursor to an official White Paper, which is written as a formal draft of a policy. The Green Paper can be used as a discussion document, published for comment and debate prior to the publication of a formal policy draft (Republic of South Africa, 2015).

sustainable use of natural resources” and that the management of this development should conform to those principles established in Agenda 21 and other international environmental agreements to which South Africa had signed (Department of Environmental Affairs and Tourism, 1996).

Table 9: Green Paper Drafting Team²⁹

Name	Organization and Sector
Mark Butler	Community Agency for Social Enquiry (CASE) (environmental NGO)
Dick Cloete, editor	Umanyano Media Service (media)
Ingrid Coetzee	Department of Environmental Affairs and Tourism (central government)
Mike Cohen	CEN Integrated Environmental Management Unit (provincial government)
Jenny Hall	CRM International (community based organizations)
Arend Hoogervorst	Eagle Environmental (business and industry)
Shirley Miller	COSATU (organized labor)
Dan Walmsley, drafting manager	Steffan, Robertson and Kirsten (business and industry)

Source: White Paper on Environmental Management Policy for South Africa, 1998.

A CONNEPP 2 conference was held in January 1997, at which over 265 sectoral representatives were provided the opportunity to present their concerns to and debate the issues directly with representatives of the Department of Environmental Affairs and Tourism, the Parliamentary National Portfolio Committee on Environmental Affairs and Tourism, and the Members of the Executive Councils (MINMEC) from the provincial environmental departments. The public proceedings were recorded, and copies of the record were sent to delegates, stakeholders, and those on the CONNEPP mailing list (Department of Environmental Affairs and Tourism, 1998).

Taking into account “all of the comments on the Green Paper and the views expressed at CONNEPP 2”, the DEAT representative of the Green Paper Drafting Team

²⁹ Several of the members of the Green Paper drafting team were chosen because of their prior contribution on the first drafting team. However, other changes were made in order to provide a wider range of opinions and promote greater participation; no public information is provided regarding the specific decisions of individual drafting team members (Department of Environmental Affairs and Tourism, 1998).

worked with the MAT, the Green Paper editor, and other members of the Green Paper Drafting Team in order to create the White Paper draft (Republic of South Africa, 1998). While several new individuals were also included in the drafting of this White Paper, the composition of the team, drawn from previous environmental management policy structures, guaranteed continuity and political stability throughout the policymaking process.

The South African cabinet approved the broad objectives, principles, and direction presented in the draft White Paper in June 1997, after which it was submitted to Parliament and published in the Government Gazette for additional public comment and discussion. The Parliamentary National Portfolio Committee on Environmental Affairs and Tourism held public hearings on the draft policy in October 1997; following these discussions, the White Paper was revised to incorporate the detailed recommendations of the Portfolio Committee (Republic of South Africa, 1998).

With the final version published in 1998, this White Paper on Environmental Management is the first National Sustainable Development Strategy of South Africa (Department of Environmental Affairs and Tourism, 1996). This policy helped to link SD and increasingly important participatory and democratic practices; it also relies upon the sustainable development principles set forth by the UN in various international agreements. South Africa's legislative history of environmental management helped to inform the policy writing, implementation, and revision of their National SD Strategy.

Following the participatory processes of CONNEPP, publication of and debate on the Green Paper, and publication, discussion, and revision on the White Paper, the National Environmental Management Act (NEMA) of 1998 was passed. This primary

policy was established in order to: identify those institutions that will coordinate the environmental tasks of the state; support the administration and implementation of all environmental management policies; and establish principles which should guide all environmental decision making (Republic of South Africa, 1998).

NEMA also presented the nation's definition of sustainable development as "the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations" (Republic of South Africa, 1998). This definition, while still embodying the intergenerational principle, highlights the importance of integration, not just awareness, of the pillars of development: social, economic, and environmental. This national definition of SD presented in NEMA illustrates South Africa's commitment to a new paradigm of sustainable and integrative development.

NEMA also created two new governmental bodies: the National Environmental Advisory Forum and the Committee for Environmental Coordination. The Advisory Forum was tasked with informing the Minister in the DEAT of stakeholder opinions regarding the implementation of the Act and relevant environmental legislation. Led by the DEAT and consisting of the Directors-General of the nine key national departments, the environment ministers of each province, and a representative of municipal governments, the Coordination Committee was responsible for promoting "the integration and co-ordination of environmental functions by the relevant organs of state"; the CEC was overseen by the International Relations, Peace and Security (IRPS) Committee of the Executive Cabinet (Hamann & O'Riordan, 2012).

The Act also requires the South African government to work towards institutionalizing the concept and principles of sustainable development in its national strategic planning efforts. One such requirement is the publication of an Annual Performance Report on Sustainable Development to audit the government's progress and performance towards the objectives of Agenda 21 and other environmental agreements (Hamann & O'Riordan, 2012). NEMA also mandated that every national department and each of the nine provinces prepare an annual Environmental Implementation Plan to be submitted to the Minister of Environmental Affairs, as well as compelling local government cooperation on implementation. Specifically, NEMA required "provincial authorities to help municipalities incorporate environmental considerations into planning. However, all provinces have capacity constraints" and the local governmental authorities were provided limited guidance on fundamental tasks of environmental management integration (Organization for Economic Cooperation and Development, 2013, p. 9). These intergovernmental regulations speak to the model of "cooperative governance" which South Africa embraced in its 1996 Constitution.

Under NEMA, the authorization to enforce environmental regulations and laws was widespread, which served to undermine the power of this Act. All national departments or ministries, as well as provincial and municipal departments, were granted the authority to appoint "environmental management inspectors" who were specifically designated the power to enforce NEMA and any of its provisions, or other specific environmental management policies and their provisions (Swanson & Pinter, 2004)

In the two years that followed the implementation of NEMA, South Africa established avenues to monitor sustainability progress at all levels of government; again,

this represented the cooperative governance model of the nation. In 1999, the government produced a State of the Environment reporting program at the national, provincial, and local levels. By the end of the following year, the National Environmental Indicators framework was formed, allowing for greater transparency in measurement decisions and increased comparability over time and across geographic boundaries (Department of Environmental Affairs and Tourism, 1998).

The Local Government Municipal Systems Act of 2000 required all municipalities to prepare a five-year strategic Integrated Development Plan (IDP) to be reviewed annually in consultation with stakeholders and interested groups. These IDPs “seek to promote integration by balancing social, economic and ecological pillars of sustainability without compromising the institutional capacity required in the implementation, and by coordinating actions across sectors and spheres of government” (Republic of South Africa, 2000) . These monitoring and enforcement activities built the foundation of environmental reporting, and helped to further establish a culture of political commitment towards sustainability at all levels of government.

Evolution of South Africa’s National Sustainable Development Strategy

The descriptive analysis above offers a foundation for the formal framework used to evaluate the South African NSDS. In preparing to undertake this analysis, documents were collected electronically and in person for over a year. The list of all documents considered in evaluating the NSDS of South Africa is provided in the appendix. The information contained in these documents was supplemented by semi-structured interviews with key sustainable development contacts from various sectors of South

African society. The list of individuals interviewed, as well as their job title and organization, is provided below.

Table 10: List of Subjects Interviewed for Assessment of South Africa's NSDS

Name	Job Title	Organization
Khalil Mullagie	Provincial Executive Officer of the Western Cape	South African Local Government Association
Karen Shippey	Director of Sustainability, Department of Environmental Affairs and Development Planning	Western Cape Government
Marco Lotz	Sustainability Carbon Specialist, Enterprise Governance and Compliance Sustainability	NedBank
Mapula Tshangela	Director for Sustainable Development and National Government Sustainability Officer	Federal Department of Environmental Affairs

Ten years after Agenda 21 and Rio Declaration, the World Summit on Sustainable Development (WSSD) was held in Johannesburg, South Africa in 2002. The conference resulted in a Plan of Implementation for National SD Strategies so that these policies would be in place within three years. Nations were urged to build on existing institutions, aligning the new NSDS with development and management programs. South Africa, having already acknowledged the principle of SD a decade earlier, now began to shift its institutions and policies more closely to the integrative NSDS framework as presented in Agenda 21, Rio Declaration, and Johannesburg Plan of Implementation.

Since South Africa began its democratic transition over two decades ago, the concept of sustainability has been central to the nation's promises of democracy, as the natural resources of the country are closely tied to the economic and social development of its people. This is illustrated by SD's constitutional protection (Department of Environmental Affairs and Tourism, 1996). Below is a timeline of key South African SD efforts.

Figure 1: Timeline of South Africa's Environmental and Sustainable Development Policy Evolution, 1989-2013

In the year following WSSD, South Africa published a Response Strategy to the Johannesburg Plan of Implementation as one of several key steps towards the creation of an NSDS. The Response Strategy identified four elements which the nation sought to establish to prepare for a new sustainable development management policy: a South African strategy for local, regional, and international action; a National Strategy for Sustainable Development (NSSD), which integrates existing policies and establishes a formal agenda for action; improved governmental cooperation across levels and sectors; and better stakeholder engagement and participation throughout policymaking and implementation processes (Swanson & Pinter, 2004). South Africa worked to achieve these four factors as it continued to build the institutional, organizational, and legislative foundation for a National Sustainable Development Strategy.

As mandated by the Forum of South African Directors General Management Committee in 2003, the DEAT and the Department of Foreign Affairs (DFA) served as an interim secretariat of sustainable development until a formal NSDS could be composed and a permanent office created. Established to advise the International Relations Peace and Security (IRPS) Cabinet Cluster of the Executive until a national sustainability policy was implemented, a Sustainable Development Task Team was formed and composed of selected national, provincial, and municipal government representatives; this Taskforce was led by a secretariat drawn from the DEAT (Swanson & Pinter, 2004). Also in 2003, the South African Sustainable Development Institute was formed in order to analyze trends and patterns in social, economic, and environmental

data, which would help inform the NSDS policymaking process (Republic of South Africa, 2003).

The leadership of these groups and the organization deemed responsible for the initiatives was almost always the Department of Environmental Affairs and Tourism, which was considered a minor, second-range department because it had no enforcement power over the other ministries (Rennkamp, 2013). The importance of strong leadership in spearheading the NSDS process cannot be overstated, as the power to negotiate political decisions is a key element in the creation and implementation of any national strategy. Despite the DEAT's efforts in leading the development of the South African National SD strategy, sustainable development policymaking and implementation was still lacking a strong political commitment from the Presidency. This lack of top-level leadership may be the result of domestic political conflicts that afflicted the nation during the development of the NSDS, including the ousting of President Mbeki due to corruption concerns. Nonetheless, the preparatory work accomplished by these entities culminated in the submission of a Cabinet Memo by the Taskforce (Department of Environmental Affairs and Tourism, 2008).

The adopted 2004 Cabinet Memo mandated the DEAT to oversee a consultative and research-based participatory process to develop an NSDS. The Memo defined an NSDS as that which seeks the “integration of governance, multiple voices, processes and action in decision-making towards a common goal with a consensual vision to set parameters and define policy choices for promoting a sustainable development agenda”, which includes improving public sector performance through a focus on implementation,

improved integration, and coordination across all spheres and levels of government (Department of Environmental Affairs and Tourism, 2008, p. 54). The executive and legislative branches of the federal government were now united in their definition of an NSDS; a national vision of sustainable development was becoming clearer but the enforcement of the National SD Strategy was undermined by the lack of capacity, especially the provincial and municipal levels of government (Swanson & Pinter, 2004).

In August 2005, the DEAT and the German Technical Cooperation (GTZ)³⁰ hosted a National Roundtable Workshop on the development of an NSDS. In attendance at this national discussion were representatives of several federal government departments and the Office of the Presidency, representatives of key quasi-public investment agencies (such as Eskom and the Development Bank of South Africa), representatives from public research agencies (CSIR), academics from universities and colleges, provincial and municipal government representatives, officials from international development agencies (UNDP, GTZ), representatives from business organizations (National Business Initiative) and a few specific large companies, and individuals from NGOs in the development and environmental fields.

At the Roundtable Workshop, stakeholders came to a consensus on “the key methodology for formulating the NSDS, namely the formulation of long-term trends (20-30 years) with special reference to resource use and eco-systems and the implications for shorter-term policy choices” in all policy arenas (Department of Environmental Affairs and Tourism, 2008, p. 54).

³⁰ This is one of several sustainable development activities and NSDS programs in which South Africa and Germany have worked together closely.

Though the national discussion boasted representatives from a range of interested sectors of society, representatives of several specific populations were noticeably absent: indigenous tribal leaders, women, children and youth, worker or trade unions, and farmers' associations (Department of Environmental Affairs and Tourism, 2008). This formal discussion process, though somewhat participative, falls far short of the CONNEPP process from a decade earlier. Regarding the lack of opportunities for broad participation, the NFSD explained that “despite the enormous demands from all sides for consultative processes, the financial resources to support participation are limited” (Department of Environmental Affairs and Tourism, 2008). Thus, limited civil society consultation was undertaken in the making of the national SD framework.

Following the August 2005 Roundtable, an expert research team was appointed to publish short empirical studies which analyzed long-term patterns, relevant development policy initiatives, and connections to related policy fields. These papers were discussed at a series of national and sectoral consultative workshops and evaluated by a national Academic Review Panel of university scholars, who were selected by the DEAT. During this time, the DEAT also established a Government Steering Committee, composed of representatives from all national departments, all nine provincial governments, and other governmental organizations (Department of Environmental Affairs and Tourism, 2008). The members of these committees and panels, often drawn from governmental entities, were almost exclusively appointed and overseen by the DEAT, limiting the level of inclusiveness, degree of independence, and range of perspectives of these policy development mechanisms.

Based on discussion and trends analysis, as well as research published by the Environmental Ethics Unit of Stellenbosch University, the policy drafting team agreed that the traditional “triple bottom line³¹” approach to sustainability was inadequate because it still focused on the three pillars of development and forced trade-offs between these sectors. Instead, South Africa approached their National Strategy from an integrative framework that promotes a new model in which environmental, social, and economic concerns are embedded in the policymaking and implementation processes; this approach aligns with the current understanding of the sustainable development paradigm. Based on this integrative approach, the results of the trends analysis, and public discussions on a sustainable development policy, the DEAT identified five cross-cutting priorities, called pathways, which form the mission of the National Framework for Sustainable Development (NFSD) (Department of Environmental Affairs and Tourism, 2008).

These five priority pathways to sustainable development are: enhancing systems for integrated policymaking and implementation; supporting ecosystems and using natural resources efficiently; promoting economic development with key infrastructure investments; creating sustainable human settlements; and responding appropriately to growing development, economic, and environmental challenges (Department of Environmental Affairs and Tourism, 2008). These five priorities were the focus of five separate chapters, which were published and disseminated for public comment in June

³¹ The “triple bottom line” approach to sustainability acknowledges the importance and priority of economic, environmental, and social issues but does not advocate for their integration. This “triple bottom line” is general advocated by business and industry stakeholders in the sustainable development debate (Slaper & Hall, 2014).

2006. By October of that year, DEAT published a completed draft of the National Framework for Sustainable Development for public comment, allowing only 30 days for interested individuals or groups to submit their feedback to the DEAT (Department of Environmental Affairs and Tourism, 2006).

The period from 2003 to 2008 is described in the National Framework for SD as phase one: visioning and systems. This initial stage involved the formation of a national vision for SD; selection of guiding principles; assessment of long-term trends; identification of the strategic planning, institutional, and monitoring and enforcement systems required; detection of priority areas for strategic policy interventions; and implementation of several “quick win” or “win-win” interventions (Department of Environmental Affairs and Tourism, 2008). In June 2008, phase one culminated in the publication of the National Framework for Sustainable Development, the first formalized National SD Strategy in South Africa.

In this early stage, the lack of resource commitment was a serious hindrance in the initial phases of the NFSD, specifically at the municipal level. As one interview subject explained of the central government supervision of local government activities and the related provision of resources, “national oversight is necessary and built into the hierarchy; same with required resources. Money means you report on performance. If you don’t spend the money, they take it away next year. If you can’t spend the money, they look into the capacity of the organization. But we are currently lacking in national

departmental alignment” even though this federal oversight system exists³² (Mullagie, 2013). As interviews and documents established, the national government has provided oversight, but they have not provided adequate resources for these municipalities and provinces to execute the mandated sustainable development activities and actions contained in the NSDS.

A 2009 discussion paper from the DEAT studied the first year of implementation of the NFSD. This report indicates that a lack of political commitment and leadership seriously undermined the capacity of the National SD Strategy to achieve effective implementation or policy alignment. This lack of capacity is also due to the secondary nature of the Department of Environmental Affairs and Tourism, relative to other national government departments (Hamann & O’Riordan, 2012). The DEAT simply did not “have the authority/muscle to exert influence on other departments, especially on issues that would require a diversion from other department’s priority areas of focus” (Department of Environmental Affairs and Tourism, 2009, p. 22).

The Discussion Paper presented a solution in which the oversight role of the DEAT would be supported by high-level political leadership and an external SD commission or forum, but these suggestions have not yet been adopted by the South African government. A National Committee on Sustainable Development was also provided for in the National Strategy for Sustainable Development (NSSD1), but as of 2014, this entity was not yet formed. This stagnation in the creation of an NCSD is due in

³² Local governments, though, have created innovative solutions to this lack of national resource support. Several municipalities have created a resource-sharing network for those services which are not in high demand, such as the sharing of a water testing facility whose services are not needed frequently enough for each municipality to develop and maintain their own lab (Mullagie, 2013).

part to that fact that the “operational procedure, structure, efficiency and findings of the NCSD is not discussed in the NSSD1” (Department of Environmental Affairs, 2014).

The election of ANC candidate Jacob Zuma in 2009 served to shift the political and policy landscape of the nation; these modifications included the reorganization of the Department of Environmental Affairs (DEA) from the former DEAT, though no considerable staffing changes were made within the new department (Department of Environmental Affairs, 2015). The election of President Zuma also resulted in the passage of a new National Development Plan (NDP2030), and its’ associated Outcomes-Based Approach, to guide the growth of the country. The NDP2030 further incorporated the concept of sustainable development in South Africa’s development objectives, actions, activities, and programs.

Lasting from 2009 to 2010, phase two of the NFSD process involved the development of a National SD Strategy and action plan in order to facilitate the implementation of the sustainable development vision, objectives, and strategic priorities as outlined in the National Framework. Working to achieve the aims of the NFSD, the NSSD1 drafting team was composed of Ms. Dorah Nteo, Ms. Mapula Tshangela, and Ms. Faith Phooko, all of whom were government employees of the DEA (Department of Environmental Affairs, 2015). No other stakeholder groups were represented on the drafting team of the NSSD1.

Relying on twenty years of environmental research, strategic management initiatives, and sustainability policy efforts, the NSSD1 outlines South Africa’s plans for SD policy implementation, evaluation, and revision and links these plans to the Medium-

term Strategic Framework (MTSF) of the national government. The National SD Strategy describes specific policy interventions to be executed between 2011 and 2014, after which the legislation is set to be reviewed and revised. Selected from existing indicators systems, including previous development indicators, the Millennium Development Goals and the 12 Government Outcomes of the NDP2030, 20 headline indicators have been identified to monitor progress in the implementation of the sustainable development strategy. This policy also details 118 specific policy and program interventions to achieve progress towards sustainability (Department of Environmental Affairs, 2015) . The NSSD1 document, however, does not identify detailed indicators or variables to measure progress.

Phase three of the NFSD outlined the implementation and execution of the NSSD1, lasting from 2011-2014. This is the timeframe in which South Africa shifted from their initial SD framework to an implemented National Strategy and Action Plan. To move towards a more sustainable path of development, the NSSD1 identified five strategic objectives: enhancing systems for integrated planning and implementation; sustaining ecosystems and using natural resources efficiently; working towards a green economy; building sustainable communities; and responding effectively to climate change. These five strategic objectives were converted into five Action Plans (Department of Environmental Affairs, 2011). Within the policy document itself, the five major objectives of the NSSD1 are directly and closely linked to the aims of the NFSD, as illustrated in the table below.

Table 11: Priorities Established by the NFSD and NSSD1

NFSD Priorities, 2008	NSSD1 Priorities, 2011
Enhancing systems for integrated planning and implementation	Enhancing systems for integrated planning and implementation
Sustaining our ecosystems and using natural resources efficiently	Sustaining our ecosystems and using natural resources efficiently
Economic development through investing in sustainable infrastructure	Towards a green economy
Creating sustainable human settlements	Building sustainable communities
Responding appropriately to emerging human development, economic, and environmental challenges	Responding effectively to climate change

Source: “National Strategy for Sustainable Development and Action Plan (NSSD1)” (2011), Department of Environmental Affairs, page 14.

The execution of the NSSD1 required additional resources from all levels and sectors of government. There was a deficiency in resources, so the government worked to provide additional avenues of support. Initiated in 2012, the Green Fund is a collaborative effort between the Development Bank of Southern Africa (DBSA), selected as the Fund’s implementing agent, and the Department of Environmental Affairs (Department of Environmental Affairs, 2015). In addition to the creation of this specialized funding source, the NSSD1 financial resources amounted to about \$1.2 billion for industrial development, \$2.5 billion from the South African Development Bank, \$10 billion from the private sector, and \$80 million from the National Treasury (Department of Environmental Affairs, 2011). This money will not be accounted for in the municipal IDPs or provincial development plans, as these are special funding sources; this leads to difficulty in ensuring the long-term stability of SD program delivery and the monitoring of NSDS implementation activities (Mullagie, 2013).

Even though the NSSD1 contains overarching goals and general objectives for the five strategic priority areas, individual targets for each indicator are not provided in the policy document. The Action Plans of NSSD1 present national aims, interventions, and

headline indicators, but no specific targets by which to measure progress towards these goals (Department of Environmental Affairs, 2015). Additionally, there is a severe lack of data on these indicators, which hinders effective monitoring and evaluation. After an assessment by CSIR, a recent Draft Monitoring and Evaluation Report found that only 26.9% of the information required to evaluate NSSD1 progress could be obtained (Department of Environmental Affairs, 2014).

As this evaluative report established, the NSSD “Action Plans do not contain any targets to be used for measurement purposes; and secondly, a target might be reached without a headline indicator being achieved or vice versa. Accordingly, accurate measurement of progress in implementation of the NSSD1” is not feasible at this time. Based on this and other information regarding the measurement of NSSD, the Report found that of the 138 indicators, 19 were scored as Appropriate; 36 as Caution; and 83 as Reconsider; CSIR concluded by recommending the permanent removal of 29 indicators from the NSSD document (Department of Environmental Affairs, 2014). The upcoming review of the NSSD1 should take these recommendations seriously in order to ensure an effective system of monitoring and enforcement of the sustainable development policy.

In addition to the lack of indicators, the NSSD1 is also unclear about the specific roles and responsibilities of newly-formed government institutions in the monitoring of and enforcement of the policy. The creation of a National Committee on Sustainable Development (NCSD) was mandated in the National Strategy for Sustainable Development. The NCSD was to be responsible for tracking overall performance on sustainability goals and the production of a Biennial NSSD Monitoring and Evaluation

(M&E) report. However, four years after the creation of the NSSD1, the NCSD still does not yet exist. This stagnation in the creation of an NCSD is due in part to the fact that the “operational procedure, structure, efficiency and findings of the NCSD is not discussed in the NSSD1” (Department of Environmental Affairs, 2014).

Assessment of South Africa’s National Sustainable Development Strategy

Utilizing evidence from this large set of documents and the information gleaned in the interviews, each of the four hypotheses was tested through the application of the formal assessment framework outlined in the previous chapter. The indicators associated with each variable are framed as questions, which were drawn from decades of work by the UN, OECD, EU and European Community (EC), many sustainability, environmental, and developmental organizations, and academic scholars and researchers. This section will describe the evolution of South Africa’s National Sustainable Development Strategy and utilize all available evidence to test the four hypotheses.

Test of Hypothesis One

The assessment indicates that South Africa’s strong commitment to participatory policymaking was lacking in the creation of the NFSD and NSSD1, especially given the extraordinary CONNEPP experience in the development of the NEMA. There was a dearth of public participation of civil society stakeholders in the making of the NFSD and NSSD1, so the lack of engagement in the implementation of these policies is a natural result. In order to rectify this problem, South Africa could undertake another CONNEPP process for the creation of SD strategy. If the resource and financial barriers to this program are too great, the federal government could instead allow for a longer public

comment period or allow comments to be submitted electronically or to the municipal government offices. Finally, the drafting teams of the NFSD and NSSD1 were completely composed of national government representatives from the DEAT. Without basic input from other groups during the policy writing and revision processes, the lack of participation in implementation is not surprising. A more diverse drafting team should be assembled for future NSDS policymaking processes, supervised by a powerful leader from the executive branch. The significance of these participatory elements in the policy development and implementation phases is assessed in the table below, as hypothesis one is tested.

Table 12: Test of Hypothesis One on the National Sustainable Development Strategy of South Africa

Hypothesis	Variables	Questions	Answers
The use of formal and open communication measures by government during the policymaking phases should lead to the ongoing participation of engaged civil society stakeholders in the policy implementation phases.	Independent	Who was responsible for the SDS development process?	<ul style="list-style-type: none"> - DEAT served as lead agency in the development of all policy drafts (Green and White Papers), as well as the final versions of NEMA, NFSD, and NSSD1 - DEAT and DFA served as interim Secretariat, then DEAT as Secretariat of SD Taskforce
	Formal public debates, dialogues, and comment periods on NSDS policymaking	What structures and strategy management systems were established for communication and information mechanisms?	<ul style="list-style-type: none"> - CONNEPP process to discuss and debate NEMA considered highly effective, but not utilized for NFSD and NSSD1 - No formal communication mechanisms for NFSD and NSSD1 - Relied upon everyday communication channels and instruments: <ul style="list-style-type: none"> o Website, media releases, community meetings, newsletters, annual reports and magazine, email, stakeholder briefings, DEAT Open Day (offices open to public), and DEAT open line for phone calls o No data from these activities made public - No NSDS drafts were published for national dissemination, people could
	Stakeholder participation during NSDS policymaking		

			access these drafts at the DEAT Office
		Which stakeholders were involved and how?	<ul style="list-style-type: none"> - DEAT lead agency in all policymaking activities - NEMA drafting teams drawn from wide range of groups - DEAT as Secretariat of SD Task Team - DEAT and DFA as interim SD secretariat prior to NFSD - NFSD and NSSD1 drafting team all employees of DEAT
		To what extent was the process consultative and/or genuinely participative?	<ul style="list-style-type: none"> - Creation of NEMA driven by CONNEPP process and multi-stakeholder groups, functioning as highly consultative and participatory (United Nations, 2002) - NFSD and NSSD1 development did not live up to the previous policymaking processes - Very limited public comment period, only via traditional mail and only for 30 days - No solicitation of comments from specific stakeholders - NFSD policy draft received 21 comments from stakeholders - Data on NSSD1 comments unavailable
		Was there trust between stakeholders and mutual respect?	<ul style="list-style-type: none"> - CONNEPP process driven by ongoing relationships based on trust and respect due to repeated interactions of stakeholders throughout processes - NFSD and NSSD1 policymaking procedures displayed far less respect for less well-organized and marginalized stakeholders
		Were there effective institutionalized channels for communication?	<ul style="list-style-type: none"> - CONNEPP formalized the process and means of communication in making of NEMA policy; this mechanism deemed extremely effective - Institutionalized channels of communication not newly created for making of NFSD and NSSD1, which relied on conventional and everyday means - Comments on the policy drafts were only accepted in writing and the comment period only 30 days
		Was there access to information for all stakeholders?	<ul style="list-style-type: none"> - In creating NFSD and NSSD1, info on policymaking and drafts available only at the physical DEAT office in

			<p>Pretoria</p> <ul style="list-style-type: none"> - Limited info was available online, with more accessible for later versions of policies as nation's electronic infrastructure grew - Policy documents online only available in English
		What pro-active mechanisms been used to engage marginalized stakeholders?	<ul style="list-style-type: none"> - No proactive tools were used to engage marginalized stakeholders in creation of NFSD and NSSD1 - Few stakeholders were represented in major national SD bodies - Groups that are represented generally well-funded and highly-organized
		What role did public awareness campaigns have in encouraging stakeholder involvement in the process?	<ul style="list-style-type: none"> - Phase One of NFSD focused on SD awareness programs and initiatives - South African society's awareness of sustainability issues deemed high due to Constitutionally-defined concept of SD, country hosting of WSSD in 2002, and numerous national development plans which identify SD as concern
	Dependent Ongoing stakeholder participation during the NSDS implementation phases	Which stakeholders were involved and how?	<ul style="list-style-type: none"> - As coordinating focal point, DEA oversaw NCSD activities - NCSD to ensure NSSD1 goals implemented effectively - CSIR to assist in monitoring and enforcement activities - Local governments to implement key activities, but little direction from national government (Mullagie, 2013; Shippey, 2013)
		Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?	<ul style="list-style-type: none"> - NFSD and NSSD1 kept any non-governmental stakeholders involved at "arm's length through the SD Taskforce under the IRPS cluster, Academic Review Panel, and National Environmental Advisory Forum" (Hamann & O'Riordan, 2012) - Most ongoing implementation partnerships only between multiple government entities, specifically the National Committee on Sustainable Development (NCSD), as required by NSSD1 (Mullagie, 2013)
		How has the process strengthened people's participation in, and influence over, the decision	<ul style="list-style-type: none"> - NFSD and NSSD1 limited the influence and participation of non-government representatives, especially in the implementation stage and specifically as compared to the NEMA mechanisms (Shippey, 2013)

		making process?	
		Did it lead to better communication pathways?	<ul style="list-style-type: none"> - Major communication pathway created for NEMA was not utilized for NFSD and NSSD1 - Given lack of engagement mechanisms in NFSD and NSSD1 policymaking, little stakeholder participation was realized in implementation phases
		How has it improved awareness of sustainable development issues?	<ul style="list-style-type: none"> - SD education programs instituted in public schools nationwide - 2012 Guidebook on SD published electronically and in hard copy for distribution through provincial governments

During the short public discussion period on the draft NFSD, the DEAT received comments from 21 stakeholders representing major environmental NGOs, all three spheres of government, “public entities such as Eskom and SANBI, the Chamber of Mines, cement producers, the banking sector, [and] one university and one environmental consultancy” firm (Department of Environmental Affairs and Tourism, 2008). The lack of participation, as evidenced by the limited number of comments and the narrow range of stakeholders, is largely due to the limited time allotted for public comment and minimal distribution of the published draft³³. Therefore, hypothesis one is shown to be successful: due to the lack of participation in policymaking of the South African NSDS, especially compared to the exceptional experience of the CONNEPP process, there was a related lack of participation in the implementation of this policy.

Test of Hypothesis Two

The financing of SD activities has improved with the creation of a specialized Green Fund, but the continuity of these resources is not secure. Each municipality and

³³ This policy draft document was only formally available for pickup in person at the DEAT Office in Pretoria (Department of Environmental Affairs and Tourism, 2006).

province is required to align their annual budgets and strategic plans with the National SD Strategy, but these local government entities are not provided with resources to do so. While the national government has provided the policy objectives and mandates, they have not provided adequate resources for these municipalities and provinces to execute the assigned sustainable development activities and actions. The hypothesized relationship between the commitment of key resources and the level of intergovernmental cooperation is tested in the table below.

Table 13: Test of Hypothesis Two on the National Sustainable Development Strategy of South Africa

Hypothesis	Variables	Questions	Answers
Nations that provide a continued commitment of financial, human, and spatial resources specific to the National SD Strategy are more likely to exhibit higher levels of intergovernmental cooperation.	Independent Commitment of financial, human, and spatial resources for NSDS implementation	Was there coherence between budget, capacity, and strategy priorities?	<ul style="list-style-type: none"> - National financing of NFSD and NSSD1 through regular budget process, and financed at the provincial and municipal levels through Integrated Development Plans (IDP) and Provincial Growth and Development Strategy (PGDS) - Capacity building efforts were delineated in the NFSD and NSSD1, but there is no mention of financing these capacity development activities
		Was there political commitment in budget terms?	<ul style="list-style-type: none"> - NFSD stated the financial aspects of implementing SD strategy would be taken into account as part of government's traditional budget process and medium term expenditure framework - NSSD1 funding amounted to about \$1.2 billion for industrial development, \$2.5 billion from the South African Development Bank, \$10 billion from the private sector, and \$80 million from the National Treasury - Special Green Fund created in 2012 to provide support for sustainable activities across all government sectors and levels (Lotz, 2013)

		Do the institutions concerned have sufficient rights, resources and effective relationships to undertake this?	<ul style="list-style-type: none"> - Under NFSD, DEAT had little authority and resources to serve as lead agency and focal point - 2009 elections resulted in shift of national development plans, and green economy incorporated more heavily into major national development strategies
	Dependent	Were there effective institutionalized channels for communication?	<ul style="list-style-type: none"> - NFSD and NSSD1 failed to penetrate the barriers between government and community, especially at the local level (Mullagie, 2013)
	Vertical integration	To what extent is there consensus about the process and content of the NSDS between the national government and those at regional and local levels?	<ul style="list-style-type: none"> - There is still “a need for intergovernmental relations and cooperative governance: forums between leaders for alignment” on SD issues and the NSSD1 (Mullagie, 2013) - Local government processes still not informed by the NSSD1 except in IDPs
	Intergovernmental cooperation	How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?	<ul style="list-style-type: none"> - IDPs at local levels inform all local activities, NFSD and NSSD1 struggled to align national priorities within local processes - With NSSD1 implementation, annual IDPs must align with national policy aims
		Is it making a difference at the level of local authorities?	<ul style="list-style-type: none"> - “Implementation can only happen if it has found its space in the IDP. We must focus on the local level, but we need knowledge from the top” (Mullagie, 2013) - Local governments are working to incorporate SD but with little national government guidance on how to do so (Department of Environmental Affairs and Tourism, 2009)

The lack of resources and support provided to local governments for the specific implementation of the NSDS has hindered the execution of the activities of the National SD Strategy, while also weakening the system of intergovernmental cooperation and coordination in South Africa. The South African National Sustainable Development

Strategy continues to face challenges in intergovernmental cooperation, due to both a lack of resources and a clear SD vision from the national government. Thus, hypothesis two, which addresses the relationship between the commitment of resources and intergovernmental cooperation, holds.

Test of Hypothesis Three

As research has shown, the backing of the Office of the Presidency is crucial to the effective implementation of an NSDS (Department of Environmental Affairs and Tourism, 2009; Swanson & Pinter, 2004). The results of this assessment indicate that South Africa is lacking executive leadership and management of the national SD efforts. All of the South African NSDS development and implementation processes have been led by the DEA. While this provided continuity in the progression, the relative lack of power of this department hindered the effective execution of the policy.

Executive leadership in the sustainable development management process is vital to the successful implementation of an NSDS. South Africa's sustainability strategy lacks this necessary level of leadership, and the interdepartmental coordination of this policy has suffered as a result. As future SD institutions and entities are deployed, including the long-anticipated NCSD, efforts should be made to select chairpersons or leaders from a powerful position in the Office of the President or the National Planning Commission. The hypothesized relationship between top-level leadership of the NSDS and interdepartmental cooperation is tested in the table below.

Table 14: Test of Hypothesis Three on the National Sustainable Development Strategy of South Africa

Hypothesis	Variables	Questions	Answers
Nations which display ongoing political and administrative top-level leadership in NSDS processes and institutions are more likely to exhibit higher levels of inter-departmental cooperation.	Independent Top-level leadership in and spearheading of the NSDS processes and institutions	When was the strategy initiated, and by which institution?	<ul style="list-style-type: none"> - DEAT and DFA led NFSD development - DEA led NSSD1 development
		What roles were played by different agencies?	<ul style="list-style-type: none"> - DEAT lead agent responsible for coordinating and supervising environmental functions in all spheres of government, and enforcing compliance (Shippey, 2013) - DEA as NSSD1 Secretariat
		Was there political commitment in budget terms?	<ul style="list-style-type: none"> - NSSD1 financial resources included about \$1.2 billion for industrial development, \$2.5 billion from the South African Development Bank, \$10 billion from the private sector, and \$80 million from National Treasury
	Dependent		
	Horizontal integration Interdepartmental cooperation	To what extent was the process consultative and/or genuinely participative?	<ul style="list-style-type: none"> - DEA boasts a history of collective planning process for medium term plan: “we’ve always worked together” (Tshangela, 2013)
		Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?	<ul style="list-style-type: none"> - NSSD1 required creation of intergovernmental National Committee on SD (NCSD) - NCSD in its infancy and little work has been undertaken (Tshangela, 2013)
		Have the directions of the strategy been picked up in other strategic or planning documents? In economic development policies?	<ul style="list-style-type: none"> - National and provincial departments required to include SD targets in their annual performance plans (APPs), and municipalities must include them in their annual service delivery budget implementation plans (SDBIP), all of which are linked to their local IDPs (National Planning Commission, 2013)

A 2009 discussion paper from the DEAT studied the first year of implementation of the NFSD. This report indicates that a lack of political commitment and leadership seriously undermined the capacity of the National SD Strategy to achieve effective implementation or policy alignment. This lack of capacity is also due to the secondary nature of the Department of Environmental Affairs and Tourism, relative to other national government departments (Hamann & O’Riordan, 2012). The DEAT simply did not “have the authority/muscle to exert influence on other departments, especially on issues that would require a diversion from other department’s priority areas of focus” (Department of Environmental Affairs and Tourism, 2009, p. 22). The Discussion Paper presented a solution in which the oversight role of the DEAT would be supported by high-level political leadership and an external SD commission or forum, but these suggestions have not yet been adopted by the South African government; this includes the creation of the National Council for SD which was prescribed in the NSSD1. Thus, hypothesis three, which theorized that the lack of top-level political leadership would result in a lack of interdepartmental coordination, holds true.

Test of Hypothesis Four

Even though the NSSD1 contains overarching goals and general objectives for the five strategic priority areas, individual targets for each indicator are not provided in the policy document. The Action Plans of NSSD1 present national aims, interventions, and headline indicators, but no specific targets by which to measure progress towards these goals (Department of Environmental Affairs, 2015). Additionally, there is a severe lack of data on these indicators, which hinders effective monitoring and evaluation. After an

assessment by CSIR, a recent Draft Monitoring and Evaluation (M&E) Report found that only 26.9% of the information required to evaluate NSSD1 progress could be obtained (Department of Environmental Affairs, 2014).

As this evaluative report established, the NSSD “Action Plans do not contain any targets to be used for measurement purposes; and secondly, a target might be reached without a headline indicator being achieved or vice versa. Accordingly, accurate measurement of progress in implementation of the NSSD1” is not feasible at this time. Based on this and other information regarding the measurement of NSSD, the Report found that of the 138 indicators, 19 were scored as Appropriate; 36 as Caution; and 83 as Reconsider; CSIR concluded by recommending the permanent removal of 29 indicators from the NSSD document (Department of Environmental Affairs, 2014).

The upcoming review of the NSSD1 should take into consideration the recommendations of this 2014 M&E report so as to ensure an effective monitoring, evaluation, and feedback system of the NSDS. The hypothesized relationship between a nation’s history of performance management and the monitoring and enforcement activities of the NSDS are tested in the table below.

Table 15: Test of Hypothesis Four on the National Sustainable Development Strategy of South Africa

Hypothesis	Variables	Questions	Answers
In their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements are most likely to have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy.	Independent History of performance management approaches and institutions	What previous strategies (or near equivalent) and processes have been undertaken, and how did the current strategy build on or link/related to these?	- NEMA requires annual SD performance report; SOE reports provided annually by national, provincial, and municipal governments - National and provincial departments must include SD “indicators and targets in their annual performance plans (APPs), and

			municipalities must include them in their annual service delivery budget implementation plans (SDBIP), which are linked to their IDPs” (National Planning Commission, 2013)
		Did the strategy build capacity and build on existing knowledge and expertise?	<ul style="list-style-type: none"> - Drafting teams of NEMA made of knowledgeable stakeholders - NFSD and NSSD1 used experts on Academic Review Panel and university research on SD
		How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?	<ul style="list-style-type: none"> - National and provincial departments must include SD “indicators and targets in their annual performance plans (APPs), and municipalities must include them in their annual service delivery budget implementation plans (SDBIP), which are linked to their IDPs” (National Planning Commission, 2013) - Auditor General’s office also has oversight role, but no details on these tasks and responsibilities
		What have been the related SD priorities of present and recent past governments?	<ul style="list-style-type: none"> - NEMA created CEC, linked national development to sustainable development, and defined SD for the nation - NFSD and NSSD1 priorities closely linked - Green economy goal in NDP2030 and Outcome 10
	<p>Dependent</p> <p>Measurable targets, objectives, and indicators</p> <p>Data availability at the local, regional, and national levels</p>	Are these frameworks efficiently monitored and enforced? At what levels?	<ul style="list-style-type: none"> - SOE reports at all levels of government, but not uniform - IDPs and SDBIPs require monitoring by municipalities and provinces, respectively - National SOE and Annual DEA reports track progress on all environmental aspects of federal government actions—not just SD <ul style="list-style-type: none"> o Lacking capacity and resources to extend current measurement systems (Shippey, 2013)

		What mechanisms and systems have been established to track and monitor strategy implementation—overall, and individual commitments?	<ul style="list-style-type: none"> - NCSD not yet formed, so - NSSD1 presents objectives and targets, but not indicators and variables to measure progress - NSSD1 relies on existing M&E frameworks with little attention to capacity building efforts for improvement
		What indicators have been included to measure progress in respect of strategy development and implementation?	<ul style="list-style-type: none"> - 20 headline indicators and 118 policy interventions listed in NSSD1 but no specific measures to monitor progress <ul style="list-style-type: none"> o M&E considered serious shortcoming of policy (Department of Environmental Affairs, 2014)
		How effective, meaningful, adequate, and efficient are these progress measures?	<ul style="list-style-type: none"> - Measures are neither adequate nor efficient because severe lack of data availability and capacity, in those instances when the variables are defined
		Is there available and adequate data to support the selected indicators?	<ul style="list-style-type: none"> - Data availability is severely lacking, especially local levels (Tshangela, 2013) - Information available for less than 27% of indicators in NSSD1 (Department of Environmental Affairs, 2014)
		How and how often is progress being reported; and to whom?	<ul style="list-style-type: none"> - Annual SOE Reports are published in hard copy and electronically at national, provincial, and municipal levels but each monitor different indicators - Monitoring is also performed by CSIR and the Auditor General's Office, though not policy mandated
		Did the strategy establish the means to assess priority issues?	<ul style="list-style-type: none"> - NSSD1 monitoring and evaluation system is severely lacking in both structure and application - NSSD1 Action Plans do not contain targets to be used for measurement, only indicators and objectives
		Were integrated mechanisms for assessment, follow up, evaluation, and	<ul style="list-style-type: none"> - In 2013, DEA was "waiting for feedback to guide the next steps. The feedback will tell how priorities change. Maybe

		feedback established?	we overachieved, but we [the DEAT Office] come from policy formation” (Tshangela, 2013)
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In addition to the lack of indicators, the NSSD1 is also unclear about the specific roles and responsibilities of newly-formed government institutions in the monitoring of and enforcement of the policy. The creation of a National Committee on Sustainable Development (NCSD) was mandated in the National Strategy for Sustainable Development. The NCSD was to be responsible for tracking overall performance on sustainability goals and the production of a Biennial NSSD Monitoring and Evaluation report. However, four years after the creation of the NSSD1, the NCSD still does not yet exist. This stagnation in the creation of an NCSD is due in part to that fact that the “operational procedure, structure, efficiency and findings of the NCSD is not discussed in the NSSD1” (Department of Environmental Affairs, 2014). Despite South Africa’s history of effective policy evaluation systems at all levels of government, as required by previous national development plans, municipal and provincial growth policies, and NEMA, the National SD Strategy failed to form an effective framework with which to measure policy progress. Thus, hypothesis four cannot be validated in the case of South Africa’s NSDS.

Conclusions and Recommendations

As the country was undergoing its democratic rebirth, South Africa also developed a National Environmental Management Act; this policy provided the foundation for the nation’s sustainable development path. This chapter outlined the

progression from the creation of the democratic constitution of 1996 to NEMA in 1998 to the National Framework for Sustainable Development in 2008 to the National Sustainable Development Strategy in 2011. In order to test the hypothesized relationships between the key NSDS elements, this description of the South African NSDS was supported by information gathered via document analysis and semi-structured interviews.

Chapter Seven: Historical Background of Germany

Introduction

Germany has long been an economic and political powerhouse of Europe, but the nation's history has also been heavily influenced by international and regional trends and challenges. For hundreds of years, the region fought to establish and maintain unity in the face of revolution, plagues, political insurrection, international development, and several world wars. Following the losses in World Wars I and II and the close of the Cold War, Germany emerged with a newfound sense of state pride and nationalism. This chapter provides a background on the history of Germany, specifically focused on the political and economic evolutions and revolutions of the past three centuries and their impact and influence on the environment.

Middle Ages, Crusades, and the Enlightenment

By the year 962, German territories were organized as the Holy Roman Empire of the German nation, ruled by Otto I³⁴. Under his reign, royal authority was reasserted regarding religious appointments, territorial assignments, and the celibacy of church officials; Otto I also marched on Rome and took control of papacy. According to some historians, Otto's triumph in Rome was ultimately disastrous for Germany because it delayed German unification by centuries (Turk, 1999).

The struggles between the German monarchy and the papacy resulted in a devastating war from 1077 until the Concordat of Worms was signed in 1122. As

³⁴ The complete name of this territory was the Holy Roman Empire of the German Nation, which lasted from 962 to 1806 (Library of Congress, 1996). Any mention of the nation of Germany during this time refers to the Empire.

feudalism became more widespread in the political fallout from the war, powerful local rulers took over administration of their territories, somewhat undermining the authority of the German King. This also resulted in halted social and cultural development of Germany, as compared to the artistic growth in France and Italy at the time (Turk, 1999).

For the next two hundred years, led by Roman Catholic Church, the Crusades would wage religious war across the European continent. From 1024 to 1124, the Salian emperors of Germany helped to establish the territory as a major power in Europe and develop a “permanent administrative system based on a class of public officials answerable to the crown” (Library of Congress, 1996, p. 10). In 1250, Emperor Frederick II Hohenstaufen died and the German empire dissolved into independent princely territories. With the death of his son Conrad IV only four years later, the empire was without political control (Detwiler, 1999). This vacuum of political leadership resulted in a brief period of civil chaos.

Known as the Great Interregnum, the period from 1256 to 1273 was one of anarchy in which there was no emperor and German princes vied for advantage over one another. In the era, the nobility stripped away many powers from the weakened monarchy: many nobles focused on their families instead of the formation of sovereign states, a free and independent class of public officials formed, and political fragmentation was amplified (Craig, 1999).

The 1273 election of Rudolf of Habsburg as King-Emperor ended the Interregnum period and Germany worked to regain its political stability. The 1356 Golden Bull edict outlined the basic Constitution of the Holy Empire, consolidating authority and providing for greater power sharing among the noble class. This law

established that the emperor would be regarded as “the first among equals” within the land-owning elite. The German empire prospered and progressed throughout 14th and 15th centuries, despite the devastating effects of the Black Death which decimated a large part of the European population at the time (Detwiler, 1999).

In 1517, Martin Luther posted his 95 Theses on the door of the Wittenberg Church, initiating the Protestant Reformation with his challenge of the practices of the Catholic Church. As a result of the intense conflicts between Catholics and Protestants and the Emperor’s efforts to strengthen the unification of the Holy Roman Empire, the Thirty Years War began in 1618. This war quickly expanded across the continent with the intervention of the kings of Denmark and Sweden and the cardinal of France. With the signing of the Peace of Westphalia in 1648, the war ended. As a result of the treaty, imperial power was further diminished and states’ rights expanded under the newly-independent principalities (Library of Congress, 1996).

During the period of the Enlightenment, German society evolved to one of high culture, philosophical leadership, and artistic excellence. This intellectual expansion was a key development, as the empire’s economy was damaged by the Black Death and the Thirty Years War. Throughout the 17th century, the principles of the Enlightenment were applied and phenomena were increasingly evaluated with rationality and reason, not religion (Detwiler, 1999).

With the storming of the Bastille in Paris, the French Revolution broke out in 1789. At first, Germans were in support of this movement towards independence. Within a few years, however, “most of this support had dissipated, replaced by fear of a newly aggressive French nationalism and horror at the execution of the revolution's opponents”

(Library of Congress, 1996, p. 30). These fears were well-founded, as France invaded Germany in 1792 (Turk, 1999). Following military defeat at the hands of the French in August 1806, the then-Emperor of the Holy Roman Empire stepped down. With this abdication of the throne, the Empire was dissolved. Conflicts continued between France and Germany, Austria, Russia, and Prussia until the fall of Napoleon at the Battle of Waterloo in 1815 (Berghahn, 1987).

After the fall of Napoleon, the Congress of Vienna convened to restore stability to Europe. With these efforts, the Congress “established an international political order that was to endure for nearly 100 years” which brought to Europe a much-needed degree of peace (Library of Congress, 1996, p. 31). At this meeting, the German Confederation was formed as a loose union of 38 independent states, four free cities, and five large kingdoms³⁵. Many historians have deemed this association as weak, ineffective, and a hindrance to German nationalism (Detwiler, 1999).

Also during the 19th century, the railroad industry boomed and the German economy prospered as a result of this first wave of the Industrial Revolution. But increased wealth only amplified the growing public discontent with the political order of the Confederation. In March 1848, a revolution began in the German states and a new Constitution was presented. However, the King of Prussia rejected the proposed constitution and refused the crown which he was offered. Amid a period of political restrictions on dissent and opposition, the German Confederation was restored by 1850 (Berghahn, 1987).

³⁵ The confederation included the kingdoms of Austria, Prussia, Saxony, Bavaria, and Wurttemberg (Library of Congress, 1996).

In 1862, Otto von Bismarck was appointed Minister President by the King of Prussia. In addition to successful wars against Denmark in 1864 and Austria in 1866, Bismarck's major domestic contribution was the creation of the North German Confederation. Lasting from 1867 to 1871, the North German Confederation instilled a new era of nationalism which had been sought for centuries (Turk, 1999). The territorial struggles of the 19th century towards a united German deeply shaped and supported the strong history of federalism and decentralization in the country.

Unification of the German Empire

Quickly after its formation, the North German Confederation found itself in a major war with France. Known as the Franco-Prussian War, Bismarck sought to reestablish German rule in the French territories of Lorraine and Alsace, which had previously belonged to the Holy Roman Empire. After the ongoing military victories against the French in the fall of 1870, the German Empire was founded and Prussian King Wilhelm I was named Emperor of Germany. Also called the Second Reich, the German Empire consisted of 22 states and three free cities, over which Bismarck would serve as Chancellor (Detwiler, 1999).

In this arrangement, Germany would be unified under a constitution that combined a strong authoritarian monarch, called Emperor or Kaiser, and a weak legislature, with the Reichstag as the lower legislative house and the Bundesrat as the upper house. The houses of parliament were extremely ineffectual relative to the Kaiser, and the governing system experienced difficulties as a result. Nonetheless, during his reign as Chancellor, Bismarck forged alliances and secured Germany's position as a

political leader in Europe, which helped to reinforce the nation's economic success³⁶ (Craig, 1999).

Despite his triumphs, in 1890, Bismarck was dismissed from his position by Kaiser Wilhelm II, the son of the previous Emperor, as the result of ongoing arguments over domestic policies. At the age of 29, young Kaiser Wilhelm II worked to amplify Germany's influence throughout the world, a policy called *Weltpolitik*, as a decisive step away from the more cautious foreign policy practices of Bismarck. In this new global policy, Germany sought its "Place in the Sun" through colonial expansion, which created hostility with Britain, Japan, Russia, and the United States (Turk, 1999).

WWI, German Revolution, and the Formation and Failure of the Weimar Republic

The geopolitical friction came to a head with the assassination of Archduke Ferdinand in 1914. As Germany was allies with Austria-Hungary, Kaiser Wilhelm II vowed to back any measure they took against Serbia, who had supported the assassination. In July of 1914, the ultimatum presented to Serbia by Austria-Hungary was deemed so punitive that war was seen as unavoidable. The various alliances of the European powers were tested as World War I began to unfold (Library of Congress, 1996).

As the leader of the Central Powers, Germany was aligned with Austria-Hungary, the Ottoman Empire, and Bulgaria. Fighting against this coalition, the Allied Powers included Russia, France, and Britain, and Italy joined in 1915 and the United States in

³⁶ Bismarck arranged an alliance with Austria-Hungary in 1879, one with Italy in 1882, and, most significantly, with Russia in 1887 (Library of Congress, 1996).

1917. The tide turned against Germany and the Central Powers with the entrance of the U.S. into the war, British blockade of food supplies, and damage of the Spanish Flu epidemic (Detwiler, 1999).

In 1918, a few units of the German Navy refused to embark on a large operation which they deemed a lost cause. Sparking the start of the 1918 German Revolution, the rebelliousness spread throughout Germany's civil and military populations. In June 1919, the Treaty of Versailles was signed and Germany and the Central Powers formally surrendered, ending World War I. The Treaty also required that Germany relinquish several territories and colonies, demilitarize the Rhineland (which would be occupied by the League of Nations for fifteen years), reduce military forces, and pay damages and war reparations (Craig, 1999).

The Weimar Republic was born from the rubble of the First World War in November of 1918. In following year, the National Assembly drafted a new Constitution and elected its first President, Friedrich Ebert. The Weimar Constitution established a federal republic of nineteen states called Länder. Consisting of both a strong president and parliamentary system, the executive cabinet would reflect the party makeup of the Reichstag, to whom they were responsible. The president maintained the broad powers to dissolve the Reichstag, dismiss the cabinet, and veto legislation, as well as the ability to invoke the emergency clause of Article 48 which would "allow the cabinet to govern without the consent of parliament whenever it was deemed essential to maintaining public order" (Library of Congress, 1996, p. 52).

Even after the passage of the Constitution, the legitimacy of the Weimar Republic was constantly in question by a large portion of German society. The individuals with extreme left political views saw parliament as a tool of the land-owning elite used to prevent a revolution. Those on the right, represented by the German National People's Party (DNVP), actively worked to abolish the new governmental system because they were "opposed democracy and desired to establish a conservative authoritarian regime" (Library of Congress, 1996, p. 53).

In addition to political challenges, the Weimar Republic faced economic constraints as well. With the expense of wartime debts and required reparation payments, the German economy was plagued by high inflation and unemployment rates. The resulting social discontent and pervasive "economic misery made these groups susceptible to the claims of extremist political parties" (Library of Congress, 1996, p. 54). In the elections of 1920, the Weimar Republic lost its majority to a coalition of two parties which received less than 30% of the vote combined (Detwiler, 1999).

With no party winning a majority of the vote throughout the 1920s, the German government presented little stability, relatively uncoordinated government action, and internal political party discord. As a result, strikes, street violence, and rumors of revolt became the norm. In addition to the domestic political strife, in 1923, as Germany defaulted on its reparation payments, French and Belgian troops occupied the highly-industrialized Ruhr region. Acknowledging the need for change, President Ebert asked Gustav Stresemann, head of the German People's Party (DVP), to outline a new government. While serving as Chancellor for four months in the fall of 1923, Stresemann

led a coalition of the Social Democratic Party (SPD), the Center Party, the German Democratic Party (DDP), and the DVP. The efforts of this alliance created a period of relative calm, but with opposition from both the left and right, Stresemann stepped down as Chancellor and served as German Foreign Minister until his death (Evans, 1997).

The successes of Stresemann's diplomacy included the Locarno Treaties of 1925, the Treaty of Berlin in 1926, and Germany's membership in the League of Nations³⁷. But these international achievements were denounced by those Germans that still criticized the stipulations of the Treaty of Versailles and questioned the validity of the political system that the Treaty helped to create. In response to these critiques and the "continued dissatisfaction on the right with the political system established by the Weimar Constitution, the Center Party and the parties to its right became more right-wing" in the late 1920s (Library of Congress, 1996, p. 57). The power and influence of these ideological groups increased with the growing frustration of German society.

One of the political parties which exploited this growing dissatisfaction was the National Socialist German Workers' Party (NSDAP, or National-Sozialistische Deutsche Arbeiterpartei); members of the group were called Nazis, a term originating from the German pronunciation of the word "national", and the party was called the Nazi Party. In 1929, the NSDAP partnered with the DNVP to initiate a referendum on the issue of reparations, managed by the parties' leaders Adolf Hitler and Alfred Hugenberg, respectively. This alliance raised the status of the Nazis to one of a socially influential

³⁷ As a precondition to Germany's admission to the League of Nations, the Locarno Treaties formalized Germany's "acceptance of the demilitarization of the Rhineland and guaranteed the western frontier as defined by the Treaty of Versailles" (Library of Congress, 1996, p. 56). The governments of Germany and the Soviet Union signed the Treaty of Berlin in 1926, in which each country pledged neutrality in the event of an attack on either nation by foreign powers (Library of Congress, 1996).

coalition of the anti-republican ideological right. With increased respect and legitimacy, the NSDAP was able to garner financial support and political traction in German society (Detwiler, 1999). This broad-based respect of the German people would prove to be one of the greatest sources of political capital for the Nazi Party.

Great Depression, the Rise of the Third Reich, and World War II

The world was forever changed in October 1929 with the stock market crash. The Great Depression shattered national economies. The Depression was especially difficult for Germany because their economic well-being depended heavily on short-term loans from the United States. After these loans were recalled, Germany was economically and socially devastated. In fact, the suffering in Germany was so great that an international reparations moratorium was passed to relieve the country from its post-war financial obligations. The Depression deepened, and the social discontent in the country “intensified to the point that Germany seemed on the verge of civil war” (Library of Congress, 1996, p. 59). The established political system in Germany could no longer contain the unrest that had existed since the end of World War I and the signing of the Treaty of Versailles.

In this climate of dissatisfaction, Nazi propagandist Joseph Goebbels initiated a media campaign that would appeal to a broad swath of German society. In their propaganda material, in addition to “promising a solution to the economic crisis, the NSDAP offered the German people a sense of national pride and the promise of restored order” (Library of Congress, 1996, p. 59). Amidst ongoing political skirmishes within government, by 1932, Hitler led the NSDAP to become the largest German political party

organization. In 1933, he was appointed Chancellor and within two months, Hitler had dictatorial control over Germany. Under Hitler's authoritarian leadership, the Weimar Republic quickly devolved (Craig, 1999).

Since none of the political parties of the German Cabinet at the time held a parliamentary majority, President Hindenburg called for the disbanding of the Reichstag; the new elections were to be held on March 5, 1933. But a week prior to these special elections, the Reichstag building was burned down; Nazis blamed the Communists and the Communists blamed the Nazis. As a result of the unrest, the President invoked the emergency clause of Article 48 and granted the Nazi party the right to suppress political opposition. However, despite the legalized persecution of opposition parties, the NSDAP won less than 44% of the vote in the March elections (Library of Congress, 1996).

With no party earning a majority of the vote, Hitler proposed to the Reichstag an "Enabling Act" that would allow him to govern without a parliament. With the backing of the Center Party and facing little resistance, as members of the Communist and Social Democratic Parties were prohibited from voting and political dissent was strongly suppressed, the proposal passed on March 23, 1933. One of Hitler's first actions under this Act was the implementation of *gleichschaltung*, or synchronization, to subordinate existing political, governmental, and governance institutions under Nazi authority (Turk, 1999).

Germany became a one-party state with the banning of all other political parties. With this, the Nazis began to "clean house" and non-Aryans and political leftists were removed from public offices at all levels of government, and even the NSDAP eliminated

from its membership those that disagreed with the principles of Nazism. With the death of President Hindenburg in August 1934, Hitler combined the offices of Chancellor and President; with this, the Guard Detachment (SS, or Schutz-Staffel) served as Hitler's private army³⁸. This consolidated power allowed Hitler to expand the newly-introduced German policies of Anti-Semitism and legalized racism (Evans, 1997).

Once the SS regime was established and granted extensive authority, they inflicted terror throughout the country in order to increase and maintain Nazi control in Germany. Despite these violent methods, the Nazi regime achieved "social order, something many Germans welcomed after fifteen years of political and economic chaos" (Library of Congress, 1996, p. 62). With the stability provided by the Nazis, the organization attained its objective: widespread support in German society and the extreme consolidation of power. After the domestic concerns of Germany were settled by the entrenchment of the Nazi Party, Hitler focused on his personal goal of a new German Empire which would spread throughout the European continent. Thus, he withdrew Germany from the League of Nations in October 1933, ordered the buildup of military supplies, munitions, and armed forces, and remilitarized the Rhineland region, which was prohibited by the Treaty of Versailles (Detwiler, 1999).

In early 1936, Germany initiated stronger ties with Italy. Later that year, Germany, Italy, and Japan signed the Anti-Comintern Pact, pledging to defend one another against foreign attacks and communism. Also at that time, Hitler informed Nazi

³⁸ Previously, the military wing of the Nazi Party was known as the Storm Troops (SA, Sturmabteilung). However, some members of the SA identified with the socialist ideology. With a large massacre of the SA leadership in June 1934, called the "Night of the Long Knives", the SS effectively superseded the SA, though the latter was never formally dissolved (Library of Congress, 1996).

leaders that the military must be ready for war within four years. Thus, the Four-Year Plan was established, which required the strict management of the German economy in preparation for war. In March 1938, Austria was annexed by Germany with the former nation's permission. One year later, with the prior consent of British Prime Minister Chamberlain, Germany occupied several of the western provinces of Czechoslovakia (Craig, 1999).

Immediately following this occupation and finally realizing Hitler's expansionist aims, Britain and France announced their intention to defend Poland. In reaction, Germany signed a military alliance with Italy and a non-aggression pact with the Soviet Union. In September 1939, German forces invaded Poland, leading Britain and France to declare war. By April of 1940, German troops had conquered Denmark and Norway, and in May they attacked the Netherlands, France, Belgium, and Luxembourg. While some nations surrendered, others continued to fight (Library of Congress, 1996).

In June of the following year, ignoring the previous pact, Hitler invaded the Soviet Union. Then, with Japan's attack on Pearl Harbor, the U.S. entered the war in December 1941. In support of Japan as an Axis power, Germany declared war on the United States³⁹. Simultaneously, Germany's industries were reorganized to support wartime efforts with much of the work derived from labor camps. These labor camps were the result of intense efforts to "cleanse" Germany and its occupied territories of Jews, foreigners, gypsies, and other marginalized groups. At the January 1942 Wannsee Conference of the Nazi Party, a well-organized program of genocide was outlined and

³⁹ In World War II, the Axis Powers included Germany, Italy, and Japan (Berghahn, 1987).

implemented; the systemic extermination of non-Aryans came to be called the “Final Solution”. By the end of the war, over six million Jews and five million other people had been killed under this agenda (Evans, 1997).

The tide turned against Germany with the Soviet victory at the Battle of Stalingrad in February 1943. And by “May 1943, Allied armies had driven the Axis forces out of Africa and had landed in Italy” while simultaneously minimizing the threat from the German navy’s submarine warfare (Library of Congress, 1996, p. 67). Italy surrendered by September, and Germany was stretched thin as it was forced to fight the Allied Forces across all fronts.

By the summer of 1944, American, Canadian, and British troops had invaded France and liberated Paris from the Germans. Seeing that his reign was coming to an end, Hitler committed suicide in April 1945. Eight days later, German troops surrendered after the Soviet army occupied Berlin. By the time of their surrender, 12 years after the rise of the Third Reich, Germany’s political, social, and economic infrastructure was completely devastated (Library of Congress, 1996).

End of WWII and the Evolution of Two Germanys

Immediately after the war, by decision at the Potsdam Conference in August 1945, Germany was required to undertake the processes of denazification and disarmament, and submit payments of wartime reparations. At that meeting, the territory of Germany was divided into four occupation zones, each of which were individually administered by the United Kingdom, United States, Soviet Union, and France (Detwiler, 1999).

The detailed negotiations at the end of the war, though, were somewhat overshadowed by the growing global debate between capitalism and communism. Known as the Cold War, the intense ideological conflict between the United States and Soviet Union severely impacted the post-war transition of Germany. The impacts of the Cold War would permanently alter Germany's path of political, social, and economic development (Evans, 1997).

Although "the Allies' original plans envisioned that Germany would remain a single state, Western and Eastern concepts of political, social, and economic organization gradually led the three Western zones to join together, becoming separate from the Soviet zone and ultimately leading to the formation" of two very distinct German states (Library of Congress, 1996, p. 73). As a result of the pressures of the Cold War, in May 1949, three of the occupation zones, those managed by the United States, United Kingdom, and France, were merged to form the Federal Republic of Germany (FRG, or West Germany). The eastern area, controlled by the Soviet Union, became the German Democratic Republic (GDR, or East Germany) in October 1949 (Turk, 1999). A map depicting the division between East and West Germany, which lasted from 1949 to 1989⁴⁰, is provided below.

⁴⁰ A major change during this time was the addition of Saarland as one of the Länder of West Germany in 1957; prior to this shift, Saarland was a virtually autonomous state (Library of Congress, 1996).

Figure 2: Map of Two German States

Source: Berghahn, Volker Rolf (1987), “Modern Germany: Society, Economy, and Politics in the Twentieth Century”, page 178.

West Germany: The Federal Republic of Germany (FRG)

After its founding, West Germany established a social market economy and a parliamentary democracy with strong political parties and stable government administration based in their Constitution, called the Basic Law. These political accomplishments, though, paled in comparison to the surprising economic boom that FRG experienced in the 1950s. Famously called the “economic miracle”, West Germany’s economy unexpectedly soared immediately in the two decades following World War II. (Evans, 1997).

Building on the initial post-war economic success, in 1957, West Germany founded a new central bank called the Deutsche Bundesbank, or the Bundesbank, and the Federal Cartel Office, called Bundeskartellamt. In 1963, a Council of Economic Experts was formed to provide impartial assessments on which to base economic policy decisions. The 1966 elections witnessed the coming to power of the Grand Coalition. An alliance of the Christian Democratic Union (CDU), the Christian Social Union (CSU), and the Social Democratic Party of Germany (SPD) under the lead of Chancellor Kiesinger and Vice Chancellor Brandt, the Coalition moved to provide the federal government with greater authority and influence over economic policy (Berghahn, 1987).

Thus, in 1967, the Bundestag passed the Law for Promoting Stability and Growth. This Act, still in place today, specified the coordination of federal, state, and municipal “budget plans in order to give fiscal policy a stronger impact” in the four key areas of “currency stability, economic growth, employment levels, and trade balance” (Library of Congress, 1996, p. 256). By the end of the 1960s, West Germany was one of the world's wealthiest countries and the leading economy of Europe. This economic leadership of the FRG would generally be sustained throughout the next forty years (Detwiler, 1999).

In addition to its economic progress after the war, West Germany toiled to regain a constructive working relationship with other nations and a positive international reputation. Thus, in 1952, West Germany joined the European Coal and Steel Community, which served as the precursor to the European Economic Community,

which later evolved into the European Union (EU)⁴¹ (Evans, 1997). This was a key initial step in FRG's reintegration into the international political community.

With the official end of foreign military occupation in May 1955, West Germany formally declared itself a sovereign state. Following this announcement, the FRG joined the North Atlantic Treaty Organization (NATO). In 1957, West Germany was also a signatory to the Treaty of Rome, which formally created the European Economic Community. This global and regional leadership continued for decades, as West Germany served as one of the founding members of the Group of Six in 1976 (G6) (Library of Congress, 1996). Germany's current role in international affairs is built on the foundation of work undertaken by the FRG in the decades after the war.

Only days after the FRG's union with NATO, the Warsaw Pact between communist countries was signed on May 14, 1955⁴². Like NATO, the Warsaw Pact was designed to guarantee military assistance under a unified command structure in the event of an attack. The two agreements also required each of its member states to establish and maintain armed forces. Thus, in addition to the formation of critical economic and political structures already underway, the FRG and GDR began to build military institutions and organizations (Turk, 1999).

⁴¹ The 1992 Treaty of Maastricht formally created the European Union, built on the foundation of the European Economic Community (Library of Congress, 1996).

⁴² The signatories to the Warsaw Pact were the Soviet Union, Czechoslovakia, Hungary, Bulgaria, Romania, Poland, Albania, and East Germany (Library of Congress, 1989).

East Germany: The German Democratic Republic (GDR)

East Germany's post-war economic experience was much different than that of their western counterpart. Under Soviet rule, a socialist dictatorship was formed and political dissent was powerfully suppressed by the Stasi, a secret police force. Political power could be exercised only by leading members, called *politburo*, of the tightly-controlled Socialist Unity Party (SED). Aligned with the tightly-controlled political system, a command-style economy was erected and strictly enforced (Berghahn, 1987).

The GDR's First Five-Year Plan of 1951 installed a highly-controlled, centrally planned system of production and distribution. However, the plan's increased focus on heavy industrial development failed to achieve its objectives because of an unforeseen shortage of raw materials. Though, in 1956, the Second Five-Year Plan continued the processes of "nationalization of all industrial concerns and the collectivization of agricultural enterprises" (Library of Congress, 1996, p. 103). As the economy slowed in the 1960s, East Germany implemented the New Economic System with increased decentralization of production decisions. This policy shift, however, could not stop the economic decline of East Germany (Detwiler, 1999).

Unlike the FRG, the new social, political, and economic order of "East Germany was not freely supported by its citizens. Indeed, force was needed to keep East Germans from fleeing" to West Germany (Library of Congress, 1996, p. 74). In order to prevent its citizens from escaping to the west, East Germany built the Berlin Wall in 1961; this piece of architecture would become hugely symbolic of the deep divides of the Cold War and the restrictive political regime of the GDR.

The Beginning of the End of the Cold War

Under the leadership of Chancellor Brandt, West Germany adopted a new policy toward the communist states of Europe in 1969, called *Ostpolitik*⁴³. This policy initiated the first line of open communication between the GDR and FRG since their formation two decades earlier. In December 1972, West and East Germany signed the Basic Treaty in order to improve relations between the two territories, including the mutual recognition of the sovereignty of both states and the peaceful migration of citizens between their borders. As a result of this agreement, the GDR and FRG became members of the United Nations (UN) in June 1973 (Craig, 1999).

This international recognition of sovereignty was a significant objective of the GDR, but it failed to provide the stability East Germany sought. Thus, in the early 1970s, the SED initiated a renewed focus on the socialist identity of the territory, even amending the Constitution to reflect the distinct development of East Germany. Despite East Germany's "tough policy against internal dissidents and carefully guarded the GDR's unique identity" as a socialist state, it became clear that the state-controlled economy could no longer provide for its people (Berghahn, 1987). The GDR's socialist leadership acknowledged their loss of control in the face of Soviet Union democratic reforms, increased internal political dissent, and growing international pressures.

In 1989, "confronted with crushing economic problems, unable to control the borders of neighboring states, and told by the Soviet leadership not to expect outside help in quelling domestic protest, the GDR leadership resigned in the face of massive and

⁴³ This translates to "policy toward the East" (Library of Congress, 1996, p. 107).

constantly growing public” protests and unrest (Library of Congress, 1996, p. 75). After standing for twenty-eight years as a symbol of European divisions, the Berlin Wall was unexpectedly opened by GDR police on November 9, 1989. Following months of intense negotiations, the GDR was dissolved and its territory and people were merged with the FRG in October 1990 (Detwiler, 1999). After decades of division, Germany was finally united.

Understandably, the process of German unification was extremely complex given the nearly thirty years of physical division and ideological disputes. When West Germany absorbed the GDR, the gross inequalities and stark contrasts between the two territories became immediately evident. The process of “unification inevitably revealed a series of unpleasant surprises about the closed economy and society” of the former East Germany (Library of Congress, 1996, p. 134). One of the disturbing revelations was the appalling condition of the environment in the former communist state.

The crumbling infrastructure and the extensive air and water pollution of the east were starkly contrasted by the strong environmental situation in West Germany. The absorption of the GDR quickly converted West Germany “from a country with a solid, even excellent, environmental record to one facing a whole range of ecological disasters—the result of the GDR's decades-long abuse of its natural habitat” (Library of Congress, 1996, p. 145). The distinct political systems of the two German states led to a wide range of social, economic, and environmental gaps. The obvious divergence between the two physical environments was due in large part to effective efforts and policies towards ecological protection in West Germany (Schreurs, 1997). After

unification, Germany would face a new challenge in the shift from traditional environmental protection to the paradigm of sustainable development.

Conclusion

The history of Germany has centered on the struggle for unification, and the search for and solidification of a national identity. While still recovering from the devastation and loss in World War I, Germany's role in the Second World War scarred the nation and left the country divided. After decades of political and physical separation, the fall of the Berlin Wall and the end of the Cold War ushered in a new era of integration. The social, economic, and environmental inequities between the two territories were prevalent, widespread, and deeply entrenched. Thus, the unification of Germany presented serious difficulties and challenges.

Chapter Eight: Evolution and Assessment of Germany's National Sustainable Development Strategy

Introduction

In the 1970s, both East and West Germany passed key environmental legislation and formed important resource management institutions. However, with the fall of the Berlin Wall, the challenges of unification quickly took precedence over environmental concerns. Since then, the country has been slow to shift from traditional environmental policy to the integrated approach of sustainable development.

Germany's eventual transition to sustainability was stimulated by several sectors of civil society, as well as pressure from international trends towards the paradigm of sustainable development in the 1980s and early 1990s. Finally, with the 1998 election of the Red-Green coalition on a platform of sustainable and balanced growth, the formation of a German National Sustainable Development Strategy began. Along with the formal adoption of their National Sustainable Development Strategy in 2002, Germany created numerous institutions and mechanisms for sustainable development and embedded sustainability concerns in existing establishments throughout government.

This chapter begins with a review of the German history of environmental policy, which serves as the legislative foundation for the National Sustainable Development Strategy. Then, the detailed evolution of Germany's NSDS is presented. Finally, a formal assessment of the German National SD Strategy is provided, as well as recommendations for policymakers and sustainability stakeholders.

NSDS Predecessors and Precursors in Germany

East Germany

On paper, the German Democratic Republic was a leader in environmental management with the early creation of government institutions and passage of key legislation. Article 25 of the 1949 GDR Constitution mandates that mineral resources be used for the common good and Article 26 prohibits the abuse of the land (German Democratic Republic, 1949). In addition to constitutional safeguards, in 1970, the Environmental Protection Act was passed and in the following year, the Ministry for Environmental Protection and Water Management was created. However, like other communist countries, East Germany tended to focus on industrial production and urban development (Solsten, 1999).

The need to improve the economic and social conditions in the GDR took priority over environmental issues. Therefore, in the late 1970s and 80s, East Germany undertook a “deliberate policy of dismantling environmental regulations through non-implementation and non-enforcement” of the Environmental Protection Act (Rehbinder, 1992, p. 234). Instead of complying with emissions regulations, for example, industries could pay a fine and continue to pollute unabated. In the 1980s, East Germany was also paid to import and dispose of industrial waste from West Germany. This is one instance of East Germany placing economic growth above all priorities, including environmental preservation⁴⁴ (Solsten, 1999).

⁴⁴ This would prove to be a very poor decision for West Germany. Once faced with unification, West Germany inherited the trash and waste which they previously exported to East Germany (Evans, 1997).

Additionally, due to the restrictive policies of the communist regime, information and statistics on the state of the GDR environment were kept from the public. To quiet any potential environmentalism uproar, the Society for Nature and the Environment was created in 1980 as a government-sponsored organization to provide citizens with a mechanism for influence; in reality, though, the “government strictly penalized anyone who stepped outside of the accepted limits” of protest and activism (Wood, 1999, p. 497). Thus, there was a lack of political pressure from civil society, stakeholder groups, or the media in support of environmental protection. As a result of the change in government priorities and the inherent lack of public pressure on the topic, economic development, political stability, and industrial growth were prioritized over environmental protection and conservation in East Germany. The pursuit of economic growth at any cost resulted in severe environmental degradation and natural resource devastation in the region.

West Germany

Originally ratified in 1949, the Constitution of the Federal Republic of Germany is called the Basic Law. Article 75 of the Constitution established that the federal government has the right to make laws regarding the “protection of nature and care of the countryside” and issues of “land distribution, regional planning and water conservation” (Federal Republic of Germany, 1949). During the decades of division, the West German government implemented policies and programs to protect and conserve the environment and natural resources.

In the 1970s, West Germany was considered a global leader in the field of environmental protection, introducing major policy initiatives and forming key

institutions and organizations. Many of these efforts could be interpreted as reactions to environmental catastrophes and global trends at the time: oil shortages, embargos, and price shocks, nuclear disasters, and growing research on the harmful effects of toxic substances (Klaus, Knopf, Kahlenborn, & Damm, 2009).

The Working Group on Environmental Issues of the Federal Government (AGU) was formed in 1970 under Chancellor Brandt's leadership. The AGU presented a forum for collaboration between environmental organizations, government, industry and business representatives, scientists and researchers, and consumer advocates (Janicke, Jorgens, Jorgensen, & Nordbeck, 2001). In the following year, the Federal Environment Program was passed under the authority of the Ministry of the Interior.

Based on the key sustainability principles of polluter pays, precaution, and cooperation, the 1971 Federal Environment Program presented several goals and indicated future legislative priorities. However, in the policy, there was "limited attention given to implementation" and mechanisms for policy execution, specifically in the Länder and localities (Schreurs, 1997, p. 140). While the Federal Environment Program was central in Germany's early environmental movement and a leading piece of environmental legislation at the time, the policy lacked the implementation mechanisms and coordinating institutions necessary to be effective. However, this policy serves as the major predecessor to the German NSDS, introducing the concept of policy integration and cross-sectoral institutional arrangements (Janicke, Jorgens, Jorgensen, & Nordbeck, 2001).

The Federal Environment Program created the Cabinet Committee for Environment and Health, which was composed of 12 ministers and chaired by the Federal

Chancellery (Janicke, Jorgens, Jorgensen, & Nordbeck, 2001). This inter-ministerial committee, unique at the time for its cross-cutting nature, serves as the precursor to the Green Cabinet created in the National SD Strategy. Also generated by the passage of the Federal Environment Program, the German Advisory Council on the Environment (SRU) provides research and expert knowledge on environmental trends and conditions. As the Environment Program mandates, every four years, the SRU submits to the federal government a report on the state of the environment which evaluates environmental policy developments and analyzes specific ecological trends (German Advisory Council on the Environment, 2012).

In 1972, the Federal Alliance of Citizens' Initiatives for Environmental Protection (BBU) was founded as a non-partisan umbrella organization of 15 smaller environmentally-focused citizen initiatives. By 1975, another large national environmental civil society organization was founded, the German League for Environment and Nature Protection (BUND). The BUND was very stable and well-organized, less radical than the BBU, and it remains a strong source of environmental leadership in Germany today (Niestroy, 2007).

Although environmentalism had developed a strong position in German society, this was not yet the case regarding administrative and political structures. Therefore, in 1972, the Basic Law was amended to grant the federal government the authority over the making of environmental legislation, though the Länder and municipalities remained responsible for their implementation. In the following year, at the initiative of the Länder, the Conference of Environmental Ministers (UMK) was created as an intergovernmental coordination entity. With several issue-based working groups undertaking the technical

efforts of the organization, the UMK is composed of environmental ministers of the 16 states and the Federal Minister for the Environment. Although the decisions of the UMK are not legally binding, this institution serves as a formal governmental coordinating mechanism on issues of the environment (Federal Environment Agency, 2003).

With the expansion of the national government's legislative authority, the Federal Environment Agency (UBA) was established in 1974 to undertake research on natural resource protection and environmental conservation (Federal Environment Agency, 1997). In 1975, the Cabinet adopted "Principles for Environmental Impact Assessment of Public Activities of the Federal State" which required federal ministries, departments, and institutions to undertake an assessment of the potentially harmful environmental impacts of proposed federal legislation and activities (Federal Environment Agency, 2003). By the end of the 1970s, the environmental movement in Germany was firmly established in the executive branch, national administrative structures, intergovernmental networks, and civil society organizations.

The Green Party was formed in 1980, presenting environmentalists with a formal foray into the German political system (Markham, 2005). The Green Party served as a strong force in legitimizing environmental concerns and prioritizing these issues on the government agenda. The coalition government elected in 1982 dropped the Federal Environment Program to focus on economic and social development and the political issues surrounding the Cold War.

Following the Chernobyl disaster in 1986, a new Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMUB) was created. In the first few years of its existence, the Ministry was small in terms of its staffing, political power,

and budget (Federal Environment Agency, 2003). In the years immediately after the Ministry's formation, the process of German unification overshadowed environmental issues. With this revision of national priorities, Germany fell behind its neighbors in environmental and sustainability leadership.

United Germany and the Slow Shift to Sustainability

Though considered to be a trailblazer in traditional environmental issues throughout the 1970s, the German government was relatively late to integrate sustainability in its national development and environmental management policies. One reason for this delay was the nation's focus on its domestic problems with the unification of East and West Germany as the SD trend was taking hold (Bachus & Spillemaeckers, 2010). In the late 1980s, Germany's domestic agenda was seen by political stakeholders to be incompatible with the paradigm of sustainable development⁴⁵.

Another explanation for Germany's slow reception to sustainability is the nation's history of extensive environmental legislation. Many critical public institutions, entities, policies, and programs for environmental management were implemented during the 1970s. Thus, almost two decades later, the "international rise of the concept of sustainable development received less attention in Germany" than in other industrialized nations which did not have extensive environmental policies in place (Janicke, Jorgensen, & Nordbeck, 2001, p. 7).

⁴⁵ As we have come to understand, the social and economic concerns of Germany during this time are, in fact, aligned with the concept of sustainable development. At the time, however, the complex paradigm of sustainability was still in the process of differentiating itself from traditional environmental protection policy. The integration of environmental, social, and economic issues was not yet accepted as the defining principle of sustainable development in Germany.

For three decades, Germany's environmental agenda was focused on traditional land conservation, anti-pollution, and natural resource protection policies, so sustainability was commonly viewed by stakeholders as taking a step backwards. Environmentalists were concerned that under the concept of sustainable development, social and economic issues would dominate ecological priorities. Thus, in 1982, the newly-elected coalition government dropped the Federal Environment Program in order to focus on the economic and social development of West Germany and the issues of the Cold War (Clark, 2001).

Eventually, Germany's paradigm shift from environmental to sustainability policy was spearheaded by a wide variety of stakeholders both inside and outside of government. The German Parliament, called the Bundestag, has the power to create a commission of inquiry, called an Enquete Commission, to investigate and analyze specific topics of national importance. In 1987, the government initiated an Enquete Commission on "Precautionary Measures for the Protection of the Earth's Atmosphere". Focused on harmful emissions and air pollution, the work of this group is said to have ushered in "Germany's second environmental revolution" (Clark, 2001, p. 81). The work of the Commission, however, faded into the background of government's agenda as Germany faced the serious challenges presented by unification in 1990.

In preparation for the UN Conference in Rio, also called the Earth Summit, the German National Committee on the Environment was created in 1991. The Committee included thirty-five representatives from various sectors of government and civil society (O'Riordan & Voisey, 2013). A few major environmental NGOs were included in Germany's preparation for the Earth Summit, but only on an ad hoc basis. Thus, in 1993,

the NGO Forum on Environment and Development was created to provide stakeholders with an organized network for communication and collaboration. This group advocates and lobbies government on issues of environmental protection and poverty reduction, specifically with regard to the participation and inclusion of stakeholders in environment and development planning (German Forum on Environment and Development, 2015).

In 1992, appointments were made to a second Enquete Commission on “Protection of public health and the environment: Assessment criteria and perspectives on sustainable management of material streams in industrial society”. The final report of this inquiry commission, delivered to the government in 1994, highlighted the importance of environmental protection in ensuring a high quality of life in Germany (Weidner, 2002).

The National Committee on the Environment changed its name to the National Committee on Sustainable Development in 1994, a signal of government’s growing reception of the policymaking approach of sustainable development. This name change was the first major institutional indication of the federal government’s shift away from traditional environmental policy and towards the paradigm of sustainability and integrated decision making. While the Committee met several times a year, politically powerful and “high-level representatives of the major groups often did not attend its meetings” which limited its success and impact (Janicke, Jorgens, Jorgensen, & Nordbeck, 2001, p. 25).

Constitutional changes that year also reflected the national shift towards sustainability. Germany’s Basic Law was amended in 1994 to assert that all entities of the “state shall protect the natural foundations of life and animals” and act with attention to

the needs of future generations (Federal Republic of Germany, 2010). Although a clear step in anchoring sustainability as a cross-cutting policy goal to be addressed by government bodies, the Constitutional change “had little direct and measurable impact on German policy making” (Janicke, Jorgens, Jorgensen, & Nordbeck, 2001, p. 17). The major value of the constitutional amendment is found in its symbolism of government commitment to sustainable development.

In the same year, the report “Environment 1994: German Strategy for Sustainable Development” was approved by the federal government for submission to the UN Conference on Sustainable Development. Prepared by the Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMUB) and Ministry for Economic Cooperation and Development (BMZ), this report provided a description of past German environmental policies but did not elaborate on future legislation or proposed programs for sustainability. The national impact of this report was minimal because it contained no policy measures or initiatives and was published only in hardcopy, not electronically, and only in English, not in German (United Nations, 2002).

Following the delivery of the report of the second commission of inquiry in 1994, a third Commission was appointed in 1995. The Enquete Commission on “Protection of Humanity and the Environment: Objectives and Framework for Sustainable Development”, in their final 1998 report, describe sustainability, define objectives of environmental quality, and outline the network of actors needed for the effective transition to a path of sustainable development (Weidner, 2002).

A 1995 report by two prominent NGOs, BUND and the German Catholic Bishops' Organization for Development Cooperation (MISEREOR), titled “Sustainable

Germany: A Contribution to Global Sustainable Development”, stimulated widespread public discussion on environmental planning and sustainability management. The organizations hosted about 1,000 events throughout the country to disseminate information, distribute the study and debate the issues (United Nations, 2002). Built with the strong capacity of an environmental and a religious NGO, these efforts increased public awareness of the concept of sustainability and helped lead German civil society’s shift towards accepting the new paradigm of sustainable development.

In 1996, the BMUB initiated a stakeholder dialogue on “Steps to Sustainable Environmentally-Friendly Development”, which was chaired by the Minister of the Environment. Over 200 representatives from business, civil society, and all levels of government met in six working groups. These groups created priorities for action and a list of the next steps on the road to sustainable development in Germany. This process also revealed potential and existing conflicts in the use and protection of natural resources, allowing stakeholders to negotiate tradeoffs early in the process and bargain towards mutually beneficial outcomes (Bachmann, The German sustainability policy: State-of-the-art, 2005).

Working from the information discussed at the dialogue, the Federal Environment Agency published a 1997 study addressing the development problems of the future, titled “Sustainable Germany: Towards an Environmentally Sound Development”. This report focused on the fields of energy use, mobility, food production, material flow management, and consumption patterns to identify three potential paths of development for Germany and their perceived outcomes.

It was the Red-Green coalition government agreement of 1998 that provided the first formal guidelines and structure for SD-governance at the federal level; this political alliance was formed between the Social Democratic Party (SPD) and the Green Party, hence its Red-Green name. With the government's approval of the "Step Process" for the development of the National Sustainable Development Strategy, Germany began its formal transition to sustainable development governance (European Sustainable Development Network, 2014). The early history of Germany's environmental policy evolution from 1970 through 1998 is provided in the timeline below.

Figure 3: Timeline of Germany's Environmental Policy Evolution, 1970-1998

Evolution of Germany's National Sustainable Development Strategy

The previous section provided a great deal of detail on the development, implementation, and revision of Germany's early environmental policies, programs, and institutions, which serve as the predecessors for and foundation of the NSDS. The descriptive analysis above offers a foundation for the formal framework used to evaluate the German National Sustainable Development Strategy. In preparing this analysis, documents and data were collected electronically and in person for over a year. The list of documents utilized in the evaluation of the NSDS of Germany is provided in the appendix⁴⁶.

Table 16: List of Subjects Interviewed for Assessment of Germany's NSDS

Name	Title	Organization
Dr. Stefan Bauernfeind	Sustainable Development Division Director	Federal Chancellery
Dr. Albert Statz ⁴⁷	Senior Associate	Ecologic Institute
Mr. Sebastian Straube	Managing Director and Co-Founder	BSD Consulting

The information gathered from these documents was supplemented by semi-structured interviews with key sustainable development stakeholders. The table above presents the list of interview subjects, and the title and organization for which they work.

⁴⁶ Many documents published regarding the development, implementation, and revision of the NSDS are available only in German; this includes electronic documents published online. Thus, whenever possible, English versions of these documents were procured during the in-country interview process or during electronic communication with key sustainable development stakeholders.

⁴⁷ Dr. Statz previously served as the Division Head of the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety. He was also a founding committee member of the European Sustainable Development Network and currently provides advisory services on issues of sustainability for several Länder (Statz, 2014).

Relying on the evidence gathered from the document analysis and semi-structured interviews, this section describes the evolution of Germany's NSDS.

In July 2000, the German cabinet formally approved procedural and institutional directives for the development of a National Sustainable Development Strategy.

Following these guidelines, the federal "government presented a first draft of Perspectives for Germany: Our Strategy for Sustainable Development in December 2001.

The publication resulted in brief, two-step 'dialogue phases', in which stakeholder meetings and citizens' internet consultations were held both prior to the first draft and again prior to the final draft of the publication" (Tils, 2007, p. 166). The time allocated for public comment and debate was short, between three and four months for all drafts and final strategy documents, and limited to internet and electronic consultations.

After a decade of dialogues and discussions and drafts and deliberations, the National Sustainable Development Strategy, "Perspectives for Germany", was adopted by the Cabinet on April 17, 2002. With the appointment of representatives to the State Secretaries' Committee on Sustainable Development (StA, or Green Cabinet) and the Council on Sustainable Development (RNE) a year prior, the implementation of the NSDS could begin immediately after adoption.

Reporting directly to the Federal Chancellery (BK), the RNE is a multi-stakeholder group of 15 representatives from industry and business, civil society organizations, academia, and the media⁴⁸. The key tasks of the Council are to advise the federal government on the implementation of the NSDS and to promote public dialogue

⁴⁸ Due to reassignments and political constraints, the Council has 15 seats but all of these positions may not be filled at any given time (Klaus, Knopf, Kahlenborn, & Damm, 2009).

on and draw attention to issues of sustainability. The everyday administrative work of the RNE is undertaken by a secretariat office, composed of eight full-time staff members. Selected directly by the German Chancellor, the members of the RNE are appointed for a term of three years (Klaus, Knopf, Kahlenborn, & Damm, 2009).

The Green Cabinet is composed of representatives from the 14 departments and chaired by the Head of the Federal Chancellery. The responsibilities of this high-level committee include the further development and revision of the NSDS; communication with the Parliamentary Advisory Council on Sustainable Development (PBnE), Länder, and municipal organizations; and coordination of sustainability policy initiatives within the federal government (Bachmann, 2012). The StA serves as a powerful and high-level “coordinating and monitoring body for sustainability. It decides about the strategy and its further development (subject to later formal approval of the cabinet), and keeps a close eye on implementation of the strategy. This Committee consists of state secretaries” who serve as top-level representatives from all of the federal ministries in the Chancellery (European Sustainable Development Network, 2014). Thus, the responsibility for the NSDS lies not with one ministry but the entire federal government, especially the Chancellery.

The Parliamentary Advisory Council on Sustainable Development (PBnE) was created in 2004 by the Bundestag. The ideological makeup of the council mirrors the political party makeup of the German Parliament. The PBnE, composed of 17 members, was established to provide parliamentary supervision on the National SD Strategy. Since 2009, the council also reviews sustainability impact assessments submitted by federal

ministries and agencies on proposed legislation (Parliamentary Advisory Council on Sustainable Development, 2014).

The roles of the StA, RNE, and PBN, and other stakeholders in the development, management, and implementation of the NSDS are depicted below in the organizational chart, which is provided by the Federal Chancellery for numerous audiences, although the clear illustration of the responsibilities and authority of these institutions is lacking.

Figure 4: Management of the German NSDS

Source: Stefan Bauernfeind (2009) “State Secretaries’ Committee for Sustainable Development Workshop: New Drive for Sustainable Development Strategies –The Power of Smart Linkages”.

The traditionally strong interest groups in German politics, namely the chief business and industry networks, have participated in sustainability policy development both within and outside of formal government arrangements, even prior to the passage of the Strategy. For small and medium-sized enterprises, the BAUM network, established in 1984, boasts over 500 member organizations as the European business community's largest environmental initiative. This groups aims "to raise the level of awareness among companies, local government, private households and organizations with regard to environmental protection and sustainable development" (BAUM, 2007). The EconSense group was established in 2000 as a network of 23 large companies committed to promoting dialogue and collaboration on Corporate Social Responsibility (CSR) efforts and sustainable development implementation in business activities (Klaus, Knopf, Kahlenborn, & Damm, 2009).

Members of these fora are routinely asked to participate in government programs for sustainable development. In preparing for the 2012 revision of the NSDS, business representatives from EconSense and BAUM were invited to submit comments and participate in the Green Economy Dialogue hosted by the Council for SD. These organizations are also a key source of business representatives for major SD stakeholder institutions, including the RNE and ad hoc committees or panels. Therefore, those companies that do not have representation in these associations are much less likely to be engaged in the German NSDS processes and activities (Bachmann, 2012).

Other evaluations regarding the lack of public participation point to the symbolic language of the German word for sustainability, "nachhaltigkeit", which is "not only not very appealing semantically, its meaning has become extremely diffused" in its abundant

usage as a political buzzword (German Advisory Council on the Environment, 2002). The Federal Chancellery acknowledges this ongoing problem as a “bottleneck” which hinders the widespread acceptance sustainable development as a new path for growth (Bachmann, The German sustainability policy: State-of-the-art, 2005). Recent civil society sustainability projects, competitions, and activities have been undertaken to increase public awareness and acceptance of the concept of sustainability.

Sponsored by the Federal Government and the RNE, the Citizens Initiate Sustainability (BIN) competition awarded a total of €100,000 to 40 winning projects in 2009 which highlight intergenerational interaction and support civil involvement in German sustainability; this is considered one avenue for the national government to provide one-time funding for local sustainability projects (Bauernfeind, State secretaries’ committee for sustainable development workshop: New drive for sustainable development strategies - The Power of smart linkages, 2009). Established as a pilot project in 2001 by the Council for SD, the Mission Sustainability program was designed honor civil society-initiated activities which strengthen sustainability in arts, culture, and education. Of the 204 entries received in 2006, for instance, 40 of the most innovative activities were published in a book and then evaluated by a panel of judges. The winning project received funding for future implementation (RNE, 2007). These competitions, while a valuable tool for civil society participation, generally favor well-organized and well-known groups and do not provide recurring financial support or human resources for the projects continued implementation.

As such, these programs have not been found to generate broad social awareness or acceptance of sustainable development. Therefore, these project-based activities were

supplemented by the Research for Sustainable Development (FONA) program, under the authority of the Ministry of Education and Research (BMBF). This FONA program provides vital money for research and development (R&D) into sustainability; and, in recent years, the government has apportioned significant funds for this purpose. The FONA3 program was launched in 2015 with approximately €1.5 billion allocated for SD R&D over the next five years (Federal Ministry of Education and Research, 2015). The public's awareness of sustainable development may be limited due to the coordination challenges that face local and Länder governments in the implementation of the NSDS activities.

The 2002 NSDS lacked clear intergovernmental cooperation mechanisms, resulting in a deficiency of coordination between the federal and state level on SD strategies and programs. This disintegration was also the result of prior state-level action on environmental and sustainability issues, including the creation of state SDSs and Agenda 21 programs. The effective implementation of the National SD Strategy, however, requires well-coordinated strategies and clarity on responsibilities of federal and state governments. After several years of criticism, the federal government has made an effort to institutionalize and formalize intergovernmental cooperation on sustainability policies (Bachus & Spillemaeckers, 2010). These changes and other developments of the NSDS since 2000 are illustrated below.

Figure 5: Timeline of Germany's National Sustainable Development Strategy Evolution, 2000-2015

In November 2007, the RNE organized a Workshop on the SD Policies of the Federal States. Sustainability experts from the 16 Länder discussed the role of the states

in promoting SD awareness, implementing the NSDS, and aligning local strategies with federal sustainability policies. This discussion built upon the work of the Conference of Environmental Ministers (UMK), in which the involvement of the Länder is “institutionalized in various national-regional working groups involving public administrators of the central government and the regions” which is designed to improve intergovernmental communication (European Sustainable Development Network, 2014).

In 2008, the UMK formed a working group to specifically address sustainable development concerns. This working group is designed to promote vertical integration of the NSDS in state and municipal strategies, as well as provide a formal forum for dialogue between the various levels of government (Klaus, Knopf, Kahlenborn, & Damm, 2009). While a strong step in the right direction, the decisions of the UMK are not legally binding and only serve to provide a forum for dialogue and debate. Additionally, by decision of the UMK, this group excludes municipal and local government representatives, who have been frequently left out of the NSDS experience until recent efforts (Stigson B. , et al., 2013).

Since the preparation of the 2008 Progress Report, Germany has worked to improve the participation of subnational governments with regard to its NSDS. This report was the first instance that the Länder and municipal umbrella organizations were formally requested to offer suggestions or feedback on the National SD Strategy; the invited local government organizations included the German Association of Cities, the Germany County Association, and the German Association of Towns and Municipalities. Prior to the preparation of this Progress Report, the subnational governments were not

consulted for feedback on the NSDS, though they were expected to implement the activities and measure progress on the indicators contained within the document (Federal Government, 2008).

In June 2008, the 100 youngest parliamentarians from cities and municipalities came together to discuss, debate, and deliberate the upcoming changes to the Strategy (Federal Government, 2008). This initiative, although innovative, should be incorporated in a regular communication program or formal information network between levels of government. Without institutionalizing the program, intergovernmental coordination and communication is only an ad hoc activity undertaken by the national government when it deems necessary; this informal approach undermines the significance and necessity of the cooperation of state and local governments.

In addition to intergovernmental cooperation, recent developments should increase the inter-departmental coordination on sustainable development policies and legislation. With the adoption of the 2008 Progress Report, federal ministries “voluntarily agreed to publish ‘departmental reports’ on their contribution to SD objectives in general” and to the goals of the NSDS (Berger & Steurer, 2009). These reports, however, need not be made public or performed on a regular basis; those decisions are left to the leadership of the Ministry. The ministry reports which are made publicly available are collected by the Chancellery and published on the main Federal Government Sustainability Strategy site, in addition to their publication on the website of the specific Ministry. A list of those ministries which have voluntarily submitted and publicly published sustainability reports since 2008 is provided in the table below.

Table 17: Federal Ministry Sustainable Development Report, by year (2008-2015)

Year	Federal Ministry Sustainability Reports
2008	- Consumer Protection Ministry
2009	- Ministry of Transport, Building and Urban Affairs (BMVBS) - Ministry of Economics and Technology (BMWt) - Ministry of the Interior - Foreign Ministry - Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) - Federal Ministry for Education and Research (BMBF) - Ministry of Finance (BMF)
2010	- Ministry for Family Affairs, Senior Citizens, Women and Youth - BMWt
2011	- Ministry for Economic Cooperation and Development (BMZ) - BMVBS - BMF - BMWt - Ministry of Food, Agriculture, and Consumer Protection
2012	- Ministry of Defense (BMVg) - BMWt (two reports)
2013	- Ministry of Health - Foreign Office - BMUB
2014	- Ministry of Economy and Energy - BMVg
2015	- BMBF

Source: Adapted from the website of the Federal Government (2015) “Reports from the Ministries”.

In May 2009, sustainability was enshrined in the Joint Rules of Procedure of the Federal Ministries in the form of a mandatory Sustainability Check on all proposed legislation. The requirement of Sustainability Impact Assessments (SIAs) encourages the acknowledgment of sustainable development concerns in departmental and agency policymaking processes. The results of these SIA reports are reviewed by the Parliamentary Advisory Council on Sustainable Development. Early reports indicated that after the first few years of implementation, “there is little evidence that such [sustainability] checks have resulted in changes to draft legislation” to better reflect sustainability issues (Organization for Economic Cooperation and Development, 2012). The delegation of this oversight responsibility to a group of politicians may prove to

undermine the policy's potential towards integrating sustainability issues in decision making, but more research needs to be performed as additional data become available.

Assessment of Germany's National Sustainable Development Strategy

Utilizing evidence from the large set of documents and the information collected in the interviews, each of the four hypotheses was tested through the application of the formal assessment framework outlined in Chapter Four. The indicators associated with each variable are framed as questions, which were drawn from decades of work by the UN, OECD, EU, many sustainability, environmental, and developmental organizations, and academics and researchers. This section will employ all available information to test the four hypotheses in the case of the German National Sustainable Development Strategy.

Test of Hypothesis One

Evaluations and reports assessed that “the low level of public participation in the strategy process is the result of a top-down, government-centred strategy approach and limited resources” in the Federal Chancellery (Tils, 2007, p. 173). Peer review reports identified the limited capacity of the BK as a major challenge in the effective engagement of civil society, as well as the implementation issues that result from this skills gap (Stigson B. , et al., 2009; Stigson B. , et al., 2013). The lack of administrative capacity in the BK is exacerbated by the institution's lack of authority for SD projects and programs outside of the activities of the RNE. Thus, the role of the Chancellery could be improved with capacity development.

Table 18: Test of Hypothesis One on the National Sustainable Development Strategy of Germany

Hypothesis	Variables	Questions	Answers
The use of formal and open communication measures by government during the policymaking phases should lead to the ongoing participation of engaged civil society stakeholders in the policy implementation phases.	Independent	Who was responsible for the SDS development process?	<ul style="list-style-type: none"> - Federal Environmental Agency published several SD reports throughout 1990s, providing foundation for NSDS - 1998 Red-Green coalition government initiated NSDS development process - 2000 Bundestag resolution outlined NSDS policymaking process, and created Council for SD (RNE) and State Secretaries' Committee on SD (StA, or Green Cabinet) <ul style="list-style-type: none"> o RNE and Green Cabinet members appointed and began work in 2001 - Green Cabinet responsible for coordination and NSDS development - Prepping for 2012 NSDS re-launch, RNE invited businesses for "Green Economy Dialogue" in person and online
	Government efforts to increase public awareness of SD	What structures and strategy management systems were established for communication and information mechanisms?	<ul style="list-style-type: none"> - RNE responsible for advising government, stakeholder communication, and promoting SD dialogue <ul style="list-style-type: none"> o Since 2000, RNE organizes Annual SD Conferences with keynote speech by Chancellor and over 1,000 participants - Dialogue Forum on SD in 2001 helped prepare draft of NSDS, which was published and distributed for comment later that year (German)
	Formal public debates, dialogues, and comment periods on NSDS policymaking	Which stakeholders were involved and how?	<ul style="list-style-type: none"> - October 2001-January 2002: four months of internet consultation in writing NSDS draft - January 2002-April 2002: four months consultation of draft NSDS - January 2004-April 2004: four months of internet consultation in writing draft progress report - April 2004- June 2004: three months consultation of draft progress report
	Stakeholder participation during NSDS policymaking	To what extent was the process consultative and/or genuinely participative?	<ul style="list-style-type: none"> - Stakeholder participation of civil society actors in "policy formulation is found not only within actual sustainability policy, but also within other department policies" (Jacon, Knopf, Kahlenborn, & Damm, 2009) due to public participation rules in Joint Standing Orders of Federal Ministries - After the decision on the NSDS

			development process in 2000, it took two years to establish the RNE and StA, and “more than one year until the government presented its first consultation paper for the SDS. The consultation itself and the time left for revising and finalization was hence relatively short” (Neistroy, 2005, p. 136)
		Was there trust between stakeholders and mutual respect?	<ul style="list-style-type: none"> - Limited trust between local and federal governments due to political system structure and history of intergovernmental policymaking - StA, RNE, and PbNE respect each other’s work but remain highly critical of each other (Bauernfeind, 2014) <ul style="list-style-type: none"> o May be that this type of critical feedback functions as a check on any single entity’s power
		Were there effective institutionalized channels for communication?	<ul style="list-style-type: none"> - For stakeholder involvement and public communication, RNE experimented with different approaches (Bachmann, 2005) - Participation methods used in NSDS development “ranged from traditional consultation processes to the possibility of delivering opinions on drafts or internet chat sessions with ministers and state secretaries” (European Sustainable Development Network, 2014)
		Was there access to information for all stakeholders?	<ul style="list-style-type: none"> - Early policy documents and research published only in German, but available electronically online and in hardcopy in government offices (national, state, and municipal) - 1st Annual Conference for SD in 2000 - In 2001, Agenda 21 Municipal Support Offices opened and offer info on current and upcoming SD initiatives - In 2001, Dialogue on World Summit for SD hosted by BMZ and BMU

		What pro-active mechanisms been used to engage marginalized stakeholders?	<ul style="list-style-type: none"> - Initiated and supported by the Länder, Municipal Agenda 21 annual competitions began in 2001 and Youth Sustainability Competitions started in 2002 for engagement in proposing and implementing SD - At the Federal level, RNE hosted SD-focused 2002 creative writing youth contest, 2004 film competition, 2005 photo contest, and 2010 youth dialogue titled “Vision 2050” - As 2005 report stated, there is “no activating mechanism built within the strategy that is reaching out to communities and the private sector encouraging those to come up with commitments and action” (Bachmann, 2005)
		What role did public awareness campaigns have in encouraging stakeholder involvement in the process?	<ul style="list-style-type: none"> - German Days of Action Sustainability initiated in 2012 to attract attention to SD issues; more than 270 events and meetings held - In 2009, Ministry for Education and Research (BMBF) created Research for Sustainable Development program (FONA) to stimulate R&D <ul style="list-style-type: none"> o FONA3 launched in 2015 with more than €1.5 billion dedicated for next 5 years - 2009 Peer Review Background Report found that the “strategy has a low impact on the general public and it is hardly known” and this has been highly criticized by the RNE (Jacon, Knopf, Kahlenborn, & Damm, 2009)
	Dependent: Ongoing participation of stakeholders during the NSDS implementation phases	Which stakeholders were involved and how?	<ul style="list-style-type: none"> - NSDS “coordinated and driven by the Federal Chancellery. Implementation is done by the Green Cabinet” which is chaired by Federal Chancellery and includes reps from each ministry (Bachmann, 2005)
		Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?	<ul style="list-style-type: none"> - As of 2005, at the state-level, the NSDS “reaches expert groups who are engaged in this for professional reasons or confronted with it due to their honorary capacity. It does not extend to the broad public” (Bachmann, 2005, p. 18) - Federal- Länder Working Group of UMK has potential for high degree of participation as built on previous partnership (Statz, 2014)

		How has the process strengthened people's participation in, and influence over, the decision making process?	<ul style="list-style-type: none"> - In creating NSDS, the German "experience has shown that rather than hindering politics, participation complements and supplements political activity" (Federal Chancellery, 2002) - RNE as 15-person multi-stakeholder group offers "inclusiveness and representativeness" in decision making (Bachmann, 2012)
		Did it lead to better communication pathways?	<ul style="list-style-type: none"> - Peer review found that "a comprehensive communication strategy is lacking" which would bring together all stakeholders (Jacon, Knopf, Kahlenborn, & Damm, 2009)
		How has it improved awareness of sustainable development issues?	<ul style="list-style-type: none"> - Amongst the public, there exists "a lack of vision about sustainability in Germany in the longer-term future" (Stigson B. , 2009) - With the German term for SD, there is "a political bottleneck for a broader stakeholder involvement coming with the language concept of the German term 'Nachhaltigkeit'. Sustainability policy has yet to be convincingly freed of the misconception that it consists solely of environmental issues" (Bachmann, 2005, p. 10) <ul style="list-style-type: none"> o Also the result of history of environmental policy leadership since the 1970s which embedded the term in the public mind

The use of open communication during the initial NSDS policymaking process was restricted to internet consultations for three or four month periods. This limited the public participation and civil society "buy-in" on the National SD Strategy. However, the central SD government institutions have taken considerable effort since that time to engage and involve various sectors of civil society in the NSDS revisions; this is especially true of the drafting process for the 2008 Progress Report. The participation of stakeholders has grown during the implementation and feedback phases of the NSDS. Therefore, the first hypothesis that the use of formal and open communication measures by government during the policymaking phases should lead to the ongoing participation

of engaged civil society stakeholders in the policy implementation phases does not hold true for the case of the German NSDS.

Test of Hypothesis Two

As interviews and reports indicated, although intergovernmental communication is somewhat institutionalized within the long-standing UMK, the expected result in increased coordination of SD efforts is distinctly lacking. There seems to be limited concern regarding this dearth of vertical integration, however, as the Länder have a history of administrative independence and policymaking authority. Regardless of this tradition of political autonomy, the work of the federal and subnational governments must be aligned in order for the Strategy to achieve many of its stated objectives, as “implementation and enforcement are delegated to state and local authorities” in the German NSDS (Organization for Economic Cooperation and Development, 2012, p. 36).

Table 19: Test of Hypothesis Two on the National Sustainable Development Strategy of Germany

Hypothesis	Variables	Questions	Answers
Nations that provide a continued commitment of financial, human, and spatial resources specific to the National SD Strategy are more likely to exhibit higher levels of intergovernmental cooperation.	Independent	Was there coherence between budget, capacity, and strategy priorities?	- NSDS offers no data on budgetary provisions, capacity needs, or their linkages to the priorities of the Strategy (Bauernfeind, 2014)
	Commitment of financial, human, and spatial resources for NSDS implementation	Was there political commitment in budget terms?	- Municipal Agenda 21 support services financed by Länder traditionally - Recently, BIN, youth-based, and other civil society competitions jointly financed by Federal and Länder - Days of Action Sustainability (est. 2012) by Federal Chancellery hosted over 270 events nationwide

		Do the institutions concerned have sufficient rights, resources and effective relationships to undertake this?	<ul style="list-style-type: none"> - The StA “administrative structure gives the Ministers relatively strong positions with leading their Ministries independently and in own responsibility. This independence is balanced by the ‘guidance competence’ of the chancellor and the practice of collective cabinet decisions” (Bachmann, 2005) - According to the RNE, “the strategy and its implementation are not sufficiently guided for the development of federal policy or actions of societal actors” (Jacon, Knopf, Kahlenborn, & Damm, 2009) <ul style="list-style-type: none"> o Lack of administrative capacity noted as key factor (Statz, 2014)
	Dependent Vertical integration Intergovernmental cooperation	Were there effective institutionalized channels for communication?	<ul style="list-style-type: none"> - UMK in place since 1973, but decisions have no binding effect - Workshop organized by RNE in 2007 to discuss SD policies of the states (all 16 Länder sent reps) - There is “no general coordination process between the national level and the regions on the NSDS” (European Sustainable Development Network, 2014)
		To what extent is there consensus about the process and content of the NSDS between the national government and those at regional and local levels?	<ul style="list-style-type: none"> - Due to the federal structure of the nation, “the transfer of the Sustainable Development Strategy to the regional or communal level is clearly perceived as insufficient” and “legally there is no room for a legitimate and enforceable top down strategy for all administrative levels from national to local” (Bachmann, 2005, p. 12) - Conference of Environmental Ministers (UMK) provides communication between national and state environmental departments, but no expansion of role under NSDS (Straube, 2014)

		How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?	<ul style="list-style-type: none"> - UMK as formalized network for intergovernmental cooperation, but no binding legal effect or direct influence on policy - NSDS is not binding in character, “but attempts to convince and stimulate others into further action by highlighting the common difficulties and obligations; <ul style="list-style-type: none"> o Thus, states “are not yet sufficiently encouraged to develop specific Sustainable Development Strategies” (Bachmann, 2005, p. 12) - As of 2009, 12 of 16 Länder have in place regional SD strategies which are generally operated by Environment Ministries (10 of the 12 with regional SDSs)
		Is it making a difference at the level of local authorities?	<ul style="list-style-type: none"> - “Stronger cooperation between the national level and the federal states for NSDS implementation has developed” but only after six years of criticism (Federal Chancellery, 2009) - Overall, Federal Government “does not have much influence on the SD activities in the regions” due to strong state role in political system (European Sustainable Development Network, 2014) - Lack of Länder consultation in NSDS development, indicator selection, and implementation decisions has seriously hindered the effective execution of NSDS (Bauernfeind, 2014; Statz, 2014)

The resources (financial, human, spatial, technological, etc.) allocated to implement the NSDS activities were not described in the Strategy or its subsequent revisions (in the form of progress reports adopted by the government). This lack of clarity

regarding financial and administrative support was identified as one cause of the policy fragmentation between levels of government (Stigson B. , et al., 2009). The NSDS required implementation and action from the Länder, but failed to provide them with the resources to accomplish these aims. Additionally, the states “were not involved in the development of the goals indicators” so these measures were enacted from the national government with little regard for local relevance or capacity (Klaus, Knopf, Kahlenborn, & Damm, 2009). Intergovernmental cooperation regarding the German NSDS has been a challenge due to the lack of clarity provided in the policy. Therefore, the hypothesis that those nations which provide a continued commitment of financial, human, and spatial resources for the NSDS are more likely to exhibit higher levels of intergovernmental cooperation cannot be substantiated in the case of Germany. More information is needed regarding the NSDS resource commitment by the federal government.

Test of Hypothesis Three

The German NSDS is meant to be the central guidepost for actions on sustainability and sustainable development in the nation. The Green Cabinet “is meant to provide the leadership and coordination for vigorous follow-up of the strategy. And the Council for Sustainable Development is meant to give advice, prompting further action in key areas, and to reach out into society. All of this machinery is clearly valuable; but we are not sure that it is at present generating sufficient energy” to implement necessary programs and achieve the objectives which have been set (Stigson B. , et al., 2009, p. 15). Although Germany has applied several critical tools for interdepartmental cooperation, such as the StA and mandatory SIAs, assessments, reports, and interviews indicate that

these measures fall short in achieving the objective of horizontal integration. The analysis of the relationship between top-level leadership and interdepartmental cooperation is provided in the table below.

Table 20: Test of Hypothesis Three on the National Sustainable Development Strategy of Germany

Hypothesis	Variables	Questions	Answers
Nations which display ongoing political and administrative top-level leadership in NSDS processes and institutions are more likely to exhibit higher levels of inter-departmental cooperation.	Independent Top-level leadership in and spearheading of the NSDS processes and institutions	When was the strategy initiated, and by which institution?	<ul style="list-style-type: none"> - 1998 Red-Green coalition government initiated NSDS development and set rules for processes - 2000 Bundestag resolution created StA and RNE; appointments made and work began in 2001
		What roles were played by different agencies?	<ul style="list-style-type: none"> - StA formed in 2000 as “high-ranking coordinating and monitoring body for sustainably” made up of representatives from the major federal ministries (Federal Chancellery, 2009)
		Was there political commitment in budget terms?	<ul style="list-style-type: none"> - RNE annual budget about € 1.9 million; ad hoc projects hosted and supported by various government and civil society institutions through their financial resources - Departments and ministries must find resources for SD projects and activities within traditional budget systems (Bauernfeind, 2014) - The “allocation of resources and the development of measures are largely the responsibility of the departments” (Jacon, Knopf, Kahlenborn, & Damm, 2009)
	Dependent	To what extent was the process consultative and/or genuinely participative?	<ul style="list-style-type: none"> - StA met only 1-3 times per year until 2008; since then, met 5-8 times/year - Participation sharply increased with preparation of 2008 Progress Report <ul style="list-style-type: none"> o Submission of individual chapters by stakeholders - RNE published opinions on nearly every NSDS policy, report, and revision - No formal communication or
	Horizontal integration Interdepartmental cooperation		

			engagement tools between StA and RNE (Bauernfeind, 2014)
		Did the NSDS develop or build on partnerships between government, civil society, private sector and external institutions?	<ul style="list-style-type: none"> - Policymaking in Germany is generally characterized “by conflicts between Ministries, which is also fed by the traditional coalition governments with Ministers from different political parties” (Neistroy, 2005) - As of 2009, Joint Standing Orders require all proposed policies undergo Sustainability Check
		Have the directions of the strategy been picked up in other strategic or planning documents? In economic development policies?	<ul style="list-style-type: none"> - Since 2008 Progress Report, federal “ministries have voluntarily agreed to publish ‘departmental reports’ on their contribution to SD objectives in general, and to the objectives” of the NSDS explicitly (Berger & Steurer, 2009) <ul style="list-style-type: none"> o Reports are not required to be made public o Between 2008-2015, 24 ministry reports published online (only in German)
		Did it lead to new ways of government departments working together? How so?	<ul style="list-style-type: none"> - Establishment of StA, with Chancellor as Chair, has made sustainability a “matter of top priority”, in order to limit interdepartmental disputes and highlight win-win situations (Bachmann, 2005) but federal structure still hinders cooperative policymaking <ul style="list-style-type: none"> o New UMK Working Group established in 2008 may help interdepartmental coordination

As the Green Cabinet is led by the Chancellery, the organization of the group is said to illustrate the federal government’s commitment to SD. The NSDS relied almost completely upon this arrangement of the Green Cabinet to provide inter-departmental cooperation. However, as the 2009 Peer Review report indicates, the issues of sustainable development were generally not addressed by the work of the ministries outside of this

Green Cabinet group and its supporting working committee⁴⁹ (Stigson B. , 2009). But the National SD Strategy relied almost completely on this organizational arrangement to produce inter-departmental coordination. The NSDS did not develop any “effective instruments to steer the successful coordination of the ministerial activities” which are deemed necessary for the complete implementation of the Strategy (Bachmann, 2012, p. 17). Therefore, the hypothesis that those nations which display top-level leadership in NSDS institutions will likely exhibit high levels of interdepartmental cooperation does not hold true in the case of Germany; hypothesis three cannot be substantiated.

Test of Hypothesis Four

Germany relied on the efforts of the well-established Federal Statistical Office to monitor and measure progress on the indicators outlined in the National SD Strategy. These Indicators Reports provide the government with one mechanism of quantitative feedback. Another major feedback tool is the biannual Progress Reports, which also serve as a means of policy revision once adopted and approved by the Parliament. These were deemed successful approaches to the monitoring, enforcement, and measurement of the National Sustainable Development Strategy. An assessment of the hypothesized relationship between the nation’s reliance on previous institutions of performance management and the effective monitoring and evaluation activities of the National SD Strategy is illustrated in the table below.

⁴⁹ This working group, called the Supporting Committee of Heads of Under-Directorates (UAL AG), is responsible for preparing for Green Cabinet meetings and processing a monitoring list of 120 measures to be fulfilled by their respective ministries. The work of the group is not published (Klaus, Knopf, Kahlenborn, & Damm, 2009).

Table 21: Test of Hypothesis Four on the National Sustainable Development Strategy of Germany

Hypothesis	Variables	Questions	Answers
In their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements are most likely to have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy.	Independent: History of performance management approaches and institutions	What previous strategies (or near equivalent) and processes have been undertaken, and how did the current strategy build on or link/related to these?	<ul style="list-style-type: none"> - Since 1984, FEA issues annual national environmental data reports; since 1999, available online (mostly in German) - UBA publishes environmental report every four years - SRU publishes biannual reports on environmental trends and data - FSO annual statistical yearbook published; since 1989, now includes Environmental Economic Accounting but not reflective of NSDS targets and indicators
		Did the strategy build capacity and build on existing knowledge and expertise?	<ul style="list-style-type: none"> - Three Enquete Commissions on environment in the 1980s-90s offer knowledge on interaction between society and nature in Germany; reports considered foundation for NSDS work in 2000s (Bauernfeind, 2014)
		How did the SDS process link and relate to existing regional, national and local strategies and planning processes and decision-making systems?	<ul style="list-style-type: none"> - For the first time, in 2008, the Länder and municipalities participated in the “formulation of a progress report itself” with submissions of independent chapter reports (Federal Chancellery, 2009) <ul style="list-style-type: none"> o Approximately 2,600 municipal and state Agenda 21 programs in place prior to NSDS (Federal Chancellery, 2009)
		What have been the related SD priorities of present and recent past governments?	<ul style="list-style-type: none"> - Until passage of the NSDS, sustainable development priorities were vague and symbolic—not formally enshrined in legislation (Straube, 2014)
	Dependent: Measurable targets, objectives, and indicators Data availability at the local, regional, and national levels	Are these frameworks efficiently monitored and enforced? At what levels?	<ul style="list-style-type: none"> - M&E activities undertaken by traditional measurement offices, with coordinated work of RNE, PBne, StA, UMK, and other organizations - Federal Statistical Office publishes Indicators Reports every two years
		What mechanisms and systems have been established to track and monitor strategy development processes?	<ul style="list-style-type: none"> - Since 2004, Progress Reports published every two years to evaluate outputs (policies and programs) of NSDS - In 2009, SD adopted as criteria for impact assessment for all new laws or regulations; guidelines published by Dept. of Internal Affairs
		What mechanisms and systems have been established to	<ul style="list-style-type: none"> - Since 2006, Indicators Reports published every two years to evaluate NSDS outcomes

		track and monitor strategy implementation – overall, and individual commitments?	<ul style="list-style-type: none"> - Autonomy and independence of M&E activities limited since oversight by governmental institutions (Federal Ministry for the Environment, 2002) - Since the adoption of 2008 Progress Report, federal “government ministries have voluntarily agreed to publish ‘departmental reports’ on their contribution to SD objectives in general, and to the objectives” of the NSDS explicitly (Berger & Steurer, 2009)
		What indicators have been included to measure progress in respect of strategy development and implementation?	<ul style="list-style-type: none"> - Most of the 21 indicators of the NSDS are “quantified and have timebound targets over the period 2010–2020. These indicators serve as a benchmark for compliance with a series of management rules. Most indicators are objectives, but the degree of achievement is also used for indicating the progress towards SD” (Swanson & Pinter, 2004)
		How effective, meaningful, adequate, and efficient are these progress measures?	<ul style="list-style-type: none"> - No consensus about the focus of the NSDS ministry “reports nor about the SD aspects which should be covered” so the concept and content of the reports vary (Berger & Steurer, 2009) <ul style="list-style-type: none"> o Reports not required to be made public or performed regularly, up to each ministry
		Is there available and adequate data to support the selected indicators?	<ul style="list-style-type: none"> - There is adequate data at all levels, but the inclusion of state and local governments should be improved to ensure accuracy and availability of information over time
		How and how often is progress being reported; and to whom?	<ul style="list-style-type: none"> - Since 2006, Indicators Reports (on outcomes) are published every two years - Since 2004, Progress Reports (on outputs) published every two years - “StA decides on the structure and on the final draft of the progress reports which are subsequently adopted by the German Cabinet. Moreover, the StA decides on all documents that are published to foster public debate on further NSDS development” (Berger & Steurer, 2009)
		Were integrated mechanisms for assessment, follow up, evaluation, and feedback	<ul style="list-style-type: none"> - The biannual Progress Reports serve as major feedback mechanism <ul style="list-style-type: none"> o Since 2008, groups and stakeholders invited to submit chapters to be included in

		established?	reports - Progress and Indicators Reports can also create binding changes once accepted by Parliament <ul style="list-style-type: none"> o Indicators Report of 2006 highlighted need to change some measures; changes made for 2008 Indicators Report
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As departments and agencies are now required to perform a Sustainability Check on proposed legislation, the environmental issues that may arise in government programs are more likely to be acknowledged and accounted for prior to passage. Also, the sustainability reports from the ministries are a positive step. However, requirements should be passed that these reports be made public and performed at regular intervals. Hypothesis four conjectured that in their NSDS, nations that rely on established monitoring, enforcement, and measurement arrangements are most likely to have the more effective monitoring, evaluation, and feedback systems for the National SD Strategy. Therefore, in the case of German, hypothesis four is validated.

Conclusions and Recommendations

Despite, or maybe because of, Germany's long history with environmental management, the nation struggled in its transition to the integrated paradigm of sustainable development. After overcoming the difficult challenges of unification, Germany refocused its national priorities; this included the shift to a sustainable path of development. With the election of the Red-Green Coalition government in 1998, Germany began its work towards a National Sustainable Development Strategy. After four years of development, drafts, consultation, and revision, the NSDS "Perspectives for Germany" was adopted.

Though public participation was lacking in the policy development phase, Germany has worked hard since that time to engage and involve stakeholders in the implementation of sustainable development activities. The efforts to engage local and state governments will also help encourage civil society groups to participate in the NSDS programs. The work to involve subnational governments has only recently begun, but due to the strong role of the Länder in German politics, this shift will surely lead to positive outcomes for all stakeholders involved. As Germany has a foundation of strong society groups and state and local governments, clear elements of government transparency are especially important. Recent additions to the NSDS guidelines to increase interdepartmental coordination, intergovernmental cooperation, public participation, and transparent monitoring indicate that Germany is motivated to produce the highest quality of sustainability legislation.

Chapter Nine: Conclusions, Recommendations, and Implications

Introduction

The concept of sustainable development is rooted in the notion that everything that humans require for their well-being depends, either directly or indirectly, on our natural resources and environment. The interdependence between the economy and the environment necessitates comprehensive and integrated policymaking which acknowledges the carrying capacity of this natural capital; this lies at the heart of the sustainable development paradigm.

Thus, at the 1992 Earth Summit, nations were urged to adopt a National Sustainable Development Strategy (NSDS) which would harmonize and integrate various economic, social, and environmental concerns throughout the policy development and implementation processes, while building upon existing institutions and legislation in the country. There have been five principles established that describe and differentiate an NSDS: 1.integrated economic, social, and environmental policies across sectors, territories, and generations; 2. country ownership and commitment; 3. broad participation and effective partnerships; 4. development of the necessary capacity and enabling environment; and 5. focus on outcomes and implementation (United Nations Division for Sustainable Development, 2012b).

In the twenty years since this conference, countries have accepted the notion of sustainable development and have worked to create and implement these National SD Strategies. However, little empirical investigation has been undertaken to assess the effectiveness of these policies, and this body research has been performed on an ad hoc

and informal basis. The research field lacks a replicable and empirical framework for the evaluation of National SD Strategies which aligns these five principles with specific variables and indicators; this study fills this gap in the literature.

This study presents a formal framework for the assessment and evaluation of National Sustainable Development Strategies in order to determine the effectiveness of their implementation. This approach is applied to two case studies, testing the relationships between key elements in the implementation of NSDSs. In doing so, the research identifies specific policymaking processes and implementation mechanisms that are necessary preconditions for an effective National Sustainable Development Strategy, and provides recommendations for future sustainable development policies.

The formal NSDS assessment framework presented in this research is used to answer the following critical questions: How do nations successfully identify, involve, and maintain the engagement of stakeholders throughout the creation, revision, and implementation processes of a National Sustainable Development Strategy? How does the national commitment of key resources influence the intergovernmental cooperation of a National Sustainable Development Strategy? How does the leadership of key NSDS institutions influence the level of interdepartmental cooperation at the national level? How do nations integrate current monitoring and enforcement institutions and approaches to design an effective evaluation and feedback system for a National Sustainable Development Strategy? The answers to these questions identify the connections between the critical dimensions of an NSDS in two very different national contexts.

Empirical findings and conclusions

While the two nations differ in significant ways, the implementation of the German and the South African National Sustainable Development Strategies share common successes and challenges. First, the presence of previous environmental policies and institutions can serve to hinder the implementation of an NSDS. These existing elements present a challenge in embedding the NSDS in the nation, both legislatively and organizationally. The integration of the NSDS in the existing political and administration country systems appears to be common in both nations studied.

Second, the strong role of subnational government organizations must be accounted for and made use of in the execution of the National Strategy. In order to effectively fulfil their tasks, state and local governments require clarity regarding responsibilities and authority in various processes of the NSDS and transparency in the specific sources of support (financial, human, spatial, etc.). Most significantly in this regard, there must be a strong national government commitment to developing administrative capacity throughout all levels and sectors of government.

Third, the chief NSDS institutions established in the policy should be led by a major political figure such as the Offices of the President, Chancellor, or Prime Minister. But this top-level leadership, while necessary, is not sufficient to ensure interdepartmental cooperation in the implementation of these strategies. The cooperation and coordination of departments and ministries requires incentives for sustainability integration and disincentives for fragmented governance. These departmental integration

efforts should be overseen by the national NSDS leadership, established in legislation, and embedded in budgetary processes.

Finally, monitoring and enforcement activities of the National Sustainable Development Strategy should differentiate between outputs and outcomes; the first regards the policy and program products of the legislation and the latter refers to the results of these activities. While relying on the traditional governmental institutions and organizations that monitor government activities, the NSDS could also benefit from independent, nonpartisan, and unbiased evaluations such as the international peer review process or the work of non-governmental M&E organizations. By coordinating with institutions such as these, the results of the NSDS assessments may convey greater reliability and validity. The application of the formal framework introduced in this study offers one example of an independent evaluation technique which could be utilized for NSDS assessments.

Theoretical and Policy Implications

A National SD Strategy is one tool that a nation can use in its shift onto a more sustainable path of development, benefitting its current citizens and future generations. Therefore, it is vital to examine the effectiveness of the execution of these policies and make suggestions for their improvement. By providing a formal assessment framework to better understand a nation's progression in the implementation of a National Sustainable Development Strategy, this research benefits policymakers and bureaucrats, practitioners and politicians, and civil society groups and citizens, both present and future.

Recommendations

The findings of this research offer policymakers and administrators with practical information and examples of coordinated and integrated action for sustainable development implementation, as well as recommendations for advancement and improvement of these activities. The research presented here offers an in-depth evaluation of two NSDSs within their respective country contexts. This analytical framework can be replicated over time and applied to other nations or regions looking to assess their National SD Strategy. If undertaken several times in the same nation over several years, this investigatory framework can help to gauge the growth and progress towards the effective implementation of a National Sustainable Development Strategy.

Conclusion

Successful National Sustainable Development Strategies have the capacity to put in place a new paradigm of policymaking, one which integrates social, environmental, and economic concerns throughout the decision making and implementation processes, built with the ongoing participation of a broad range of stakeholders. This research is the first in the field to present a formal framework for the assessment and analysis of these Strategies, while accounting for unique national contexts and constraints.

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Appendices

Table 22: List of Documents Utilized for Assessment of South Africa's National Sustainable Development Strategy

Year	Author and Publisher	Title
1994	Office of the President	Reconstruction and Development Plan (RDP): White Paper on Reconstruction and Development
1996	Department of Environmental Affairs and Tourism (DEAT)	Green Paper on an Environmental Policy for South Africa: Paper for Public Discussion
1996	United States Library of Congress, Federal Research Division	A Country Study: South Africa
1997	Ministry for Provincial Affairs and Constitutional Development	Green Paper on Local Government
1997	United Nations Division for Sustainable Development (UNSD)	Progress Report on South Africa's Program on the Testing of Indicators of Sustainable Development
1998	United Nations (UN)	Results from Testing of CSD Indicators of Sustainable Development in South Africa: 1998
1998	DEAT	White Paper on Environmental Management Policy for South Africa
1998	Office of the President	National Environmental Management Act
1998	DEAT	Report Submitted by South Africa to the Fourth International Workshop on the CSD Indicators of Sustainable Development
1999	DEAT	State of the Environment: South Africa 1999 Overview
2000	UNSD	Pre- World Summit on Sustainable Development National Report
2002	DEAT	South African School Guide for Producing a State of Environment Report
2002	UNSD	Johannesburg Summit 2002 Country Profiles: South Africa
2002	DEAT	Environmental Indicators for National State of the Environment Reporting
2002	DEAT and Council for Scientific and Industrial Research (CSIR)	Provincial and Local Government SOE Training Manual
2002	Ferrier and Lloyd, Public Administration and Public Policy Journal	Developmental Issues and Environmental Policy in South Africa
2003	UN Development Program (UNDP)	South Africa HDR Report. The Challenge of SD in South Africa: Unlocking People's Creativity
2004	DEAT	Development of a Core Set of Environmental Performance Indicators: Final Report and Set of Indicators
2004	DEAT	Strategic Environmental Assessment
2004	DEAT	DEAT Ten Year Review
2005	DEAT	An Assessment of Provincial and Local Authorities' (Municipal) SOERs
2005	DEAT	State of Environment Reporting: Guidelines for Municipalities
2005	DEAT	National State of the Environment Project, Environmental Governance. Background Research Paper
2005	DEAT	Environment Outlook: A Report on the State of Environment of South Africa. Part One, Setting the Scene

2005	DEAT	Environment Outlook: A Report on the State of Environment of South Africa. Part Two, State of the Environment
2005	DEAT	Country Report to Fourteenth Session of the United Nations Commission on Sustainable Development
2006	DEAT	South Africa Environment Outlook: A Report on the State of the Environment
2006	DEAT	Outcomes of the Stakeholder Consultations on Environmental Performance Indicators for local level reporting
2006	DEAT	Provisional Environmental Headline Indicators
2006	DEAT	National Framework for Sustainable Development: Publication for Comment
2007	DEAT	State of the Environment Reporting (SoER) Toolkit
2007	DEAT	DEAT Annual Report 2006-2007
2007	DEAT	NEMA Amendment Bill [B36-2007]: public hearings
2008	DEAT	Strategic Plan for the Environmental Sector, 2008-2013
2008	DEAT	People - Planet - Prosperity: A National Framework for Sustainable Development in South Africa
2008	DEAT	Environmental Sustainability Indicators: Technical Report
2008	UN Economic Commission for Africa	Sustainable Development Report on Africa: Five-Year Review of the Implementation of the World Summit on Sustainable Development Outcomes in Africa (WSSD+5)
2008	South African Development Community (SADC)	South African Environmental Outlook
2008	Du Plessis, SA Public Law Journal	Legal mechanisms for cooperative governance in South Africa: Successes and failures
2009	Office of the President	Green Paper: National Strategic Planning
2009	DEAT	Strategic Plan for the Environmental Sector, 2009-2014
2009	DEAT	Ministerial & DEAT briefings: Strategic Plan 2009-2012
2009	DEAT	DEAT Annual Report 2008-2009
2009	DEAT	Environmental Sustainability Indicators: Technical Report
2009	DEAT	National Environmental Compliance and Enforcement Report 2008-9
2009	Development Bank of South Africa (DBSA)	What Works for Us: A South African Country Report on Tactics, Tools and Methods for Integrating Environment and Development
2009	Funke, Shaxson, and Bielak, CSIR	Evidence-Based Policy for Environmental Sustainability: A Path Forward for South Africa
2009	DEAT	Fifteen Years: A review of the Department of Environmental Affairs and Tourism
2010	DEAT	National Greening 2010 Framework
2010	Ministries of Economic Development, Environmental Affairs, Science and Technology, and Trade and Industry; South African Local Government Association (SALGA); South	Green Economy Summit Report

	African Cities Network	
2010	Republic of South Africa	National Strategy and Action Plan for Sustainable Development (DRAFT 1)
2010	National Planning Commission (NPC)	National Development Plan 2030: Our future, make it work
2010	NPC	Publication of the Revised Green Paper: National Planning Commission
2010	Department of Environmental Affairs (DEA) ⁵⁰	DEA Annual Report 2009-2010
2010	DEA	Environmental Sector Skills Plan for South Africa: A Systems Approach to Human Capacity Development and Sector Skills Planning, Summary Document Based on a More Comprehensive Series of Working Papers
2010	DEA	Environmental Sustainability Indicators: Technical Report
2010	NPC	Development Indicators Report
2010	Office of the President	Guide to the Outcomes Approach
2010	Peter and Swilling, DBSA	Greening the South African Growth Path: Challenges, Prospects and Trajectories
2010	DEA	National Environmental Compliance and Enforcement Report 2009-2010
2011	Economic Development Department	New Growth Path: Accord 4: Green Economy Accord
2011	DEA	National Strategy for Sustainable Development and Action Plan (NSSD 1), 2011-2014
2011	DEA	DEA Annual Report 2010-2011
2011	Statistics South Africa	Census 2011: Provinces at a Glance
2011	Statistics South Africa	Census 2011: Municipalities at a Glance
2011	Statistics South Africa	Census 2011: Statistics in Brief
2011	DEA	National Environmental Compliance and Enforcement Report 2010-2011
2011	DEA	Environmental Sustainability Indicators: Technical Report
2011	Integrated Reporting Committee (IRC) of South Africa	Framework for the Integrated Reporting and the Integrated Report: Discussion Paper
2012	DEA	Technical Performance Indicator Descriptions for the 2017-18 Strategic Plan and 2012-13 Annual Performance Plan
2012	DEA	Environment Sector Research, Development and Evidence framework
2012	DEA	Publication of Need and Desirability Guideline in Terms of the Environmental Impact Assessment Regulations, 2010
2012	DEA	DEA Annual Report 2011-2012
2012	Statistics South Africa	The South Africa I Know, The Home I Understand: Census Report
2012	NPC	Development Indicators Report
2012	DEA	South Africa Yearbook 2011/12: Environment

⁵⁰ In 2009, the DEAT was reorganized and renamed as the Department of Environmental Affairs (Department of Environmental Affairs, 2015).

2012	Sustainable Governance Indicators (SGI)	Governance Capacities in the BRICS
2012	DEA	The Green Economy: Does It Include You? Your Handy Guide to the Green Economy
2012	DEA	Environmental Sustainability Indicators: Technical Report
2013	DEA	DEA Medium Term Strategic Plan: 01 April 2013 - 31 March 2018
2013	UNEP	Green Economy Modelling Report of South Africa: Focus on Natural Resource Management, Agriculture, Transport and Energy Sectors
2013	DEA	DEA Annual Report 2012-2013
2013	DEA	Environmental Impact Assessment and Management Strategy for South Africa: Progress to Date
2013	Organization for Economic Cooperation and Development (OECD)	OECD Environmental Performance Reviews
2013	DEA	National Environmental Compliance and Enforcement Report 2012-2013
2013	Rennekamp, Energy Research Center, University of Cape Town	Sustainable Development Planning in South Africa: A Case of Over-Strategizing?
2014	DEA	Celebrating 20 Years of Democracy
2014	Thierry and Giordano, Planning Theory & Practice Journal	Multi-Level Integrated Planning and Greening of Public Infrastructure in South Africa
2014	DEA	National Environmental Compliance Report 2013-14
2014	DEA	DEA Strategic Plan 2014-2019
2014	DEA	Technical Performance Indicator Descriptions for the 2014-2019 Strategic Plan
2014	DEA	DEA Annual Report 2013-14
2014	DEA	National Strategy for Sustainable Development (NSSD1): Monitoring and Evaluation Second Draft Report

Table 23: List of Documents Utilized for Assessment of Germany's National Sustainable Development Strategy

Year	Author and Publisher	Title
1993	Organization for Economic Cooperation and Development (OECD)	OECD Environmental Performance Review: Germany
1997	Federal Environmental Agency	Sustainable Germany: Towards an Environmentally Sound

	(FEA)	Development
1997	United Nations (UN)	Interim Report on Testing UN Indicators of Sustainable Development in Germany
1998	Advisory Council on the Environment (SRU)	Environmental Report 1998: Environmental Protection: Securing Achievements-Breaking New Ground
1998	UN	Report on Testing UN Indicators of Sustainable Development in Germany
1999	FEA	FEA Annual Report
2000	FEA	FEA Annual Report
2000	United Nations Division for Sustainable Development (UNSD)	Pre-World Summit on Sustainable Development National Report
2000	SRU	Environmental Report 2000: Beginning the Next Millennium
2001	Hauff, Council for Sustainable Development (RNE)	Sustainable Development: From Slogan to Political Strategy
2001	FEA	FEA Annual Report 2001
2001	Jänicke, Martin; Jörgens, Helge; Jörgensen, Kirsten; and Nordbeck, Ralf, OECD	Governance for Sustainable Development in Germany: Institutions and Policy Making
2001	RNE	Statement on the German government's pilot projects for sustainable development
2002	FEA	Integrated Environmental Monitoring: Concept and Implementation
2002	Müller, RNE	The Status of Social Topics in the National Strategy on Sustainability
2002	RNE	Statement on the National Strategy on Sustainability of the German Government
2002	Schroder, Federal Chancellery (BK)	Speech given by Chancellor Schröder at a conference "Strategy for Germany – Mission for Johannesburg" held by the Council on Sustainable Development
2002	UN	Johannesburg Summit 2002 Country Profiles: Germany
2002	UN	National Assessment Report for the World Summit on Sustainable Development: Germany
2002	OECD	OECD Environmental Performance Review: Germany
2002	FEA	Environmental Data: Germany 2002
2002	BK	Perspectives for Germany: Our Strategy for Sustainable Development
2002	SRU	Environmental Report 2002: Towards a New Leading Role
2003	FEA	A Guide to Environmental Institutions in Germany
2003	Schoer, Federal Statistical Office (FSO)	The Role of the National Accounts and its Satellite Systems for the German National Strategy for Sustainable Development
2004	FEA	Environmental Health in Germany: Everyday Examples
2004	Kern, Kristine; Koll, Claudia; and Schophaus, Malte, Social Science Research Center Berlin	Local Agenda 21 in Germany: An Inter- and Intranational Comparison
2004	RNE	Responses to Questionnaire on the European Union Sustainable Development Strategy (EU SDS)
2004	European Commission	National Sustainable Development Strategies in the European Union: A first analysis by the European Commission
2004	Bachmann, RNE	Progress Report 2004. Perspectives for Germany: Our Strategy for Sustainable Development

2005	RNE	NSDS Formulation and Implementation in Europe: Experiences and Good Practises
2005	Niestroy, European Environment and Sustainable Development Advisory Councils (EEAC)	Sustaining Sustainability: a Benchmark Study on National Strategies Towards Sustainable Development and the Impact of Councils in Nine EU Member States
2005	FEA	FEA Annual Report 2005
2005	FEA	Data on the Environment: The State of the Environment in Germany 2005
2005	RNE	In Unerring Pursuit of the Recurrent Theme. Statement on the 2004 Progress Report
2005	RNE	Germany Road Map for Sustainability 2005: Appraisal and Perspectives
2006	FEA	FEA Annual Report 2006
2006	FEA	FEA Introductions
2006	FEA	FEA: What We Do
2006	FSO	Sustainable Development in Germany: Indicator Report 2006
2006	Hauff, RNE	Early Warning and Long Term Sustainability
2006	UN	Federal Republic of Germany: Public Administration Country Profile
2007	Bachmann, RNE	Communicating Sustainability: The Case of the German Council for SD
2007	Tils, Environmental Policy and Governance Journal	The German Sustainable Development Strategy: Facing Policy, Management and Political Strategy Assessments
2007	FEA	Environmental Data for Germany: Practicing Sustainability – Protecting Natural Resources and the Environment
2007	Hauff, RNE	Brundtland Report: A 20 Years Update
2007	FEA	Scientific Assessment and Evaluation of the Indicator Ecological Footprint
2007	Ministry for Economic Cooperation and Development (BMZ)	Social and Ecological Market Economy Principles in German Development Policy
2007	Ministry for Education and Research (BMBF)	Economics for Sustainability
2007	BMZ	Sustainable Energy for Development: Sector Strategy Paper
2007	Topfer, RNE	Meeting Global Challenges: The Contribution of SD Strategies
2007	FSO	Sustainable Development Indicators and Environmental-Economic Accounting
2008	EEAC	Sustaining Europe for a Long Way Ahead: Making long-term sustainable development policies work
2008	BMZ	Biological Diversity Report
2008	US Library of Congress	Country Profile: Germany
2008	BMBF	Social-ecological Research Framework Concept 2007-2010
2008	FSO	Sustainable Development in Germany: Data on the Indicator Report 2008
2008	FEA	National Report to the Sixteenth Session of the Commission on Sustainable Development
2008	BK	Progress Report 2008 on the National Strategy for Sustainable Development for a Sustainable Germany
2008	RNE	Sustainability—the Unfinished Business Challenges in International Cooperation

2008	RNE	Which lights are on red? Update on the 21 indicators in Germany's Sustainability Strategy—based on the 2006 indicator report of the Federal Statistical Office
2008	SRU	Environment Report 2008: Environmental protection in the shadow of climate change
2008	Statz	The German National Sustainable Development Strategy: Progress and Perspectives
2009	FEA	Concept for a Future Climate Policy: Plotting a New Course in 2009
2009	Stigson, BK	Germany: State Secretaries' Committee for Sustainable Development
2009	FEA	Analysis of the Yale Environmental Performance Index (EPI)
2009	BMBF	Keeping the Blue Planet Green: German ideas for sustainable solutions in environmental technologies
2009	BMBF	Research for Sustainable Development: Framework Programme of the German Federal Ministry of Education and Research
2009	RNE	Draft Profile on National Sustainable Development Strategies
2009	RNE	Maturing the Sustainability Strategy: Statement regarding the 2009 review of the European Union Strategy for Sustainable Development, EU SDS
2009	BK	Background Report for the Peer Review of German Policies for Sustainable Development
2009	BK	Peer Review on Sustainable Development Policies in Germany
2009	Stigson, World Business Council for SD	Sustainable Development in Germany: Conclusions from the Peer Review of Sustainable Development Policies
2009	FEA	Data on the Environment: Edition 2009
2010	FEA	What Matters in Germany
2010	FSO	Sustainable Development in Germany: Indicator Report 2010
2010	BK	Germany Basic Law Constitution
2010	Haber, RNE	Inconvenient ecological truths: A perspective on sustainability in the 21st Century
2010	BMBF	Corporate Social Responsibility from a Development Policy Perspective
2010	BMBF	Study and Research on Sustainability in Germany
2010	RNE	Strategic Cornerstones for Sustainable Development in Municipalities
2010	EconSense	Position Paper on the Commission Working Document: Consultation on the Future "EU 2020" Strategy
2011	OECD	OECD Environmental Performance Review: Germany
2011	Bachmann, RNE	Long-term planning as part of political decision making
2011	FEA	What Matters in Germany
2011	FEA	Data on the Environment: Edition 2011
2011	BMZ	Green Economy
2011	Parliamentary Advisory Council on Sustainable Development (PBnE)	Parliamentary Advisory Council on Sustainable Development Position Paper: Prospects for sustainable mobility – ensuring mobility for the future
2011	Bachmann, RNE	The German Sustainability Code. A New Approach Linking Economy and Society onto the Pathway to Sustainability
2011	Bachmann, RNE	Governance for Sustainable Development. Framing "Rio".

2011	PBnE	Communication from the Parliamentary Advisory Council on Sustainable Development: European Sustainable Development Strategy
2011	PBnE	Report by the Parliamentary Advisory Committee concerning the sustainability impact assessment in the context of regulatory impact assessments and optimisation of the procedure
2011	PBnE	United Nations Conference on Sustainable Development (Rio+20): Implementing sustainability on a global scale
2011	United Nations Organization for Education, Science, and Culture (UNESCO)	UN Decade of Education for Sustainable Development 2005–2014: National Action Plan for Germany
2012	FEA and BMZ	Committed to Biodiversity: Germany's International Cooperation to Implementing the Convention on Biological Diversity for Sustainable Development
2012	FEA and BMZ	Sustainable Energy for Sustainable Development: The German Contributions
2012	BMBF	Economics for Sustainability II: Further development of sustainability economics
2012	BMBF	Understanding – Evaluating – Shaping. Transdisciplinary Knowledge for a Sustainable Society: Memorandum on the Development of Social-Ecological Research in Germany
2012	OECD	OECD Economic Surveys Germany
2012	Hascic, OECD	Environmental Innovation in Germany
2012	OECD	Test of the OECD Set of Green Growth indicators in Germany
2012	BK	National Sustainable Development Strategy: 2012 Progress Report
2012	RNE	What we did in 2012 and what we are up to in 2013 A quick overview for interested parties
2012	OECD	OECD Environmental Performance Review: Germany
2012	Bachmann, RNE	Accelerating Implementation by Scaling up of Good Practices
2012	European Sustainable Development Network	Germany: Basic Overview
2012	FSO	Sustainable Development in Germany: Indicator Report 2012
2012	RNE	The German Sustainability Code (GSC): Recommendations of the German Council for Sustainable Development
2012	BK	10 Years of Sustainability “made in Germany” National Sustainable Development Strategy
2012	BK	National Sustainable Development Strategy 2012 Progress Report
2012	SRU	Environmental Report 2012: Responsibility in a finite world. Summary for Policymakers
2012	Bachmann, RNE	Germany's Council for Sustainable Development and the German Case of Framing National SD Policies
2012	SRU	Respecting environmental limits – A challenge for the 7th Environmental Action Programme
2012	RNE	Multi-stakeholder forum "German Sustainability Code" (GSC) of the German Council for Sustainable Development)
2012	EconSense	The Opportunities and Challenges of Sustainability Ratings and Rankings, EconSense discussion paper
2012	RNE	Linking the GSC with UN, OECD, etc.
2012	Bachmann, RNE	Germany's Council for Sustainable Development and the

		German Case of Framing National SD Policies
2013	RNE	Green Economy: Ten Requirements Invitation to Dialogue
2013	BMZ	Participating, engaging, making a difference: Strategy on working with civil society in German development policy
2013	RNE	Work Programme of the Council for Sustainable Development until June 2016 and Working Steps in 2014
2013	RNE	Rules of Procedure of the Council for Sustainable Development
2013	RNE	For a New Start in Sustainability Policy: Opinion of the Council for Sustainable Development Concerning the Report of the Peer Review 2013, "Sustainability – Made in Germany"
2013	BK	Sustainability-- Made in Germany: The Second Review by a Group of International Peers
2013	RNE	Analysis of the Implementation and Effectiveness of the German Sustainability Code: A Review
2013	Bachmann, RNE	Sustainable Development Goals: towards smart governance
2013	RNE	Making Energiewende a Success Story Thanks to Strong Local Authorities
2014	Bachmann, RNE	Germany is a Developing Country
2014	RNE	In a nutshell: information on recent work items and modalities
2014	FEA	Towards Sustainable Development Goals: Working Paper
2014	BMZ	Sustainable Energy for Development: German Development Cooperation in the Energy Sector
2014	PBnE	Statement of the Parliamentary Advisory Council on Sustainable Development on the Report of the 2013 Peer Review on the National Sustainable Development Strategy "Sustainability – Made in Germany"

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PUBLICATIONS AND PRESENTATIONS

Emas, Rachel. "Public Administration Education and Training around the World: A Review of Selected Institutional Case Studies", in *In Quest of Excellence: Papers Prepared for the UN/IASIA Task Force on Standards of Excellence for Public Administration Education and Training*, ed. Allan Rosenbaum. 2015.

Emas, Rachel. "Principles in Practice: Progress to Date on the International Accreditation of Public Administration Education and Training Programs" International Association of Schools and Institutes of Administration Annual Conference. July 7, 2014. Paris, France.

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Emas, Rachel. "Smarter Government 2014" American Society for Public Administration Annual Conference. March 16, 2014. Washington, D.C.

Emas, Rachel. Ph. D. Student Panelist. Florida International University-Ecole Nationale D'Administration Seminar. March 3, 2014. Miami, Florida.

Emas, Rachel. "Driving Green Vehicle Sales in the United States" International Sustainable Development Research Conference. July 2, 2013. Stellenbosch, South Africa.

Emas, Rachel. "What is Driving Alternative Fuel Vehicle Sales in the U.S.?" International Association of Schools and Institutes of Administration Annual Conference. July 23, 2012. Bangkok, Thailand.

Emas, Rachel. "Are State-Level Incentives Driving Alternative Fuel Vehicle Sales in the U.S.?" American Society for Public Administration Annual Conference. March 2, 2012. Las Vegas, Nevada.

Emas, Rachel. Ph. D. Student Panelist. Florida International University-Ecole Nationale D'Administration Seminar. September 15, 2011. Strasbourg, France.

Emas, Rachel. "Brazil's Successful Administration of the Clean Development Mechanism" International Association of Schools and Institutes of Administration Annual Conference. June 14, 2011. Rome, Italy.

Emas, Rachel. "Green Jobs in the U.S.: Which States Have the Comparative Advantage?" American Society for Public Administration Annual Conference. March 15, 2011. Baltimore, Maryland.

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