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ABBREVIATIONS

AAAFD	Addis Ababa Action Agenda on Financing for Development
APOS	Archdiocese of Port of Spain
AEC	Antilles Episcopal Conference
ASOE	Assessment of the State of the Environment
CCJJ	Catholic Commission for Social Justice
CST	Catholic Social Teaching
CENRP	CARICOM Common Environmental and Natural Resource Policy
CSDC	Compendium of the Social Doctrine of the Church
CCAP	CARICOM Common Agricultural Policy
CCFP	CARICOM Common Fisheries Policy
CRFADRCC	CARICOM Regional Framework for Achieving Development Resilient to Climate Change
ECLAC	Economic Commission for Latin America and the Caribbean
EMA	Environmental Management Authority
FGD	Focus Group Discussions
FI	Franciscan Institute
GEO	Global Environment Outlook
GoRTT	Government of Republic of Trinidad and Tobago
ILO	International Labour Organisation
ISDR	International Strategy for Disaster Reduction
LS	Laudato Si
LDNTSP	Land Degradation Neutrality Target Setting Programme
MPU	Ministry of Public Utilities
NAIWP	National Water Improvement Project (NAIWP)
NEP	National Environmental Policy
PACC	Paris Agreement on Climate Change
RN	Rerum Novarum

RC	Rotary Club
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
SIDS	Small Island Developing States
SCT	Social Capital Theory
TCL	Trinidad Cement Limited
UCC	Upper Corosal Community
UNDP-LAC	United Nations Development Programme for Latin America and Caribbean
UNEP	United Nations Environment Programme
UNFCCC	The United Nations Framework Convention on Climate Change
WASA	Water and Sewerage Authority
WSDTT	Working for Sustainable Development in Trinidad and Tobago

ABSTRACT

The environment continues to assume global prominence as solutions to its wanton destruction are unceasing. Thus, the study's preoccupation of "Assessing Environmental Degradation in Vulnerable Communities from the Perspectives of Laudato Si: A Case Study of Corosal Community" confirms the global efforts to protect the environment as stipulated in the Sustainable Development Goals (SDGs).

Employing Laudato Si (LS) (On Care for our Common Home) as the primary document in understanding the on-going destruction of the earth (environment), the study uses Corosal community as a case study, and consequently reviews other relevant documents to investigate the presence of environmental degradation in Corosal.

The study concludes with evidence via interviews, that, indeed environmental degradation is present in the community, driven largely by human activities in the areas of agriculture, mining and quarrying, waste disposal, wanton disrespect to the environment, amongst others; coupled with its development plights. The community's vulnerability is seen in the attendant impacts of the phenomenon; and consequently, identifies important stakeholders such as the Catholic Church, Franciscan Institute (FI), Rotary Club (RC), Trinidad Cement Limited (TCL), amongst others, for their interventions.

The study recommends that, the community adopts best environmental governance practices in ensuring responsible and sustainable agricultural activities and finally engaging extractive companies whose operations impair the community's environment, to review their operations as stipulated by the guidelines of Environment Management Authority (EMA), the National Environment Policy (NEP) blueprint and LS principles.

Key Words: Environmental degradation, Laudato Si, Vulnerability, Catholic Church, Sustainable Development Goals (SDGs)

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INTRODUCTION

The environment and its related products had and continue to provide humankind's needs, especially for the latter's sustenance. This relationship is profound in its ability to ensure human progress and development. Indeed, human progress and development do not occur in a vacuum, but within the confines of the environment which provides the resources for the realisation of development aspirations. This inseparability finds profound expression in The Brundtland Commission's *Environment and Development: Our Common Future* report, which asserts that: "The 'environment' is where we live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable" (Brundtland Commission Par. 14).

However, this copacetic relationship is threatened by humankind's insatiable desire to develop at an exponential rate potentially ignoring the integrity of the environment and the environment's capacity to contain these human activities. Thus, the result is the constant degradation of the environment leading to the gradual loss of its integrity and carrying capacity to serve the needs of present and future generations.

The Economic Commission for Latin America and the Caribbean (ECLAC) defines environmental degradation as "The reduction of the capacity of the environment to meet social and ecological objectives and needs" (284). This definition portends that the environment has both social and ecological dimensions which should be taken into consideration when planning any development interventions, so that, their effects on both people and the ecology are significantly reduced. Indeed, development interventions do not happen in a vacuum but rely on the natural environment for their resource provisioning. For example, in 2014, the International Labour Organisation (ILO) estimated that the natural environment such as the ecosystems supported about

1.2 billion employment opportunities representing 40% for individuals, communities, and organisations (7). The effects of environmental degradation are real, and vulnerable communities that are prone to the phenomenon are at the receiving end of increasing climate change, landslides, pollution of all forms -: air, land, water, loss of biodiversity, deforestation, amongst others.

Globally, as indicated by the sixth Global Environment Outlook (GEO-6) in 2019 on the theme “*Healthy Planet, Healthy People*” under the auspices of the United Nations Environment Programme (UNEP) evidently states that unchecked human activities pose threats to the earth’s ecosystems and subsequent degradation of the ecological foundations as seen in continuous temporal and irreversible damages leading to pollution of the air, water, biodiversity, ocean and land (UNEP 4).

Hosting 57% of the world’s primary forest, the United Nations Development Programme for Latin America and the Caribbean (UNDP-LAC) estimates that the region is imperative as a driver in the biodiversity and conservation (7). Subsequently, this enviable natural wealth of the region continues to be threatened by human activities. Indeed, these human activities seen in pronounced urbanisation, unsustainable agricultural practices and mineral extractions continue to impose irreversible damages on the environment to the extent that the region’s 9.68% forested area continues to be depleted since 1990 (UNDP-LAC 9). Indeed, the Sustainable Development Goals (SDGs) which is “a transformative vision for economic, social and environmental development” (ECLAC 5) provides opportunity for national governments to respond forcefully to these development challenges to improve the lives of their citizens.

In Trinidad and Tobago, the *Working for Sustainable Development in Trinidad and Tobago’s* (WSDTT) document of the Government of Republic of Trinidad and Tobago (GoRTT) outlines environmental issues and challenges confronting the country in the areas of climate

change and sea level rise, natural and anthropogenic (man-made) hazards, management of wastes, coastal and marine resources, freshwater resources, energy resources, tourism resources, biodiversity resources and transportation (49). GoRTT's *Land Degradation Neutrality Target Setting Programme (LDN-TSP)* document further outlines the historical antecedent of environmental degradation in the country by identifying economic development and human population as main factors (11).

Land as a resource is imperative for overall development. Therefore, its degradation portends deterioration and significant loss of the natural ambience where soil productivity, ecosystem, biodiversity, amongst others are compromised with local and global implications in the areas of food insecurity, water scarcity, climate change, and biodiversity conservation (LDN-TSP 11). Indeed, 58.3% of the country's land area is degraded with about 10.7% being stable land area (LDN-TSP 3).

Indeed, the state of the country's environment is periodically assessed by the Environmental Management Authority (EMA) via its Assessment of the State of the Environment (ASOE) report. For example, EMA's 2021 report reveals that bush fires or open burning in the country reduced by 70% (1); and furthermore, revealing 1,614 occurrences of natural hazards of flooding and landslides (4).

Furthermore, in Trinidad and Tobago, the environment and its management, captured in the National Environmental Policy (NEP) reveals the environmental situation of the country. Thus, the policy provides the country and its stakeholders the blueprint for environmental management (NEP 2). Subsequently, NEP acknowledges the environmental challenges confronting the country as it pursues sustainable development initiatives within these constraints (7).

This environmental outlook should elicit responses from governments, stakeholders, and organisations working in the environmental governance space to address the phenomenon of environmental degradation. The Catholic Church's role and response as an important stakeholder in the environmental space and overall development of the human person cannot be overemphasised.

The Catholic Church prides itself as the “voice of the poor and the vulnerable” of society. The Church understands this role from the perspective of a holistic human development -: spiritual, physical, intellectual, cultural, economic, environmental, amongst others, that affect the human person.

Indeed, responding and bringing to the fore the plight of the poor and vulnerable people in the advent of the industrial revolution was the Papal encyclical, *Rerum Novarum* (RN) in 1891. It advocates for better conditions for poor and vulnerable workers overwhelmed by the excesses of capitalism (O'Brien & Shannon 14). Akin to *Rerum Novarum* (RN) is Pope Francis' encyclical, *Laudato Si* (LS) in 2015, which amongst other things, forcefully advocates for the protection and care of the earth (environment) as “our common home” in response to the cries of the earth for the harm being inflicted to it by humankind's irresponsible activities (LS 6). The exploitation perpetuated and being perpetuated to the environment by activities of countries, corporations, communities and individuals is causing unprecedented catastrophes, hence the environment's degradation.

For agrarian communities in Trinidad and Tobago, especially those endowed with natural resources whose livelihoods are dependent on the environment, environmental degradation is a reality; and overwhelmingly threatening their livelihoods, dignity, as well as their entire social and cultural patterns. A case in point is Corosal community.

In Corosal, a community of about 300 inhabitants and endowed with natural resource for cement production in Central Trinidad, community members are experiencing the realities of environmental degradation. Human activities, especially those spurred by mining operations and agriculture are polluting water bodies, degrading land, causing excessive soil erosion, occasional landslides, illegal dumping of waste, forest fires and climate change are eroding economic gains and dignity of the people (Ishmael, “Interview”).

From the prism of *Laudato Si* (LS), this calls for urgent actions to reverse the threats to livelihoods and overall wellbeing of community members. Albeit the community continues to invoke its communal spirit in addressing some of these challenges, its strengths cannot overcome these herculean challenges without external support and partners, for which the Catholic Church’s role is imperative. Therefore, seeking environmental dialogue with partners is appropriate as the encyclical advocates for “...a new dialogue about how we are shaping the future of our planet. We need a conversation which includes everyone, since the environmental challenge we are undergoing, and its human roots, concern and affect us all” (LS 10).

Indeed, the Church’s lead role is plausible and manifested in its time-tested hierarchical governance structures, that is, bottom-up approach, which it uses in its advocacy and engagement with oppressed people and communities, especially within the liberation theology circles, where the See-Judge-Act methodology is imperative.

With respect to Corosal community, it hosts the Good Shepherd Catholic Church, which is under Tortuga Parish. Tortuga Parish is under the Central vicariate which is consequently under the Archdiocese of Port of Spain (APOS) as the chief (mother) Church at the national level. The Archdiocese of Port of Spain belongs to the regional Episcopal conference of Bishops called the Antilles Episcopal Conference (AEC), headquartered in Kingston, Jamaica.

Therefore, these governance structures enable the Church to possess primary information about the plights of vulnerable people and communities, especially from the grassroot level; enough to convince, and engage other stakeholders such as the Government of Trinidad and Tobago and environmental groups to understand the plights of vulnerable communities like Corosal community. Consequently, rallying these stakeholders in fashioning out and implementing environmental governance initiatives to insulate Corosal community from the effects of environmental degradation is appropriately feasible.

Thus, the Church's role and intervention, foremost expected, are informed by its Catholic Social Teaching (CST); which primarily respect the dignity of the human person and therefore, will not condone any activities that would compromise on the dignity and livelihoods of vulnerable people and communities like Corosal.

Rationale

This study aims at exploring the presence of environmental degradation and associated impacts in Corosal community; and how it can be addressed by Government and stakeholders. Indeed, by the merits of its role as a potent voice, the Catholic Church assumes the position of a worthy stakeholder, advocating for vulnerable people and communities like Corosal. Protecting the environment (earth), God's gift, is the Church's foremost preoccupation as its steward by noting that "...The urgent challenge to protect our common home includes a concern to bring the whole human family together to seek a sustainable and integral development, for we know that things can change" (LS 10). The study also seeks to bring to the fore the importance of partnership in addressing development challenges, especially environmental degradation. The Church's role means that should appropriate environmental initiatives be embarked upon by stakeholders,

environmental degradation can be reduced; and consequently, reverse activities that might compromise the dignity and livelihoods of Corosal community (cf. 2 Thes 3:10).

Parameters

The study focuses on assessing environmental degradation in vulnerable communities with Corosal being a case study from the perspectives of *Laudato Si* (LS). The impacts of environmental degradation, albeit with local, national and global dimensions, are only limited to Corosal Community. The study also demonstrates the resilience of Corosal community and how stakeholders such as the Catholic Church uses its advocacy in assisting vulnerable communities like Corosal and how this experience can be replicated in other communities yearning to be heard and assisted in Trinidad and Tobago.

Objectives of the Study

General Objective

The study is anchored on a general objective of “Assessing the presence of environmental degradation in Corosal Community.”

Specific Objectives

1. To identify local and community strategies in overcoming environmental degradation.
2. To interrogate the Catholic Church’s interventions as a stakeholder in Corosal community.

Methodology

To make the study authentic and align with its objectives, mixed research methodologies are employed. Mixed research methodologies involve using both qualitative and quantitative techniques in collecting and analysing data in research (Creswell 43). Therefore, the primary

source of data for the study is chiefly via interviews from respondents in targeted study area, Corosal, stakeholders, amongst others. The study also relies on books, articles and relevant documents for its secondary source. Indeed, in adopting the mixed research methodology, a purposeful mixing of methods in data collection, data analysis and interpretation are required, which the study utilised forcefully.

As a strength, therefore, the mixed methodology combines the synergies of both qualitative and quantitative research methods to adequately address inadequacies of solely using either method (qualitative or quantitative). As Saville (7) notes “mixed-method research designs are becoming increasingly relevant to addressing impact research questions.” Consequently, the research methodology incorporates data sources linked to the attainment of the objectives of the study.

Chapter Outline

The study is organised in four main chapters. Chapter one (1) assesses the environmental situation in Corosal community by reviewing the primary document, Laudato Si (LS); and other relevant books, articles and documents to comprehensively understand the phenomenon. Furthermore, it also establishes Social Capital Theory (SCT) as the conceptual framework or theoretical background of the study.

In chapter two (2), the section discusses environmental degradation as an ecological crisis from human roots perspective. Chapter three (3) also delineates concrete actions and interventions via partnerships from global, regional, national and community levels being undertaken to speedily address environmental degradation.

Lastly, chapter four (4) concludes the study with research methodology employed, data collected and analysed, as well as summary of findings of the entire study and recommendations.

CHAPTER ONE

1.0 Brief Understanding of Laudato Si (LS)

The Catholic Church consistently addresses pertinent issues confronting humankind via Papal encyclicals. Indeed, these encyclicals come under the corpus of Catholic Social Teaching (CST). Therefore, its significance is espoused by the *Compendium of the Social Doctrine of the Church* (CSDC) thus the “Christian knows that in the social doctrine of the Church can be found the principles for reflection, the criteria for judgment and the directives for action which are the starting point for the promotion of an integral and solidary humanism” (CSDC no. 7).

For example, encyclicals such as *Rerum Novarum* (The Condition of Labour) in 1891 by Pope Leo XIII, exposing the excesses of capitalism and its dehumanising aspect (O’Brien & Shannon 14) and *Populorum Progressio* (On the Development of People) in 1967 by Pope Paul VI, which advocates for economic justice as a catalyst to promote peace (O’Brien & Shannon 238), *Laudato Si* (On Care for Our Common Home) in 2015 by Pope Francis, imploring the world to care for the earth as stewards, amongst encyclicals consistently reveal global phenomena that tend to erode human progress; and impair the dignity of the human person, which the Church is a chief advocate. Thus, the Church’s encyclicals assert the Church’s role to humanity as these “...communicate a vision of the church as servant to humanity, a renewed concern for the human person and human rights, an increasing emphasis on popular participation...” (O’Brien & Shannon 1).

Laudato Si (LS) has become the Catholic Church’s foremost environmental blueprint at the turn of the millennium, detailing the global environmental situation with a clarion call on all

stakeholders “...to protect nature, along with a growing concern, both genuine and distressing, for what is happening to our planet” (LS 19), is imperative with the unprecedented degradation the earth is experiencing. The global environmental situation in 2015 as noted by United Nations Environment Programme (UNEP) called for renewable actions in protecting the environment from all forms of degradation, especially “...from mitigating and adapting to climate change to transforming unsustainable consumption and production practices” (UNEP 5).

Indeed, the year 2015 is also pivotal in the global environmental journey where the international community unanimously adopts on the milieu of sustainability important environmental blueprints such as the Sustainable Development Goals (SDGs), the Paris Agreement on Climate Change (PACC), the Sendai Framework for Disaster Risk Reduction (SFDRR) and the Addis Ababa Action Agenda on financing for development (UNEP 6). Thus, LS’ publication is timely and profoundly identifies these environmental challenges and their corresponding consequences, as well as, potent solutions, especially for poor and vulnerable communities and people.

Emblematic of any Catholic encyclicals and overall Catholic Social Teaching (CST), the Catholic Church also employs a unique triad methodology or concept called See-Judge-Act. This methodology, used in liberation theology circles is employed by the study to understand the phenomenon of environmental degradation in Corosal community. Developed by Cardinal Cardijn, the methodology is “a movement from engagement and solidarity, then to reflection and understanding, and finally to cooperative involvement and action” (Sand 2).

Thus, this methodology helps in contextualising phenomena or their current state or reality (See); in assessing or evaluating what needs to be done about the phenomena from different prisms-economic, social, cultural, amongst others, in order to attain the desired destination

(Judge); and the process of morphing the phenomena into desired result (Act). The methodology, thus, invokes a far-sighted consciousness on the part of individuals addressing phenomena to view them from different perspectives to address or offer holistic solutions after vigorous probing.

1.1. Environmental Degradation from the Perspectives of Laudato Si (LS) Using See-Judge-Act Methodology

From the foregoing, LS uses this methodology in “reviewing several aspects of the present ecological crisis” (LS 15) in understanding the global environmental situation (See) as captured in Chapter One (What is Happening to Our Common Home) and Chapter Two (The Gospel of Creation). Consequently, “consider some principles drawn from Judaeo-Christian tradition which can render our commitment to the environment more coherent” (LS 15) as seen in Chapter Three (The Human Roots of the Ecology Crisis) and Chapter Four (Integral Economy) come under the “Judge” category which offers profound reflection on phenomena; and finally, advancing “...broader proposals for dialogue and action which would involve each of us as individuals, and also affect international policy” (Ibid) comes under the “Act” category as encapsulated in Chapters Five (Lines of Approach and Action) and Six (Ecological Education and Spirituality).

1.2. “See” Category in LS

This category is captured in Chapter One (What is Happening to Our Common Home) and Chapter Two (The Gospel of Creation). It is imperative to proceed this section with profound understanding the study community, Corosal, with respect to its history and the environmental situation.

1.2.1. Brief History of Study Area: Corosal Community

Corosal was formerly known as Maraval as fondly remembered with nostalgia by older generation for its agricultural heritage. Albeit used interchangeably, Corosal prominently remains the preferred name amongst the current generation. Indeed, Maraval came to the limelight in the 1900s when estate owners cum investors arriving in Montserrat Hills of Central Range found out that Maraval's relief, soil and climate were favourable for the cultivation of cocoa, once thriving agricultural crop in Trinidad in the mid-17th century (Ishmael, "Interview"). These conducive conditions convinced these investors to heavily invest in the cultivation of this crop, thus, turning Maraval area into a thriving cocoa estate.

Thus, the community's social and cultural dynamics would modify with the influx of labourers coming from different religious, racial and cultural backgrounds to this cocoa producing hub. With dwindling national cocoa productions, the once vibrant Corosal community saw massive exodus of both labourers and members alike, affecting the overall population. This agricultural downturn coupled with infrastructural deficits affected the community's overall development till today where amenities such as water, roads, community health centre, schools, public transport, amongst others are missing (Michael, "Interview"). Apart from its rich vegetation and forest cover, the community has key identifiable natural resources such as limestone deposit and range of rocks suitable for quarrying, attracting companies such as Trinidad Cement Limited (TCL) in the community (Ishmael, "Interview").

Indeed, after many years, it was only in 1986 that the community was connected to the national grid. Not perturbed by its infrastructural deficits, Corosal community uses and relies on its community volunteerism and self-help spirit to make life worth living (Ishmael, "Interview").

1.2.2 Environmental Situation in Corosal Community

Apart from Corosal's rich agrarian heritage and natural resources, it is imperative to ascertain the environmental situation in the community which the study seeks to unravel. The environmental situation potently reveals profound environmental degradation threatening the environmental ambiance of the community.

For community members, environmental degradation is a daily reality. Water bodies are polluted, land being degraded because of excessive excavation as a result of mining and quarrying, excessive erosion, occasional landslides, illegal dumping of garbage, forest fires and vagaries of the weather occasioned by climate change (Ishmael, "Interview"). Water bodies have been polluted due primarily to poor agricultural practices such as improper application of agricultural chemicals upstream that seep into water tables and underground springs. These activities already compound the age-old water problem the community is facing (Jeneil, "Interview").

The two extractive industries in mining and quarrying operating in the community are Trinidad Cement Limited (TCL) and Saiscon Company (SC), respectively. The operations of these companies in the community have contributed and continue to contribute significantly to the degradation of the land, thereby compromising its integrity. Thus, the continuous mining has occasioned landslides in the community evident in visible cracks in houses, further deterioration of existing untarred road with frequent cave in, excessive erosion because of loss of vegetative cover, amongst others (Curtis, "Interview").

The environmental situation in Corosal community, largely degradation of the environment is fundamentally human driven. The encyclical profoundly echoes this human factor by asserting

the “...human origins of the ecological crisis” (LS 101). Thus, the document identifies technical prowess for bringing humanity to the crossroads and further discusses environmental degradation.

1.2.3. Understanding the Realities of Environmental Degradation

The encyclical commences with the global environmental situation entreating the world that “...our present situation, pointing to the cracks in the planet that we inhabit as well as to the profoundly human causes of environmental degradation” (LS 163). Therefore, the encyclical sets in motion the global action to reverse environmental degradation to protect “our common home” in a sustainable manner (LS 6). The realities of environmental degradation are not only globally pronounced as it permeates and transcends borders to local communities like Corosal.

Furthermore, non-biodegradable waste continues to be detrimental to the environment and if unchecked “...the earth, our home, is beginning to look more and more like an immense pile of filth” (LS 21) with its ability to impair the integrity of the environment.

Consequently, a term, “throwaway culture” is coined by the encyclical to refer to a growing irresponsible behaviour of morphing things into rubbish, whose recycling becomes a challenge at both domestic and industrial levels (LS 22). The United Nations Environment Programme (UNEP) opines that “Unsustainable production and consumption can be considered the core reason for environmental degradation” and further admitting that “Local communities all around the world suffer disproportionately from environmental degradation, pollution and resource depletion” (5). The phenomenon of pollution is profoundly present in Corosal community with human activities further endangering the environment’s ambiance.

The climate serves humanity in several ways. The encyclical encapsulates its importance by noting that “the climate is a common good, belonging to all and meant for all” (LS 23). However, a growing phenomenon, climate change, largely attributed to human activities is threatening this “common good” by significantly changing the climatic conditions at global, regional, national and local levels.

The encyclical’s assertion that “Climate change is a global problem with grave implications: environmental, social, economic, political and for the distribution of goods” (LS 25) is apt as it threatens livelihoods of poor and vulnerable people and communities who are environment-dependents. In Corosal, the phenomenon is ever present as reflected in declining agricultural production, excessive heat, vagaries of the weather, amongst others (Participants, Focus Group Discussion (FGD)). Consequently, the AEC’s pastoral letter *Caring for the Earth- Our Responsibility* also admits climate change’s profound “...serious impacts on the sustainable development of Caribbean Small Island Developing States (SIDS)” (AEC 10).

Water, an important resource is seriously under threat from environmental degradation seen in pollution, supply constraints and tendency of extinction in some cases. Pollution from industrial activities should be controlled because “underground water sources in many places are threatened by the pollution produced in certain mining, farming and industrial activities...” (LS 29). Appropriating this resource in the current manner poses great disadvantage to poor and vulnerable people and communities. Certainly, LS posits forcefully that “One particularly serious problem is the quality of water available to the poor” (29); and further admits by reminding stakeholders that “our world has a grave social debt towards the poor who lack access to drinking water, because they are denied the right to a life consistent with their inalienable dignity” (30). In Corosal, water has gone beyond being a necessity and a basic human right to being a luxury

commodity due to human activities that compromise its quality. Therefore, community members resort to rainwater harvesting chiefly via water tanks and occasionally patronise water trucks, albeit expensive, especially for large households as seen in Figure 6.

It is imperative to note that the environment which acts as the foundation for human endeavours is God's masterpiece, reflecting biblical, theological, and spiritual dimensions where "we can ask what the great biblical narratives say about the relationship of human beings with the world" (LS 55). Indeed, this relationship between humankind and environment (earth) has always been copacetic with profound symbiotic relationship as ordained by God (Creator). This ecological covenant has been violated by humankind, hence, the current ecological crisis with its associated challenges. Thus, humanity ever becoming vulnerable to natural disasters.

1.3. Vulnerability and Vulnerable Communities

Vulnerability is a phenomenon that has many ramifications. Vulnerability for Wisner et al. means "characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard" (11).

Once impaired by these phenomena, people and communities become incapable of optimally functioning and resort to coping mechanisms or strategies to meet deal with these consequences. It is the poor people and communities that bear the consequences of vulnerability.

The capacity to engage peoples and communities in such situations informs the Catholic Church's principle of *Preferential Option for the Poor and Vulnerable* to ensure their overall inclusion or integration by showing solidarity to them as well as ensuring that they also benefit from the "Common Good." Consequently, in search of these measures, LS admits profoundly that

“...every ecological approach needs to incorporate a social perspective which takes into account the fundamental rights of the poor and the underprivileged” (93).

The CSDC defines solidarity as “...the firm and persevering determination to commit oneself to the common good of all and of each individual, because we are all really responsible for all” (193). For vulnerable communities and people, the Church employs these principles as yardsticks in advocating for their share of development as their right. In Corosal community, these principles are utilised in engaging other stakeholders in pursuit of their welfare. The Church fully understands that if vulnerability is not properly addressed by stakeholders, it has the ability of degenerating into inequality amongst people and nations, thus, making the attainment of SDG 10 (Reduced inequalities) difficult.

1.4. Theoretical Framework of the Study

The theory or conceptual framework adopted for the study is Social Capital Theory (SCT) which primarily hinges on social relationships as a resource amongst members within a community or group in overcoming challenges. Therefore, it is defined as “those features of social organization such as trust, norms and networks that can improve the efficiency of the society by facilitating coordinated actions” (Putnam 35) and Fukuyama (3) sees it “as the existence of a certain set of informal values or norms shared among members of a group that permit cooperation among them.”

Indeed, the theory can be classified as bonding, bridging and linking; where bonding involves the connections between people with similar traits, interests and homogeneity bridging reflected in connections between people from diverse backgrounds; and linking expressed in relationships amongst people with different powers having access to resources, ideas, information and knowledge within a given community or group (McGonigal et al. 1-5).

These classifications offer the various strands of the theory and composition within the community which can be harnessed communally in addressing challenges facing the community. The theory's emphasis on localisation of resources, which is community-based and indigenous to the local conditions can readily be activated each time that are problems, before external assistance is sought or engaged.

CHAPTER TWO

2.0. “Judge” Category in LS

This section offers reflection on the phenomenon of environmental degradation vis-à-vis LS as contained in chapter three (The Human Roots of the Ecology Crisis) and chapter four (Integral Ecology). Thus, by perusing environmental degradation, the section provides eclectic foundations, apart from its theological foundation, in understanding the phenomenon from different strands.

2.1. Human Roots of Ecological Crisis

Humankind’s uncontrolled insatiability for development continues to push the limit of the environment’s carrying capacity. Consequently, technology has become the catalyst spurring these human endeavours as its role has not been disputed because “Technology has remedied countless evils which used to harm and limit human beings” (LS 102). However, depending on its application and utilisation, technology can be a blessing or a bane to humanity because “Never has humanity had such power over itself, yet nothing ensures that it will be used wisely, particularly when we consider how it is currently being used” (LS 104). Thus, the assertion that “Humanity has entered a new era in which our technical prowess has brought us to a crossroads” (LS 102) is instructive.

Technology, misdirected and misapplied towards the environment can become one of the roots of ecological crisis because “Human beings and material objects no longer extend a friendly hand to one another; the relationship has become confrontational” (LS 106).

This exploitative tendency perpetuated largely by countries, companies and individuals make the earth’s cry for help from all stakeholders. The earth’s cry is an admission of the failure of humankind to honour the trusted moral responsibility to the earth as its steward. Boff forcefully

asserts this notion by noting that “...The human being-called to be Earth’s guardian angel and watchful tiller- may be Earth’s Satan. Humans have shown that they can commit not only homicide and ethnocide, but biocide and geocide as well” (XI).

The ecological crisis has further been exacerbated by human superiority tendency-anthropocentrism and its wrong interpretation, especially the Christian version which tends to “...give the impression that the protection of nature was something that only the faint-hearted cared about” (LS 116). Thus, anthropocentrism tendency monopolises everything in favour of human beings at the expense of things, including the environment. This asymmetrical relationship only further jeopardises already volatile situation. The human-centredness should be far removed from any meaningful endeavour because “Once human being declare independence from reality and behaves with absolute dominion, the very foundations of our life begin to crumble...” (LS 117).

This path affords vulnerable communities the unique opportunity to acknowledge the spiral effects of misguided action and collectively amass their communal talents and resources in overcoming environmental degradation and its attendant effects. Consequently, LS notes thus “If the present ecological crisis is one small sign of ethical, cultural and spiritual crisis of modernity, we cannot presume to heal our relationship with nature and the environment without healing all fundamental human relationships” (119).

2.2. Understanding Integral Ecology

Understanding the relationship between human beings and the environment is imperative as ecology, studying “...the relationship between living organisms and the environment in which

they develop” proves the point that “everything is interconnected” (LS 138). This interaction anticipates a solidarity and cooperation from both parties to ensure a palpable balance, so that actions and inactions from parties, especially human beings should not further destabilise the ecological balance since “We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental” (LS 139). This interconnectedness phenomenon should inform stakeholders in Corosal community about the consequences of engaging in illicit activities with the tendency to jeopardise the environment.

Boff’s understanding of ecology is profound and brings a deeper perspective by asserting that it “...encompasses and organises current bodies of knowledge, grounds a new centrality in human activity and thought, and encourages the formation of a new covenant between the human being and the surrounding social, earthly, and cosmic reality” (41). Ecology for Allen (301) “...counts as a major trend in Catholicism not only because of this stirring inside the Church, but also because it looms as one of the most potent social and political forces of the twenty-first century.”

Therefore, protecting the ecology means adopting a holistic approach in an integrated fashion where diverse disciplines are employed in ensuring ecological balance in human developments. Boff’s “If ecology is not holistic, it is not really ecology” (41) is imperative in appreciating the integration approach in ecological management and synergies generated when integration is embraced. Therefore, any development intervention should take into consideration the ecological balance in navigating through meeting human needs and at the same time protecting the environment. The encyclical forcefully makes this point thus “The protection of the environment is in fact “an integral part of the development process and cannot be considered in isolation from it” (LS 141).

Therefore, development dividends should be enjoyed by all irrespective of social, race, religion, colour or culture. Thus, the principle the “Common Good” is understood as “the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfilment” (LS 156).

The effects of environmental degradation cannot be overemphasised. Environmental degradation places stress not only on community level social structures, but also on social institutions which function at a broader level to maintain communal identity, cohesion, and culture. Environmental degradation elicits social changes and subsequently making individuals respond differently with potential of possible competition and conflict between different ethnic groups or cultural traditions. This social aspect is embedded in the Social Capital Theory.

2.3. Environment-Development Nexus

Environment and development are inseparable because the latter takes place within the former’s space and consequently relies on it for its provisions. However, unmeasured and unconstrained human activities and desires aided by technology that tend to create imbalances in this relationship, where the environment’s ambiance and integrity are significantly compromised leading to environmental degradation. As LS notes “...our immense technological development has not been accompanied by a development in human responsibility, values and conscience” (105).

Human beings need development and progress but not at the expense of degrading the very foundation or source that provides all the materials for this same purpose. For Corosal community, this is critical in meeting its current development aspirations without impairing the environment, especially for its future generation.

Thus, World Commission on Environment and Development (WCED) under the auspices of the United Nations General Assembly (UNGA) defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNGA 43) buttresses GoRTT NEP’s position “Thus, development and the pursuit of peace, justice and strong institutions in Trinidad and Tobago must be done in a manner that strives to balance social, economic and environmental considerations” (7). Therefore, LS notes that “Authentic development includes efforts to bring about an integral improvement in the quality of human life, and this entails considering the setting in which people live their lives” (147).

CHAPTER THREE

3.0. Act Category of LS

The “Act” category translates realities (See) and reflections (Judge) into action from international, national and local levels in addressing environmental degradation as well as adopting appropriate ecological education and spirituality where new life-styles towards the environment become paramount. The encyclical advocates for international consensus in responding to environmental challenges.

These collective efforts continue to engender countries to regulate and implement policies in combating dehumanising problems, by affirming that “A global consensus is essential for confronting the deeper problems, which cannot be resolved by unilateral actions on the part of individual countries” (LS 164). With respect to solving environmental issues, the world continues to embark on solving climate change, environmental degradation, water crisis, amongst others, via the international blueprint document, Sustainable Development Goals (SDGs) as identified in SDG 17 (Partnerships for the Goals).

Indeed, GoRTT is a signatory to several international and regional environmental agreements such as the Paris Agreement to the United Nations Framework Convention on Climate Change (UNFCCC), the Revised Treaty of Chaguaramas Establishing the Caribbean Community (CARICOM), CARICOM Common Environmental and Natural Resource Policy (CENRP), CARICOM Common Agricultural Policy (CCAP), CARICOM Common Fisheries Policy (CCFP), and CARICOM Regional Framework for Achieving Development Resilient to Climate Change (RFADRCC) amongst others (NEP 3). This is a testimony that with the political will and commitment, vulnerable communities like Corosal can benefit from these regional and international agreements.

It is therefore imperative for the Church via LS to invite other stakeholders such as GoRTT and environmental groups to rally together in fashioning out appropriate environmental governance initiatives as contained in global, regional and national initiatives able to reduce environmental degradation in vulnerable communities such as Corosal. The Church's position is indeed, informed by the principle of subsidiarity which "...grants freedom to develop the capabilities present at every level of society, while also demanding a greater sense of responsibility for the common good from those who wield greater power" (LS 196).

Localisation of these global initiatives is important in engaging local communities and stakeholders in implementing such initiatives for the benefit of the country. Indeed, community-based groups or organisations "serves as a map of the various stakeholders and their anticipated roles regarding environmental management" (NEP I).

NEP charges companies in the spirit of partnership to ensure that their operations do not compromise the environment but rather contribute to its conservation and protection (8). This assertion is especially encouraging for vulnerable communities, especially those hosting companies whose operations tend to compromise on the environment. However, poor regulatory regimes, institutional weakness and poor monitoring systems may impede the realisation of this goal as these communities are inundated with series of environmental challenges. Should institutions act as stipulated by law, vulnerable communities would have been saved from further degradation because their plights would have been identified by appropriate government agencies and solutions proffered.

CHAPTER FOUR

4.0. Data Analysis, Summary and Recommendations

The summary of findings, discussions obtained via interviewing respondents from the study community, Corosal, as well as recommendations, are discussed in this chapter. Using the Case study methodology which “investigates a contemporary phenomenon in depth and within its real-life context...” (Yin 18), the study evidently describes the case, environmental degradation, and associated factors in Corosal community, with the community being the unit of analysis.

The study employs a mixed methodology of both quantitative and qualitative research techniques of data collection via questionnaires, interviews, focus group discussions (FGD) and observations in obtaining primary information from respondents (community members) and other relevant stakeholders. A total of 54 respondents participated in the research, namely, 13 respondents participating in the FGD, 31 questionnaires administered retrieved from respondents and 10 respondents interviewed. To ensure fair representation and not denying respondents, a stratified sampling technique is used, leading to the engagement of broad groups, namely, men, women and youth (above 18), that make up the entire community. Details of information obtained vis-a-vis the objectives of the study are discussed in the findings:

4.1. Summary of Findings

The general objective of the study “To assess the presence of environmental degradation in Corosal Community” is verified by respondents in the following:

First, respondents affirm the presence or existence of environmental degradation in community with evidence being deforestation, water pollution, land degradation via excessive

excavation and unauthorised dumping of garbage by outsiders, poor drainage, landslides, air pollution, amongst others. As a participant aptly puts it thus: “Natural springs that were used for drinking cannot be used now because of the use of pesticides in gardening that polluted the water” (Participant 1, FGD transcribed). For another participant “unauthorized dumping of garbage - people from outside dumping garbage in the community Going on in the last 8-10 years. Community members tried to chase people dumping garbage out of the area” (Participant 9, FGD transcribed).

The phenomenon is also corroborated by all 31 respondents (100%) by responding in the affirmative as seen in Table 1 below:

Table 1

<i>Environmental Degradation in Corosal</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	31	100%
No	0	0%
Total	31	100%

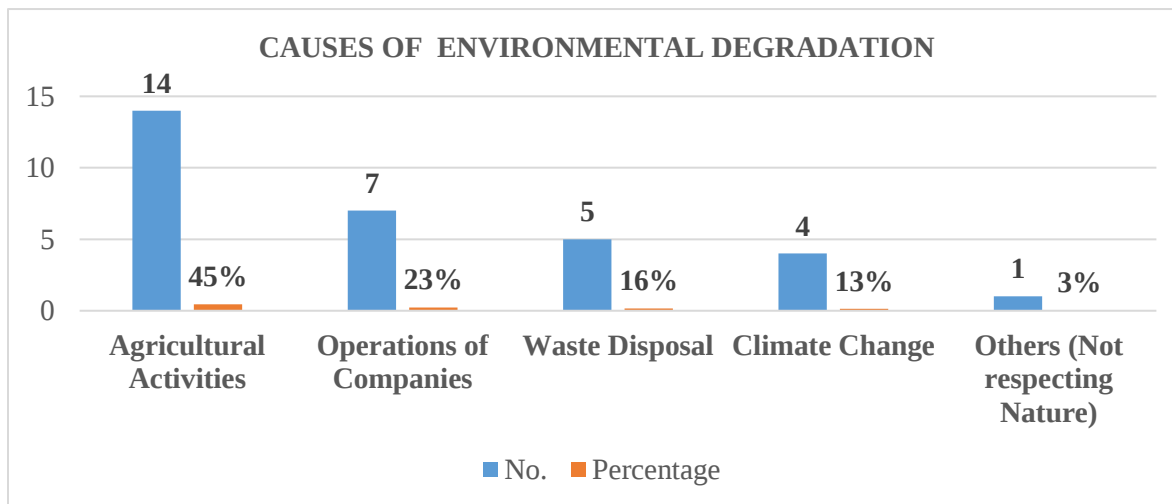
Source: Field Research, 2022

For example, a respondent notes that “The environmental degradations/pollutions that are happening in my community are the deterioration of road conditions, landslides and unauthorised dumping of garbage along the road” (Chelsea, “Interview”).

Second, participants admit the causes of this phenomenon being profoundly human activities, especially in agricultural and extractive sectors. For example, a participant identifies the operations of TCL as a contributory factor to land degradation by asserting that “Where there were

mountains of 200-300 feet high, there are now gorges from intense digging/excavation from TCL operations” (Participant 2, FGD transcribed). Figure 1 below shows the causes of environmental degradation in Corosal as identified by respondents:

Figure 1



Source: Field Research, 2022

From Figure 1 above, agricultural activities (45%) largely contribute to environmental degradation in the community, evident by the community’s agricultural base. Operations from extractive companies (23%) also contribute to environmental degradation with landslides being largely common outcome. Consequently, waste disposal (16%), climate change (13%) and “not respecting nature” (3%) all contribute to environmental degradation. These human activities reflect anthropocentrism, a root of ecological crises which prioritises human superiority to wantonly degrade the environment (LS 116).

The study also identifies the impacts of environmental degradation albeit not set out as an objective. Respondents reveal the impacts being for example, as a participant reveals thus: “...No accessibility to water for crops...The community depends on rainwater (Participant 11, FGD

transcribed). For another “once the roads deteriorate, the community is cut off from surrounding communities” (Chavez, “Interview”) and yet another observes that the “...community have excelled but people leave the community because of the deprivation (Participant 8, FGD transcribed).

4.2. Specific Objectives of the Study

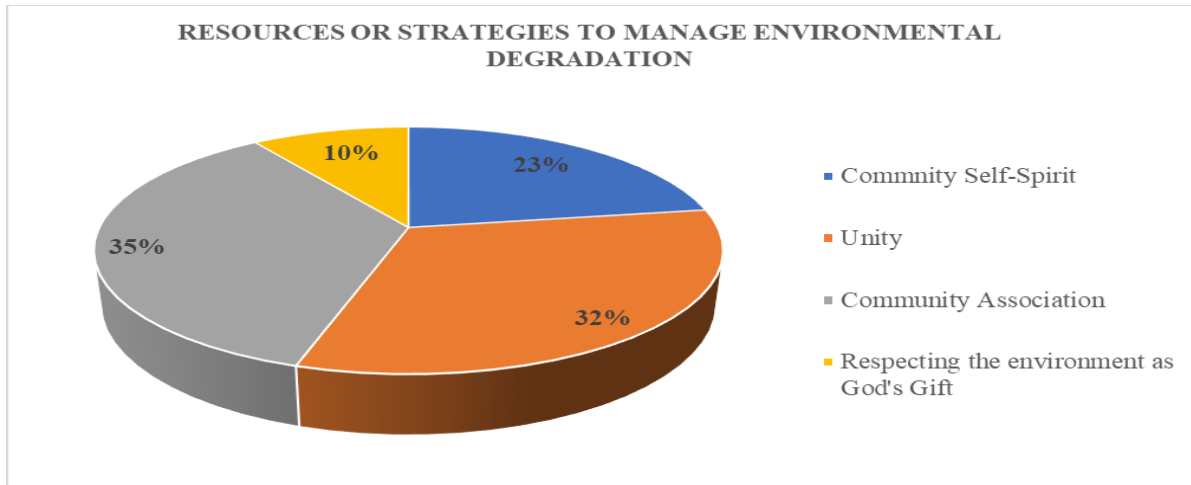
The study’s two specific objectives are “To identify local and community strategies in overcoming environmental degradation” and “To interrogate the Catholic Church’s interventions as a stakeholder in Corosal community.”

4.2.1. Identifying local and community Strategies in Overcoming Environmental Degradation

The Corosal community identifies the formation of a community association as one of its strategies. The association, the Upper Corosal Community (UCC), has since become its mouthpiece in highlighting its developmental challenges to government agencies, companies operating in the area and external partners.

Furthermore, as another strategy, the UCC has committed to building its capacity towards the care of the environment with the assistance of Franciscan Institute which “conducts Laudato Si sessions and visit to the community. Raising awareness and inviting other organisations to join in helping the community” (Analisa, “Interview”).

Figure 2



Source: Field Research, 2022

The study also reveals as seen in Figure 2 above that 7, 10, 12 and 2 respondents representing 23%, 32%, 39% and 6% identify community self-help spirit, unity, community association and respecting the environment as God’s gift, respectively, as strategies and resources the community can employ in overcoming environmental degradation. Consequently, a participant notes with respect to unity that “... Yes there is unity in the community in fighting these challenges. There have been community-led protests... residents provided labour for most of the community projects” (Participant 13, FGD transcribed).

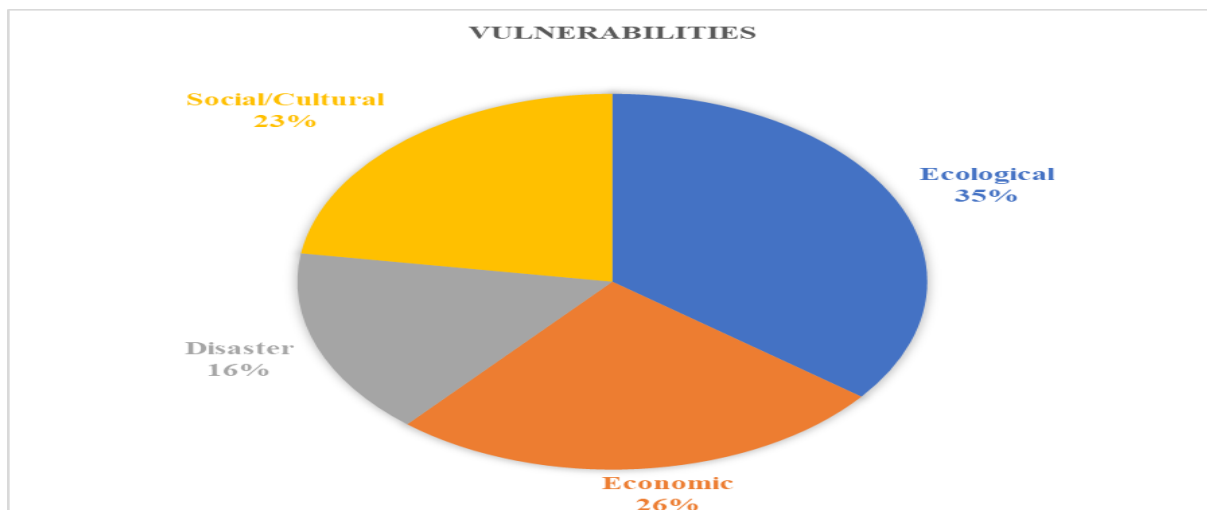
“Respecting the environment as God’s gift” as asserted by 6% of respondents is imperative as Cummings notes that “A growing appreciation of the interdependence of all beings results in an attitude of reverence toward all” (81). Consequently, humanity is entreated to be the earth’s chief steward as Allen (301) asserts that “No concept looms larger in Catholic environmentalism that human beings as stewards of creation, meaning caretakers rather than masters.”

These resources and strategies corroborate the tenets as espoused by SCT which posits the importance of community or group, networks and relationships as resources in both overcoming vulnerability as well as the holistic development of Corosal community.

Vulnerability

The study also reveals the different levels of vulnerability being felt in the community as shown in Figure 3.

Figure 3



Source: Field Research, 2022

11 respondents (35%), 8 respondents (26%), 5 respondents (16%) and 7 respondents (23%) indicate ecological, economic, disaster, and social/cultural vulnerabilities, respectively, being experienced in the community. Corosal's ecological vulnerability, attaining the highest percentage (35%) depicts its susceptibility to degradation and climate change, largely caused by human activities which poses threats to livelihoods.

4.2.2. Interrogating the Catholic Church’s interventions as a stakeholder in Corosal community in Corosal community.

Table 2

<i>Stakeholders in the Community</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Government</i>	7	23%
<i>Catholic Church</i>	11	35%
<i>Franciscan Institute</i>	5	16%
<i>Good Spirited Individuals/Organisations</i>	8	26%
<i>Total</i>	31	100%

Source: Field Research, 2022

Table 2 shows various stakeholders contributing to the development of the community. Respondents observe non-governmental stakeholders such as the Catholic Church, Franciscan Institute and Good spirited individuals/organisations with a combined of percentage of 77% as important and reliable stakeholders apart from Government (23%). Apart from Government, community members view interventions by these non-governmental stakeholders as appropriate and timely.

The Catholic Church (35%) has been at the forefront advocating for the community’s share of development as well as contacting relevant government agencies about the plights of the community. The Catholic Church at the parish level (local level) acknowledges the plights of Corosal people being “environmental issues and lack of basic necessities like water, roads, and public transport. These have always been the same for years” (Ragoonan, “Interview”).

Consequently, the Church at the archdiocesan level (national level) under the aegis of the Catholic Commission for Social Justice (CCJJ) of the Archdiocese of Port of Spain also solidarises with vulnerable communities like Corosal by affirming that “Yes, because we share in their plights. We apply see, judge, and act process to identify problems and solutions to influence their lives” (Ramdeen, “Interview”).

The Catholic church’s position is also informed by the tenets of liberation theology which amongst others advocates for the liberation of poor and marginalised people as Gutierrez (24) observes that “The poor and marginalised have a deep-rooted conviction that no one is interested in their lives and misfortunates.” Thus, the Catholic Church profoundly offers and inspires hope amongst members of the Corosal community in demanding justice for its rightfully deserved share of the national wealth. Indeed, Massingale’s (145) assertion that “The pursuit of justice must be guided by a vision capable of inspiring a hope that sustain a people in the face of the always difficult, often elusive, and perhaps permanent quest for full recognition as human beings...” has been the Catholic Church’s preoccupation for vulnerable communities like Corosal.

Therefore, the researcher uses the Catholic Church’s influence at the local and national levels as a special purpose vehicle to engage with the Minister for Ministry of Public Utilities (MPU). It yielded a positive response in November 2022, where the community has been deemed to a beneficiary of the ongoing National Water Improvement Project (NAIWP) which targets communities without water. The water project is scheduled to start between March-June, 2023 as seen in Figure 12.

“Good-spirited individuals and organisations” as stakeholders continue to support the community in various ways. The support by these non-governmental stakeholders is a testimony

that GoRTT needs the support of other stakeholders in the country's development as enshrined in SDG 17, that is, achieving global partnerships in realising the SDGs.

CONCLUSION

The study evidently proves the presence of environmental degradation in Corosal community, driven largely by human activities in the areas of agriculture, mining and quarrying, waste disposal, wanton disrespect to the environment, amongst others. Thus, environmental degradation phenomenon continues to make the community vulnerable at different levels- ecological, economic, social/cultural and “disaster.” The resultant impacts such as decline in agriculture, land degradation, poor road network because of excessive erosion and landslides, financial strain, migration, amongst others, cannot be overemphasised.

Indeed, the strategies adopted by the community to overcome this phenomenon, namely, formation of a vibrant community association and building its capacity to create awareness and education about protecting the environment, imbibing social resources such as unity, community self-help spirit, and “respecting the environment as God’s gift” should be implemented and sustained to reverse the impacts of environmental degradation.

Consequently, good-spirited individuals and organisations such as the Catholic Church, Franciscan Institute, Rotary Club, TCL, amongst others, identified as stakeholders should be routinely engaged so that their influence can beckon government and its agencies to address the plights of Corosal community.

RECOMMENDATIONS

Environmental degradation stems from continuous pollution of the earth by human activities. It is in this light that Corosal community should be proactive in addressing this phenomenon with the following recommendations:

Corosal community's agrarian base should prompt its members to adopt good environmental governance practices that tend to promote conservation of its biodiversity whiles engaging in responsible and sustainable agricultural activities.

The extractive companies whose operations impair the community's environment should be engaged by the community association to review their operations as stipulated by the guidelines of EMA, NEP and LS.

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APPENDIX A: Questionnaires

1. Interview questions for Focus Group Discussion

- a. Briefly describe the community.
- b. What are the social amenities and who provides them?
- c. What are the main job opportunities in the community?
- d. Do the majority of members work within or out of the community?
- e. What are natural resources?
- f. Has the community reached out to the company?
- e. What are the environmental problems in the community?
- g. Does the Catholic Church talk about care for the environment? What is your knowledge of the Church's stance on the environment?
- h. Are you familiar with Laudato Si?
- i. What do you know about Laudato Si?
- j. Do you know what the term climate change means?
- k. Do you see signs of climate change in Corosal community?
- l. What is your relationship with government or government agencies in the community?
- m. Is the government or any of it's agencies aware of environmental problems?
- n. Are the environmental issues affecting your livelihood?

2. Interview with Community members

- a. What are the environmental degradations/pollutions happening in your community today and the most serious one?

- b. Do you believe these environmental degradations/pollutions have the potential of causing financial strain to your family/community?
- c. How are these environmental degradations/pollutions affecting your daily activities/life.
- d. With the current environmental degradations/pollutions, how do you foresee the future of this community in the next ten years (2031)?
- e. Do you see local resources or strategies being used by the community to overcome these environmental challenges?
- f. In your opinion, is there unity in the community in fighting these environmental challenges?
- g. What role do you think the Church should play in protecting communities like yours from environmental degradations/pollutions?
- h. And what role would you also play in combating the current environmental challenges?
- i. How do you see the Church partnering/collaborating with the Government and other agencies in addressing these challenges?

3. Interview questions for Stakeholders

- a. Can you briefly describe your position in the Parish/institute/ archdiocese/community?
- b. Do you know Corosal Community within your work? If yes, can you describe the community?
- c. Are there environmental degradations happening in the Corosal community today?
- d. What has been the response of your outfit towards these challenges in the community?
- e. Do you think the faithful see your outfit as a potent voice speaking on their behalf about their plights?.
- f. Have you asked assistance from government or other organisations?
- g. From your knowledge does your outfit talk about the care of the environment via Laudato Si?
- h. Can Laudato Si be an important document in addressing the environmental challenges in Corosal community?

- i. Have you heard about Government's Policy Document to respond to environmental problems in the country?

4. List of interviewees and their designation

- A. Ramdeen, Leela- Chairperson of Catholic Commission for Social Justice
- B. Rev. Roy Ragoon- Parish Administrator of Tortugah Parish
- C. Analisa Ramsahai- Regional Programme Coordinator for The Franciscan Institute.
- D. Chelsea Devette- community member
- E. Ismael Devette- community member
- F. Chavez Paul- community member
- G. Michael Devette- community member
- H. Janeil- community member
- I. Amanda Curtis- Secretary of UCC
- J. Christian Lyndon- community member

APPENDIX B: Figures



Figure 4 – Map of Trinidad and Tobago

Source: <https://www.worldatlas.com/maps/trinidad-and-tobago>

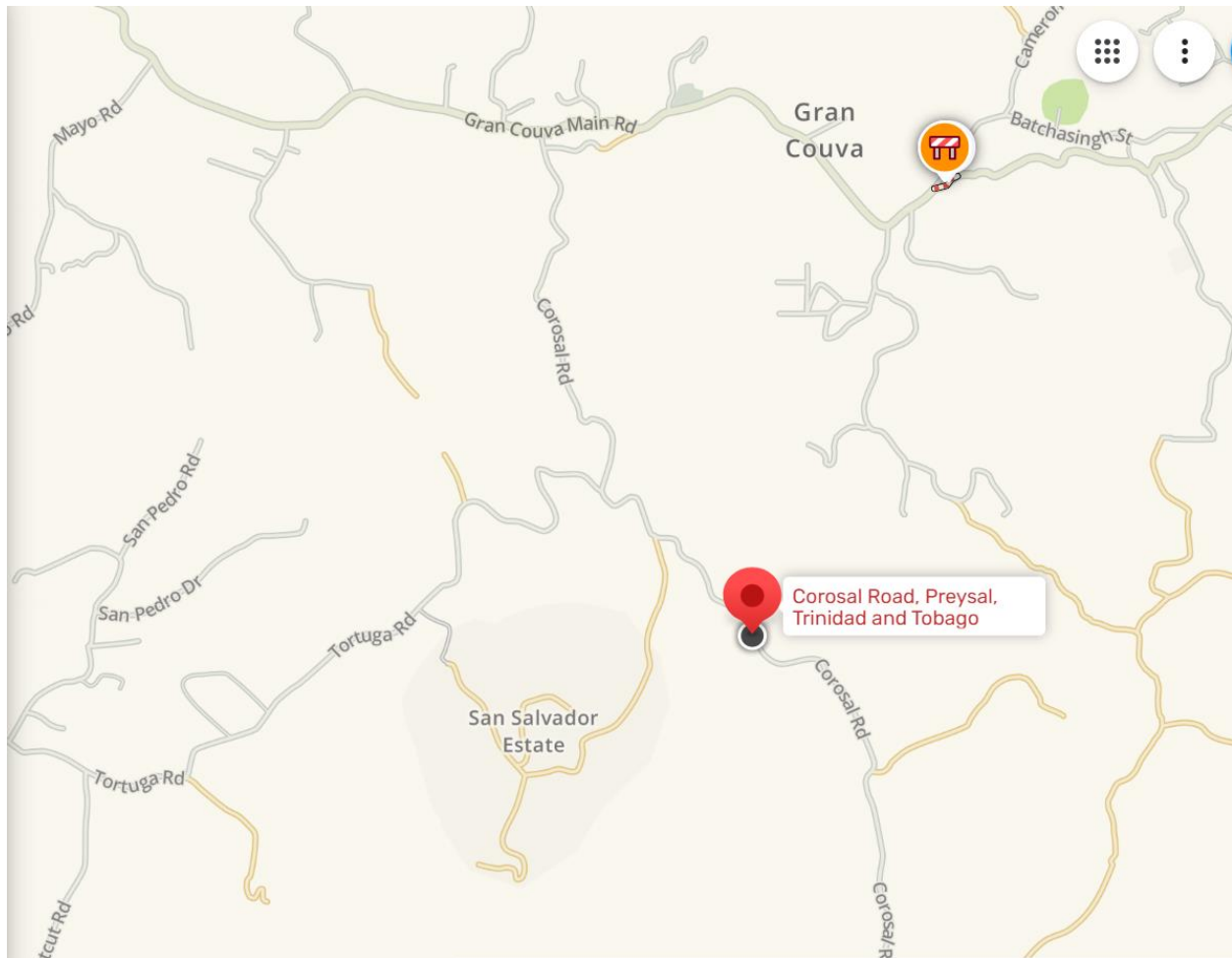


Figure 6 – Map of Corosal

Source: <https://www.waze.com/live-map/directions/tt/couva-tabaquite-talparo-regional-corporation/preysal/corosal-road?to=place.EihDb3Jvc2FsIFJkLCBQcmV5c2FsLCBUcm luaWRhZCBhbmQqVG9iYWdvIi4qLAoUChIJ-3kwkNH1NYwRFyzI0otOOtqSFAoSCSGE8O-39jWMER2GZ2Vxe7V3>



Figure 7 - Good Shepherd Catholic Church in Corosal community

Source: Field Research, 2022

LAUDATO SI'

ON CARE FOR
OUR COMMON HOME



POPE FRANCIS



ENCYCLICAL LETTER

Figure 8 – Laudato Si

Source: <https://www.amazon.co.uk/Laudato-Si-Common-Vatican-Documents/dp/1784690708>



Figure 9 - Tanks being used by a household in Corosal in harvesting rainwater

Source: Field Research, 2022



Figure 10: Bush burning

Source: Field Research, 2022



Figure 11: - Landslides in sections of the community

Source: Field Research, 2022



FIGURE 12 - Operations of extractive companies degrading the land

Source: Field Research, 2022



Figure 13 - Community self-help spirit in repairing poor roads

Source: Field Research, 2022



Figure 14: Deforestation of the environment

Source: Field Research, 2022

SUNDAY EXPRESS		
12 SUNDAY 12 MARCH 2023		
 PIPELINE INSTALLATION PROGRAMME Scheduled Pipeline Installation Projects Pipeline Installation Programme to increase access and improve water supply to communities throughout Trinidad and Tobago.		
NORTH WEST	Western Main Road, Carenage Western Main Road, Glenvale to Big Tind Duration: March 10 - May 9, 2023 Cor. Mt. Hololo Rd/ Hillside Ave. Cascade Cor. Nono and Foncec Street to end of Foncec Street Duration: March 10 - April 28, 2023 Mt. Hololo Rd (Cross Country) End of Foncec Street to Arapina Rd Duration: March 10 - April 24, 2023 Pioneer Drive, Petit Valley Cor. Shor Drive to end of Street Duration: March 13 - June 2, 2023 Morne Coco Road, Petit Valley Cor. Hillcrest Drive to Cor. Sierra Leone Road Duration: March 13 - April 27, 2023 Beau Press Rd, Paramin Lp 52 to Lp 70 Beau Press Road, Paramin Duration: March 10 - April 15, 2023	Saddle Road, San Juan Cor. Eastern Main Road to Cor. Hunter Road Duration: March 13 - April 30, 2023 Maloney Street, Petit Bourg Cor. Eastern Main Road to Cor. Bridge Road Duration: March 13 - April 27, 2023 Cascade Rd, Cascade Walker Avenue to Mon Repos Road Duration: March 13 - May 14, 2023 St. Anne Gardens, Cascade Cor. St. Anne Road to end of Street Duration: April 7 - 27, 2023 Rose Hill, Maraval Cor. Saddle Road to end of Street Duration: April 7 - 29, 2023 Averboukh, Goodwood Park Cor. Diego Martin Main Road to Cor. Benjamin Street Duration: April 7 - 24, 2023
	Second Street, Mallick Cor. North Avenue to end of Street Duration: April 7 - May 7, 2023 Concord Road, San Juan Cor. Saddle Road to end of Street Duration: April 7 - 27, 2023 Mt. Lambert Pipeline Project Cor. First Ave to end of each street Duration: June 4 - September 3, 2023 Eastern Main Road, Laventille Citrus Growers Association, Laventille to Morvant Junction Duration: June 4, 2023 - January 9, 2024 Nelson Street, Port of Spain Duke Street to South Quay Duration: June 4 - July 25, 2023 First Avenue Mt. Lambert Mt. Lambert Circular to First Street Duration: June 4 - July 11, 2023	Morequito Avenue, Valsayn Kairi Street to Bula Street Duration: June 4 - September 21, 2023
	Lapinot Road, Lapinot Lp 410 to Lp 181 Lapinot Road Duration: March 20 - June 6, 2023 Riverside Road, Curepe Eastern Main Road to Maracas Royal Road Duration: June 4 - September 14, 2023	De Gannes and Jawahir Road Cor. Little Cuesa Road to 1km mark Duration: June 4 - July 21, 2023
	Freeport Well #20 Pipeline Camden Base Road to Calcutta Road #2 Extension Duration: March 20 - June 30, 2023 Corosol Road, Uman Couva Proposed Intake Site, Corosol Road to 5km Mile Marker Duration: March 20 - June 30, 2023	Freeport Well #21 Pipeline Proposed Freeport Well #21 Site to Junction of Mission Road and Freeport Mission Road Duration: April 17 - June 13, 2023 Freeport Todds Road, Freeport Lp LV32 La Cuesa Road to Lp83 Freeport Todds Road Duration: June 4 - October 31, 2023 La Cuesa Road, Freeport Lp 147 La Cuesa Road to Lp LV32 La Cuesa Road Duration: June 4 - September 15, 2023 San Fernando Waterfront Redevelopment Project Package 3 Lady Hailes Ave to Park Street Duration: August 23 - September 12, 2023 San Fernando Waterfront Redevelopment Project Package 2 Independence Ave and Lady Hailes Ave to Queens Street PTSC Terminal Duration: August 25 - October 24, 2023
CENTRAL	Freeport Well #22 Pipeline Freeport Well #22 on Ruckon Road to 3115m on La Cuesa Road, Freeport Duration: March 22 - June 13, 2023 San Fernando Waterfront Redevelopment Project Package 1 Circle Street to Queens Street Duration: March 22 - June 10, 2023 Freeport Well #23 Pipeline Freeport Well #23 to Freeport Water Treatment Plant on Tanti Mahdoo Road Duration: March 24 - June 20, 2023	San Fernando Waterfront Redevelopment Project Package 5 Cor. Gulf View Link Road and Riverside Drive to end of Butler Street Duration: September 12 - October 22, 2023 San Fernando Waterfront Redevelopment Project Package 4 Rhenzi Kirtan Highway to Gulf View Link Road Duration: September 20 - October 10, 2023 San Fernando Waterfront Redevelopment Project Package 7 Lady Hailes to Water Taxi Terminal Duration: September 20 - October 10, 2023 San Fernando Waterfront Redevelopment Project Package 6 Rhenzi Kirtan Highway to Rushworth Street, San Fernando Duration: September 23 - November 2, 2023 Las Lomas #12 The intersection of Caroni South Bank Road and Crystal Drive to 171 m North Duration: September 25 - October 3, 2023
	Chatham Well #15 Pipeline Unnamed Road, Off Chatham North Trace (466 m from Chatham North Trace inside Unnamed Road) to Southern Main Road Duration: March 17 - May 7, 2023 Stephen Johnson Road, Erin Cor. SS Erin Road to Stephen Johnson Street Duration: March 20 - April 14, 2023	Clarke Road Penal, Well #9 Pipeline Proposed Clarke Road Well #9, Satnarine Trace, Penal to Clarke Road Well #8 Duration: May 15 - August 16, 2023 Salazar Trace, Point Fortin Lp 1839 Cor. South Central Road to 3.6km mark Duration: June 4 - October 13, 2023
SOUTH WEST	Wilson Road Well Pipeline Lp 25 New Colonial Road to End of Unnamed St at Lp 370 Duration: September 20 - October 20, 2023	Hindustan Road, Princes Town Cor. Naparima Mayaro Road and Hindustan Road to end of Street Duration: March 20 - April 29, 2023
	Wilson Road Well Pipeline Lp 25 New Colonial Road to End of Unnamed St at Lp 370 Duration: September 20 - October 20, 2023	Hindustan Road, Princes Town Cor. Naparima Mayaro Road and Hindustan Road to end of Street Duration: March 20 - April 29, 2023
Reducing water loss Improving service reliability Increasing accessibility		

Figure 15: List of water beneficiary communities in Trinidad and Tobago

Source: Sunday Express, 12th March, 2023, pg. 2