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ABSTRACT

This thesis examines the Diocese of Roseau's role in appreciating and conserving the island's freshwater resources in the context of an increasingly observable lack of water stewardship among the citizens (clergy and laity). This study acknowledges that since freshwater is one of Dominica's most abundant natural resources it should not be left only to governmental agencies and NGOs to protect it but all, including the Catholic Church. The research also looks at the global phenomenon called climate change and its impact on rainfall patterns on the island which leads to other environmental issues. Since access to an adequate supply of fresh water is paramount to the lives and well-being of all people, proper water stewardship at all levels of society is necessary. This work recognizes that the church's role as part of its contribution towards addressing ecological challenges such as water wastage, pollution and other environmental problems is by urgent formation of the ecological conscience of its members. This role is based on the understanding of the theological and social responsibility of the Church. The study makes it clear that the Diocese of Roseau must address freshwater conservation because of its Christian obligation which flows from the biblical mandate to care for and preserve the sanctity of all of creation. Finally, the research aims to assist the diocese in promoting the idea of integral ecology among all spheres of Dominican society.

Keywords: common good; conservation; ecological conversion; integral ecology; water ethics; water resource; stewardship

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INTRODUCTION

Rationale

Two years after the promulgation of Pope Francis' encyclical *Laudato Si'*, *Care for our Common Home*, in which he stressed the devastating effects that climate change is having on the environment and people of small and developing countries, Dominica was hit by a category 5 hurricane, Maria. This encyclical seemed prophetic. In it, Pope Francis states, "It (climate change) represents one of the principal challenges facing humanity in our day. Its worst impact will probably be felt by developing countries in the coming decades." (LS 25) The major cause of the destruction to the island during the wet period (June to November) according to all reports is water from overflowing rivers, streams and blocked waterways. In an island that has an abundance of water, if not properly managed and cared for can become a weapon of catastrophic disaster as we have seen with Hurricane Maria (2017) and Tropical Storm Erika (2015). This is not only due to heavy rainfall but compounded by the actions and inactions of human contributors, building near water areas and the dumping of garbage in drains and other waterways.

The Catholic Church in Dominica which represents a very large part of the population is a vital dialogue partner to remedy or lessen the causes of what can be deemed an ecological crisis which Blessed Pope Paul VI referred to it as "a tragic consequence." One of the results of the ecological crisis is the loss of freshwater sources which is leading to a rise in water scarcity globally especially in poorer countries. According to Worldwildlife.org "Clean freshwater is an essential ingredient for a healthy human life, but 1.1 billion people lack access to water and 2.7 billion experience water scarcity at least one month a year. By 2025, two-thirds of the world's population may be facing water shortages." Notwithstanding the concerns mentioned, the nation's

attitude towards the treatment of water can be deemed irresponsible and wasteful. Over the years the government has enacted laws and policies to protect and conserve the island's precious resource but laws and policies alone are not sufficient. An all-round social framework must be built, focusing on the use and proper management of Dominica's water as a gift for the common good. This is where the Diocese should take the lead, in advancing an integral ecology.

Thesis statement

Although the Diocese of Roseau has encouraged the protection of the island's freshwater resources, it needs to focus on the ecological conversion of Dominicans.

Parameter

This research is concentrated on the Diocese of Roseau, which represents about 61.4 percent of the population.¹ A study on an institution of this size and reach gives a good representation of how the population views and interacts with the island's freshwater. The study is limited also to freshwater in Dominica primarily because the island is known for its large amount of this resource per capita. The number of words stipulated and the time frame in which the project should be done also influenced the focus of the study.

Objectives

This thesis aims to bring to light the significant role that the Diocese of Roseau can contribute to the conservation of freshwater on the island by (1) helping to change the public

¹ International Religious Freedom Report for 2022 United States Department of State, Office of International Religious Freedom. <https://www.state.gov/wp-content/uploads/2023/05/441219-DOMINICA-2022-INTERNATIONAL-RELIGIOUS-FREEDOM-REPORT.pdf>

perception of water as not merely a resource at their disposal but as a gift for the common good, (2) ensuring that both the government and private sector observe their moral and ethical responsibility towards the proper management of the resource, (3) facilitating the diocese understand its role in forming an ecological conscious population and (4) providing literature on eco-theology.

Methodology

This research paper appraises theologically the role of the Diocese of Roseau in the conservation of Dominica's freshwater resources. The island in focus has already enacted various laws and legislations to protect the resource but there remains a need for the church to get involved. The researcher employed a combination of quantitative and qualitative forms of data collection. Questionnaires were distributed to various parishes with questions of varying levels; individual, community, parish and diocesan to gain an understanding of the church's ecological awareness. An average of ten interviewees responded from each of the fifteen parishes in the Diocese. Though similar style questions were given to both parishioners and clergy, a few were tailored specifically for the clergy. The researcher also interviewed some participants in small groups and other individuals of interest were met one-on-one. In the small groups and individual meetings, a discussion-type format was used. In addition, the research makes use of a variety of secular literature and church documents on the topic.

Chapter Outline

The body of the thesis is divided into three chapters and a conclusion. Chapter one is divided into three subsections. The first deals with the present context of freshwater on the planet.

The second describes the importance of freshwater to Dominicans' life. The third highlights the issues that threaten freshwater.

Chapter two is subdivided into three sections. The first deals with freshwater in the life of The Church. The second looks at the contributions made by the Diocese of Roseau towards water conservation. The third deals with the perception of the people towards the resource; identifying the problem.

Chapter three focuses on the diocese's role in freshwater conservation and is broken down into two subsections. The first looks at the concerns of the diocese—the second highlights what is needed by the diocese to correct the problem and includes recommendations.

LITERATURE REVIEW

Literature in this area of research is limited because the regional and local Church has only recently been focusing on this area of study. However, on the topic of ecology, with water being a part of the ecological framework, much has been written both on a scientific and social level generally.

There has been a concerted effort, especially in recent decades by the church to reflect on its own involvement in ecological issues since ongoing climatic studies have provided evidence of serious concern about the rising temperature of the earth's atmosphere and its present and future effects on life on the planet.

Scientific contribution

The scientific community has led the way in ecological and environmental studies. The information that has been compiled is immense and of great importance, especially in tracking the state of life on the planet and human impact on the earth's resources. Pope Francis recognizes the authoritative role of science in matters of what he deems an 'ecological crisis' and underlines emphatically "The climate is a common good, belonging to all and meant for all. At the global level, it is a complex system linked to many of the essential conditions for human life. A very solid scientific consensus indicates that we are presently witnessing a disturbing warming climate" (LS, 23).

Scientists and environmentalists have brought to light the phenomenon of global warming and its effects on the earth's climate and weather patterns. According to the World Meteorological Organization, "Water and climate change are inextricably linked. Climate change is exacerbating both water scarcity and water-related hazards (such as floods and droughts), as rising temperatures disrupt precipitation patterns and the entire water cycle." The report goes on to state that, "Only

0.5 per cent of water on Earth is useable and available freshwater – and climate change is dangerously affecting that supply” (WMO 2021).² The United Nations report on water and climate change indicates that “By 2050, the number of people at risk of floods will increase from its current level of 1.2 billion to 1.6 billion. In the early to mid-2010s, 1.9 billion people, or 27% of the global population, lived in potentially severe water-scarce areas. In 2050, this number will increase to 2.7 to 3.2 billion people” (UN 2020).³ These are causes for grave concern.

The Universal Church

The Church has progressively released documents that bring to light environmental problems with recommendations to help tackle them. In his 1970 address to the FAO, Paul VI described the ecological concern as “The progressive deterioration of that which has generally come to be called the environment, risks provoking a veritable ecological catastrophe.”⁴ He warned, “Man is suddenly becoming aware that by an ill-considered exploitation of nature he risks destroying it and becoming in his turn the victim of this degradation... This is a wide-ranging social problem which concerns the entire human family” (QA 21). Subsequent Popes have picked up on the theme of ecological tragedy in one way or the other. Pope John Paul II in his 1990 World Day of Peace message referred to the ecological crisis as one stemming from a moral problem, he stated,

We can understand better the importance of giving attention to what the earth and its atmosphere are telling us: namely, that there is an order in the universe which must be respected, and that the human person, endowed with the capability of choosing freely, has

² WMO is the United Nations system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces and the resulting distribution of water resources. <https://www.unwater.org/water-facts/water-and-climate-change>

³ UN-Water's consolidated technical advice from United Nations entities and external organizations helped shape Sustainable Development Goal 6 (SDG 6) to “Ensure availability and sustainable management of water and sanitation for all”. As a result, SDG 6 and its various targets take the entire water and sanitation cycle into account.

⁴ Visit of Pope Paul VI to the FAO on the 25th anniversary of its institution, Monday, 16 November 1970 (par.3).

a grave responsibility to preserve this order for the well-being of future generations. I wish to repeat that the ecological crisis is a moral issue (WDP 15).

Pope Benedict XVI saw the solution to the ecological crisis as a shift in an understanding of development, from one that is purely economically and technologically driven to a preferred authentic human development. According to him this type of understanding of development calls for the human person to enter into genuine relationships. He writes, “The environment is God's gift to everyone, and in our use of it we have a responsibility towards the poor, towards future generations and humanity as a whole” (CV 48). The Church has a role in the salvation of creation through humanity. “She (The Church) must above all protect mankind from self-destruction because when “human ecology” is respected within society, environmental ecology also benefits” (CV 51).

Pope Francis has dedicated his papacy to championing the care of the gifts that God has blessed ‘our common home’ with. He calls on all people of goodwill to play their part in ensuring that they are protected so that future generations can enjoy them as well. In his 2015 Encyclical *Laudato Si’*; Care for Our Common Home, Pope Francis mentions the word “water” numerous times to demonstrate the great value and concern he places on water as a sacred and essential part of life. In the Huffpost, Peter Gleick highlights that the document mentions several notable water problems; the lack of access to clean drinking water “indispensable for human life and for supporting terrestrial and aquatic ecosystems” (LS 28), the challenges for food production due to droughts and disparities in water availability and “water poverty” (LS 28), the continued prevalence of water-related diseases afflicting the poor (LS 29), contamination of groundwater (LS

29), and the trend toward privatization and commodification of a resource which the encyclical describes as a “basic and universal human right” (LS 30).⁵

The world’s water challenges though they may seem to be technical, economic, political, and social issues, ultimately have an anthropological origin, “There can be no renewal of our relationship with nature without a renewal of humanity itself. There can be no ecology without an adequate anthropology” (LS 118). An integral ecology is key to combating anthropocentrism, it is “a vision capable of taking into account every aspect of the global crisis” (LS 138).⁶

The Regional Church:

The Antilles Episcopal Conference (AEC) released a Pastoral Letter in 2005 on Caring for the Earth. The document focused on the theme of stewardship, It states that, “The truth is that all human beings are called to be stewards, stewards of God’s gift of creation, the primary sacrament of His love. To thankfully take responsibility for the integrity of creation is an important part of what it means to be made in God’s image”⁷ (CE 2). What is unique about the document is that it addresses islands like Dominica with an abundance of freshwater and their responsibility to manage the resource sustainably. They write, “millions of gallons of water and other liquid waste end up in the sea. Proposals made to our governments to collect this water, treat it and make it available for non-potable uses seem worthy of serious consideration” (CE 59). The bishops recognize the effects that climate change is having on Small Island Developing States (SIDS), but they also realize that “The problem is aggravated by the pollution of our rivers. Often waste is dumped in gullies and rivers, and hazardous chemicals find their way into our rivers” (CE 28).

⁵ Peter H. Gleick. HuffPost.com, Laudato Si' and Water: The Vatican's Encyclical Letter and Global Water Challenges.

⁶ According to the Pope, “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. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature” (LS, 139).

⁷ Antilles Episcopal Conference Pastoral Letter “Caring for the Earth – Our Responsibility.” An Invitation to Reflection, April 2005.

The Local Church

In his Pastoral Letter to the Dominican Church entitled ‘Eco-Spirituality-Caring for Our Common Home’ Bishop Gabriel Malzaire emphasized that while the world is in a water crisis our responsibility as a people is to “appreciate the treasure we have in the Nature Isle. But it is something we must give our deliberate attention if we are to succeed at preserving it. Our rivers are under serious threat of pollution” (ES 11). The document addresses the theme of eco-spirituality which “aims at growth in personal integration and loving concern for others, leading to union with God who is enduring love... The individual’s lifestyle contributes to global transformation, which we call the new creation, that is, full spiritual and ecological integrity” (ES C). The bishop noted that as a diocese the focus should be forming the moral conscience of the people. He writes, “We need to make this a central concern in our pastoral ministry, fully cognizant of its moral implications...As a consequence, the Church has an urgent task of educating the people on the ecological challenges” (*ES C1*).

Fr. Francklyn, Cuffy a local priest, in many publications stressed the lack of public participation in activities geared towards the protection and conservation of Dominica’s rivers and other freshwater sources. As part of the 2018 World Rivers Day observance, The Sun newspaper published an editorial in which Fr. Cuffy emphasized that it is time to change the perception that most Dominicans have, the belief that we will always have “so much water” because of the claim of having 365 rivers, when in fact this is not true. He claims that our rivers are drying up right before our eyes and we do not seem to care that we are losing “our gifts so rich and rare,” quoting a line from Dominica’s National Anthem.⁸

⁸ The fact that our rivers are dying right before our very eyes is undisputable; but what is perplexing is that we say and do very little as we sadistically watch them slowly die away. Our government, the ministries of education, tourism and forestry, in particular, and the private sector institutions such as DOWASCO and DOMLEC, must find a way to

On Tuesday, January 17th, 2017, the Diocese of Roseau hosted a panel discussion around Pope Francis's Encyclical Letter on Care for our Common Home. Sr. Lorraine Royer a local nun, started the presentation stating, “We all know that the natural environment is crucial for existence but not all of us are aware of the connection between caring for the environment and spirituality” (“Catholic Church” 00.00.00-00.00.10). She highlighted the importance of an integral ecology that involves connecting care of the natural world with justice for the poorest and most vulnerable people and that only by radically reshaping our relationship with God, our neighbours and the natural world can we hope to tackle the ecological and social threats facing our planet. Sr. Royer noted that nature itself is the best tool by which we can listen to the cry of the earth. While dialogue and education are keys that can help us arrest the tyrant of self-destruction which currently endorses the global threats, pollution, lack of access to clean drinking water, depletion of biodiversity, social breakdown and global inequality are the roots of the problems identified.⁹

In a September 12, 2022, Orator’s issue, Mr. Richie Ferrol did an exclusive piece on Mr. Atherton Martin¹⁰ on the present situation of the Layou River, Dominica’s largest freshwater basin. Mr. Martin claims that the majestic Layou River remains threatened today, perhaps more than ever because of several issues; a destroyed river basin and ongoing environmental issues from an oil spill, violations of environmental laws and failure to implement proper land use planning in sensitive areas. His perception is that the general population may not comprehend the science of how rivers replenish themselves. People do not know how that process impacts their survival, and

raise awareness of the state of Dominica's rivers because without rivers their businesses will be much less lucrative and attractive. <http://sundominica.com/articles/world-rivers-day-2018-when-the-river-floods-it-doe-4987/>

⁹ Access to the entire report can be obtained from CBN4News under the caption **CATHOLIC CHURCH CALLS FOR ENVIRONMENTAL CONSERVATION** at <https://www.youtube.com/watch?v=-yJd59GloSw>

¹⁰ Mr. Atherton Martin is one of Dominica’s only environmentalists, an agronomist, and former president of the Dominica Conservation Association (DCA). He was awarded the Goldman Environmental Prize in 1998, for his efforts in protecting tropical forests from environmental threats due to planned large copper mining operations. He has twice served in the country’s cabinet, as Dominica’s Minister of Agriculture in the 1970s and as Minister of Agriculture, Planning and the Environment in 2000.

that of the forests, wildlife, and waterways. He realizes that people are taking the existence of rivers for granted in Dominica because there are so many of them. He claims that a small amount of water exists today where a deluge used to be. Dominica is losing its rivers, one day only a dry canal will remain.¹¹

The literature review provides the framework around which this thesis will be developed. What will be key in this project is the demonstration of how the incorrect perception of the island's freshwater resource leads to the lack of genuine concern for the resource by the majority of Dominicans and the need for adequate interventions by the Diocese of Roseau toward the formation of an ecological conscious population.

¹¹<https://orato.world/2022/09/12/environmentalist-in-dominica-sheds-light-on-failing-layou-river-government-missteps/>

CHAPTER ONE

1.0 Water as a resource

The island of Dominica is known as the “Nature Isle” of the Caribbean because of its lush vegetation. So strong is this feeling that chroniclers usually profess that it would be the only island that Columbus would recognize if he were to make his original mistake again in the 21st century. However, behind this abundance of vegetation lies another secret, an abundance of water. (Williams vii)

The statement above gives a general and fairly accurate description of the Dominican landscape and the availability of freshwater on the island. Many places in our world however are not as fortunate to share in the same abundance of freshwater. Allan Williams, in his book *Deluge* states, “To understand the value of freshwater we must go back to the original concepts that connect water to the existence of human beings. The presence of water guides our search for life on this and other planets. If there is or was evidence of water, then the possibility of finding life is increased. On our planet, the availability of this “source of life” is not abundant everywhere. (Williams 2)

The most common definition of a resource is something that is useful to humans. A more social definition is “a natural feature or phenomenon that enhances the quality of human life”¹² or “a physical material that humans need and value such as land, air, and water.”¹³ While the human is stressed in all three, water like air and land is vital for the existence and continuation of all life. This proves the adage, ‘water is life’. Freshwater, which is normally considered a renewable resource, in many areas is not so. Because of scarcity, it is unable to be replenished at the same rate that it is being used. Freshwater because of various factors such as population growth, climate change, pollution and environmental degradation, is now deemed to be in global shortage. This is

¹² <https://www.merriam-webster.com/dictionary/resource>

¹³ <https://education.nationalgeographic.org/resource/resource-types/>

a growing concern for all people and Dominica like the rest of the world, must take seriously the protection of its freshwater sources.

1.1 Water and Dominican life

From the arrival of the island's indigenous people the Kalinagos who are believed to have migrated from the Orinoco River area in South America (Caribs) water has been instrumental to their way of life as hunters and gatherers.¹⁴ In understanding the island's history and its first people, archaeological studies revealed that their life revolved around water areas which were critical in selecting a site for their settlement.¹⁵ In his work Mapping Water in Dominica, Mark Hauser showed a unique and interesting use of water as an instrument to map the history of the island during the time of enslavement. He looked at the relationships among the colonizers, the enslaved and the environment. He began by stating the obvious but understudied importance of the resource of that period. He writes, Water animated the landscape; it brought life to the soil. Its absence speaks to how much the people writing the account took it for granted as part of their everyday life. Its absence is also noteworthy for those who had to rely on available sources to drink, cook, wash, and water their animals.¹⁶

Most research on the topic of Dominica's water shows that the availability of freshwater supply is not an issue on the island. A report conducted by the Organization of American States (OAS), recorded that, in order to satisfy the water demand, the Dominica Water and Sewerage

¹⁴ Lennox Honeychurch, *The Dominica Story* pp.11-14

¹⁵ It has been recorded in the archaeological record of Dominica that natural resources played a major role in habitation site selection. Most of the sites that have been studied on the island are located, near the mouths of rivers or by springs in sheltered bays, on ground above flood level during heavy rains. Water resources were not only sought after for drinking purposes, but would have also been selected for the fish, shellfish, and bird life that they support, which would provide food for indigenous populations. The indigenous populations migrated via canoe, so they would have been attracted to certain landscapes or ecologies... River estuaries such as Roseau, Canefield, Belfast, Layou, Batalie and the Indian River harboured canoes and rafts. (Pickering 16)

¹⁶https://uw.manifoldapp.org/read/mapping-water-in-dominica-36cd0cea-ecf0-4d4e-bfc1-efaf6c1629c1/section/af9a41b4-10a0-48b1-9c2e-06f1cb166fda#p1_1

Company (DOWASCO) currently extracts water from about 47 independent river intakes, providing a total capacity of over 10 million gallons per day (10mgd). These supply systems are generally more than adequate to satisfy the demands of the communities (DNR 6-7).¹⁷ William notes that, “one interesting feature that demonstrates this abundance is the fact that Dominica does not rely on any groundwater reserves, as currently exists its surface flows suffice” (Williams 2).

While the majority of the water distribution on the island is concentrated on household usage, hotels and manufacturing also contribute in some part to its overall use. A small but significant part of the available freshwater is sectioned off for the generation of hydroelectricity on the island. The Dominica Electricity Services Limited (DOMLEC) website states that “steps have been taken to interconnect renewable energy systems to the company’s grid. The company operates three run-of-the-river hydro plants on the Roseau River in the Roseau Valley. These plants contribute 26.3% of the company’s overall generation power.”¹⁸ Although the island depends heavily on agriculture little to none of the island's domestic water supply is used in agriculture. Most families create wealth through rain-fed agriculture, which is dependent on climatic variability. However, in recent years there have been efforts to connect farmers to the water grid.

1.2 Water under threat

The scarcity of freshwater concerns us all and it is a challenge for the planet’s inhabitants. The World Water Council suggests that by 2025, half of the world's population will be living in places where water is either scarce or becoming scarce. In recent decades Dominica has been

¹⁷ The Dominica Water and Sewage Company (DOWASCO) is the lone institutional provider of water to the communities of Dominica. It has an estimated water production capacity of about 10 million imperial gallons per day (IGPD), obtained from 47 different surface flows. The largest single source is the one that serves the urban area of the capital Roseau and a number of surrounding communities and has a capacity of 3 million IGPD. The other 46 systems serve the rural communities. <https://www.oas.org/reia/iwcam/pdf/dominica/report.pdf>

¹⁸ <https://www.domlec.dm/history/>

experiencing a somewhat bitter-sweet relationship with water due to the impact of climate change. As the earth's temperature increases the more unpredictable the weather patterns become. This has caused significant global concerns and even greater anxiety to the peoples of small island developing states such as the Caribbean. Dominica has experienced some of the worst impacts of this phenomenon because of its location, mountainous terrain and generally wet conditions. The island has recorded significant increases in annual total precipitation while experiencing record number of consecutive dry days. This means that the wet season is getting significantly wetter and the dry season is getting dryer. According to Dominica Climate Resilience and Recovery Plan 2020-2030, the International Monetary Fund (IMF) ranked Dominica as the country that suffered the worst natural disasters between 1980 and 2017 (Hurricane Maria) based on sustained damage, estimated at 226% of gross domestic product. Dominica ranks as the fourth most vulnerable Caribbean country (DCRP 6)¹⁹.

A recent reminder of the impact of climate change on Dominica is Hurricane Maria. According to post-hurricane assessment, "Maria left 80-90% of the island's natural environment particularly the forest in ruin. Water was one of the major contributors to overall damage on the island. Torrential rains caused almost every river and stream to overflow their embankment taking with them bridges and roads" (ACAPS 5).²⁰ After storms or hurricanes access to drinkable water becomes ever more essential. Maria left 43 of the 44 water network systems completely non-operational. Water trucking services were deployed in mainly urban areas while people in rural

¹⁹ <https://odm.gov.dm/wp-content/uploads/2022/02/CRRP-Final-042020.pdf>

²⁰ The disruption of water and sanitation services impacted on livelihoods by disrupting production, manufacturing, and tourism activities. Limited access to water supply changed habits and consumption patterns among the affected population (PDNA 2017). This change in practice is not ideal and should be a temporary solution until water is restored. Extensive rehabilitation is required to repair the damage and to increase future resilience (OCHA 19/10/2017; OCHA 26/10/2017). In some instances, rehabilitation of these systems were made using provisional solutions which in many cases resulted in feeble or disrupted service. https://www.acaps.org/fileadmin/Data_Product/Main_media/20180131_acaps_disaster_profile_dominica_v2.pdf

areas fetched water from subsurface or underground sources for drinking. Rivers and streams became the main sources of drinking water once the water was declared safe.

One of the significant effects on freshwater observed after the passing of hurricanes and tropical storms is the constant changes in river courses, altering the landscape. Another common threat to the island's freshwater is contamination by quarrying activities, garbage disposal, sewage, effluent discharge and the washing of pesticides and fertilizers containers.²¹ What climate change is doing is exposing how fragile the island's natural environment is and how quickly the perceived overabundance of freshwater can become a scarce resource.

²¹ *ibid*

CHAPTER TWO

2.0 Water as sacrament

In no other place is it evident that water is elevated to such high honour as in the Catholic Church. Water is used throughout the life of the Church because it was birthed and nourished from the water which flowed out from the side of Christ as His bride. “The origin and growth of the Church are symbolized by the blood and water which flowed from the open side of the crucified Jesus. For it was from the side of Christ as he slept the sleep of death upon the cross that there came forth the wondrous sacrament of the whole Church.” (CCC 766)

Water in the liturgy of the Catholic Church is not just a tool or a mere resource but a sacramental gift which according to Mark Allman shows reverence for creation because all of creation is a context of God’s self-disclosure. (Allman 51) Water as a sacramental symbol demonstrates the relationship between the Church’s liturgy and ordinary life. I rely now on Allman’s insight on K. Irwin and J. Hart’s hermeneutic for a theology of water as a sacrament. Sacramental symbols are polyvalent and serve as a bridge between the sacred and the secular, which can be conflated in the theology of water as a sacrament. Sacramental symbols are effective because they parallel day-to-day activities (ordinary water becomes holy water and at the same baptismal water reminds us of cleansing; washing/bathing). Therefore, how an object is used and perceived in everyday activities affects its ability to function sacramentally. This is especially true with water, the central symbol of baptism.

According to Allman in baptism, water is the indispensable symbol of new life, forgiveness of sin and membership into the Body of Christ. However, in the daily life of one billion people, water is a deadly source of disease, polluted with excrement and chemicals or a commodity they cannot access or afford. Polluted water no longer has a sacramental character and is ineffective as

a symbol for the washing away of the stain of original sin and instead becomes a symbol of diseases and death. The Didache, one of the oldest Christian treatises, included the instruction that one should baptize in 'living water' (fresh flowing water) both for the sake of authentic sacramental symbolism and hygienic reasons. Likewise, when water is privatized, its sacramental is denied to many. Its availability as a sign of a loving grace and gift for all life is limited. Instead, it symbolizes oppression and the commodification of God's grace and gift. Allman claims that the gravest threat to understanding water as a sacrament and the practice of baptism is not from any new theological movement or radical interpretation of Scripture but from the state of water in the world.

(Allman 51-55)

A link, therefore, can be made between the Church and the Dominican people and also the Sacrament of Baptism and the island's freshwater. The growth of the local church relies heavily on the people's receptiveness to the grace that God offers through the sacraments of the Church. The parishes throughout the Diocese of Roseau in their pastoral ministry must awaken in the people the connections that the Church offers life in Christ Jesus through her sacraments, first through baptism. Water is not only important for external washing but for internal cleansing, the renewal of mind, body and soul. Through the waters of baptism, we participate in the Paschal mystery of Christ "Therefore we are buried with him by baptism into death: that like as Christ was raised up from the dead by the glory of the Father, even so we also should walk in newness of life" (Rom.6:4). In baptism we are saved from the slavery of sin to freedom in Christ Jesus and brought from death to new life. Our abundance of clean fresh water is both a material and spiritual sign of God's gift of life in Christ, "I have come that they may have life and have it in abundance" (Jn.10:10). The use of living water as a sacrament of initiation into a new life in Christ should

inspire renewal of mind and conversion in attitude towards the conservation of the resources of our common home.

2.1 Water and the Diocese

Although the Diocese of Roseau as a collective body has not documented or said much on the topic of the conservation of freshwater on the island, many individuals associated with the local Catholic community have spoken and continue to voice their concerns through advocacy and practical works. One such group within the diocese is the Laudato Si Committee headed by Msgr. William John-Lewis and Sr. Lorraine Royer. In my interview with Sr. Royer, she summarized their work in the following, we created awareness of ‘Laudato Si’ in different ways: we gave courses on the document to groups both in-person and online, making use of the various online resources, retreats were conducted with students at the secondary level, using themes from Pope Francis’ documents. Every year on the Feast of St. Francis of Assisi, reflections with a focus on our connectedness with the natural world are distributed throughout the diocese. The Dominica Catholic Radio was one of the main means for the sensitization of Catholics on the urgency to become stewards of God's gifts. Sr. Royer noted that while water was discussed broadly, they did not address the island’s freshwater situation.

Fr. Franklyn Cuffy, chairman of the World Rivers Day Committee called for a change in the branding of the Nature Island of the Caribbean. Speaking to Q95 news, Cuffy stated that Dominica’s claim of 365 rivers gives the impression that we will never want for water, but this might not be true because the authorities responsible for protecting and developing the surroundings of Dominica’s rivers and natural sites are not doing a good job. He continued, the number 365 signifies the abundant blessing of freshwater that God has given to the island, but this

should be matched by our response to the gift as individuals and in our relationships with each other and nature.²²

As part of the 2023 World Rivers Day activity, Fr. Franklyn Cuffy as president of the Waitikubuli Advocate for a Viable Environment (WAVE), in ‘THE SUN’ editorial, described the attitude of the government and people of Dominica as ‘couldn’t-care-less’ as the gift ‘so rich and rare’ dwindling and dry up. In 2023 Dominica and most of the Caribbean experienced one of the driest dry seasons of recent times. He claims that we are already ‘missing the water,’ as the rivers run dry the state electricity company (DOMLEC) is currently being forced to ration power because severe drought has cut its ability to generate sufficient quantities of hydroelectricity. Fr. Cuffy laments that in addition to financial and human resources and a splash of aggressiveness to influence the state to plan and implement a decade-long plan to save our rivers, he said we need a revolution a complete change, to reverse the death of our rivers.²³

Bishop Gabriel Malzaire in his 2018 independence homily announced the pastoral plan for the Diocese of Roseau in the coming year under the theme ‘Stewardship, a Way of Life’. The one word he claims most adequately represents the mindset required for a successful future is STEWARDSHIP. Stewardship demands a responsible attitude toward every aspect of the created order, of prime importance is our attitude towards the Earth—our common home. He continued, created out of God’s giftedness, therefore, we are duty-bound to use our time, talent and treasure for the building of the community of God’s people. In closing he mentions that to be stewards of creation also constitutes the need to take greater care of the “self” not with an unbridled selfishness,

²² Chairman of the World Rivers Day Committee Fr Franklyn Cuffy calls for change in Dominica’s Tourism Brand, as the authorities charged with protecting Dominica’s rivers and natural sites are not doing a good job. <http://www.q95da.com/news/chairman-of-the-world-rivers-day-committee-fr-franklyn-cuffy-calls-for-change-in-dominicas-tourism-brand-as-the-authorities-charged-with-protecting-dominicas-rivers-and-natural-sites-are-not-doing-a-good-job>

²³ The Sun, Editorial, On World Rivers Day, a priest and a poem called “White River Divine.” 19th September 2023, p.4.

but rather with a keen sense of responsibility, for the sake of the common good. (Bishop's independence message, 2018)²⁴ This cannot be achieved with a parochial view of self but with an openness to understand “self” in relationship to all other “selves” and creation.

2.2 Perception of Dominicans:

On the island, the number of rivers and above-average precipitation are largely attributed to the island's volcanic topography. It is this mountainous landscape that gives rise to high rainfall levels. Because of this dependable hydrological environment, the perception among the nationals is that the island has an overabundance of water “Water cannot finish,” the people say. Consequently, it is commonplace to find citizens complaining about slight disruptions in their water supply or may even protest if it persists for a few days. This idea that freshwater is in unlimited supply does not correspond to the global reality. John Clammer states that “water is not a renewable resource but it is a recyclable resource through its global cycle... If ‘x’ amount of water was present in the 1950s to quench the thirst of 1 billion people, then the same amount had to be shared by 6 billion in 2009 and 8 billion in 2023... Water is a one-time allotted resource” (Clammer 81).

The general sentiment of those familiar with the historic flow conditions of Dominica's rivers is that the abundance of water resources on the island is not the same as they once were.²⁵ This trend should be a rallying call for national action that is underpinned by the recognition at the widest public level that there is a need for proper management of this valuable resource and that water resource management is everybody's business (NIWRP, 2011).²⁶ In this national plan for

²⁴ <https://www.dioceseofroseau.org/bishops-independence-message-2018/>

²⁵ <https://orato.world/2022/09/12/environmentalist-in-dominica-sheds-light-on-failing-layou-river-government-missteps/>

²⁶ Commonwealth Of Dominica, Dominica National Integrated Water Resources (Iwrm) Policy, July 2011. <https://faolex.fao.org/docs/pdf/dmi161367.pdf>

water conservation, the Church has a duty to form the ecological consciousness of the people. As Bishop Malzaire, Fr. Cuffy and Sr. Royer have pointed out there remains a gap that the church needs to fill, ecological conversion. The diocese must go beyond advocacy and focus on practical ways of changing the present culture.

The data collected from questionnaires shows the need for a theological voice on ecological matters. Although 80% of the lay interviewees agree that the Church has been given the mandate by God to care for the earth's resources only 15% agree that the local church is active in issues affecting water in the society. This compared to 80% and 20% among the clergy. It is no surprise that 85% of those interviewed believe that Dominica does not have water problems. This clearly supports the general perception of the population, that as long as water is available for use in the home then there is no other concern. This way of thinking is exactly why only 20% of the respondents see the need to get involved or know someone in their church community who takes part in environmental issues such as water pollution and conservation. While 60% of the clergy agree that caring for creation was part of their seminary training, only 10% make environmental issues part of the agenda at their parish meetings or conferences at least once a year. This is supported by the fact that 75% of the laity disagree that the church teaches the community about ecological responsibility and the majority, 95% has not had parish discussions on church documents such as *Laudato Si*. Again while 80% of the clergy responded positively to encouraging their congregation to take part in activities for World River's Day, less than 30% actually participate.

The problem of the lack of urgent action toward the protection of Dominica's freshwater stems from the people's false perception of an overabundance of the resource on the island. This

also demonstrates a gap between the diocese's theology and praxis. The local church needs to address and correct this before it is too late.

CHAPTER THREE

3.0 The Concern of the Diocese

The most natural way for the Gospel of Christ to become relevant to all generations is by Christians getting actively involved in all aspects of life in the world as both private and public citizens; family, social, cultural, educational, and political. In *Gaudium et Spes* we read, "...it is generally the function of their well-formed Christian conscience to see that the divine law is inscribed in the life of the earthly city" (GS 42). The Church, although not an NGO, must be engaged in the affairs of the world in order to purify them of corruption and injustice. The Pastoral Constitution on the Church in the Modern World opens with these words "The joys and the hopes, the griefs and the anxieties of the men of this age, especially those who are poor or in any way afflicted, these are the joys and hopes, the griefs and anxieties of the followers of Christ"(GS 1). Given that access to clean freshwater is one of the major griefs and anxieties to men and women of this age, the Church has a duty to provide ethical and moral guidance on issues relating to freshwater as a 'gift from God' essential to all life. The protection of freshwater is not only a social good but, for the Diocese, water ethics spills over into the sacramental life of the Church because water is used in its liturgy and sacrament.

In his 2020 presentation to the Conference on Theology in the Caribbean Today (CTCT), Archbishop Gabriel Malzaire referenced the Dominica Climate and Recovery Plan 2020-2030 as the island's strategy in preparation and response to events of major natural disasters. Bishop Malzaire identified closely with the section on resilience, which speaks to the planning and implementation of measures to build strong communities, through a population that is "conscious" and values resilience. He thought that this was a very important part of the document that the

Diocese should be included, because it corresponds with the mission of the church in building community and forming conscience. Bishop Malzaire pointed out that to build resilient communities the collective conscience, mindset and behaviour of the people and their spiritual and cultural beliefs and practices should be taken into consideration. It underpins respect, dignity and peace among all citizens ensuring that no one is excluded, respecting both people and the environment.²⁷ As Pope Francis puts it, “We are not faced with two separate crises, one environmental and the other social, rather, with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded and at the same time protecting nature.” (LS 139)

The Diocese of Roseau although it supports the government’s recovery plan, recognizes that there is a gap between the policymakers (government) and the local Church. The voice of the Church remains absent. It does not matter how many laws are enacted, legislations passed or policies written on environmental protection, if the conscience of the people is not formed to think ecologically, the conservation of the island’s resources will never be a priority.

3.1 What is needed

As identified in the rationale of this project the role of the diocese in the conservation of Dominica’s freshwater resource is twofold (1) the formation of the ecological conscience of the human person and (2) provide guidance both to the government and private sector to help them realize their moral and ethical responsibility towards the proper management of the resource. If these are its responsibility, the diocese must take steps to warn, educate and lead the discussion on

²⁷ Bishop Malzaire’s reply highlighted the *Dominica Climate Resilience and Recovery Plan 2020-2030* as a local-level, practical response to that which threatens Caribbean nations regionally and globally. Identified in the plan were six “result areas”, namely: strong communities; robust economy; well planned and durable infrastructure; enhanced collective consciousness; strengthened institutional systems; and, protected and sustainably leveraged natural and other unique assets. It was suggested that focusing on these six areas would allow the Government to deliver on its resilience targets. <https://catholicct.org/2020/10/19/ctct-calls-for-a-caribbean-jubilee/>

topics relating to creation. Not only as a social responsibility but also the biblical mandate given to humanity from the beginning, to be custodians of all of creation “The Lord God took the man and placed him in the garden of Eden to “cultivate and care” for it.” (Genesis 2:15)

a. Water Stewardship

At the beginning of creation, every human person is bestowed with the responsibility to cultivate and care for his or her environment. According to Dr. Allan Williams, water stewardship means, “implementing an economically, environmentally and socially responsible water strategy, aimed at safeguarding long-term availability of clean water for all stakeholders” (Williams 163). Since water is a shared resource, water stewardship is not only an individual responsibility but must incorporate all facets of society, it requires a holistic approach to water conservation. The Catholic Church must create avenues for dialogue among individuals, private companies, schools, churches, government and NGOs, working together to identify practical ways to promote best water stewardship practices. One such program can be the “Adopt a River” campaign, where social organizations assume responsibility for protecting a freshwater body and its environment.

b. Water as Gift

If we view water as a renewable resource that will always be there no matter how we use or misuse it, then this has serious implications for the way we treat it.²⁸ Through its catechesis, the diocese must help the individual awaken their ecological conscience to see all forms of life as having their own worth and not just in terms of their usefulness for humans. As a divine gift, fresh water becomes infinite in value, it is life-giving, and it a treasure of ‘great price’ and not just

²⁸ We have regarded other forms of nature as having value only insofar as they are useful for us humans. However, an ecological worldview sees all forms of life as having their own worth and not just a usefulness for humans. “Varieties of animals and plants are not only important insofar as they (now or in the future) have utility or optional usefulness for people, but also possess an inherent quality.... not only human but also non-human life have an intrinsic worth... there is a certain right to life for everything and everyone”. At the heart of the deepest feelings of those who care for the fate of the planet is a sense that the earth is seen as having its own wondrous and absolute value independent of us; our duty is to live in harmony with it. (AEC, Caring for Our Earth-Our Responsibility no.35)

something we possess as people of the Nature Isle. Becoming ecologically conscious and focusing on the sacredness of water is the best way to ensure that our freshwater resources are protected, and the rivers and springs remain pristine and conserved for future generations. The church must get the people to regard freshwater as their gift from God and how they care for and manage this gift is their gift back to God.

c. Water Ethic

The Church's role is to promote water ethics as outlined in the Encyclical Letter *Caritas In Veritate*, "It is necessary to cultivate a public conscience that considers water is universal rights of all human beings, without distinction or discrimination" (CV 27). In this regard, the diocese of Roseau needs to promote in her teachings the need for equal access to clean, safe portable water by all citizens. Since access to freshwater adds value to the way of life of a people, equal access to clean water by all can play a major role in closing the gap between the underprivileged and the privileged. Pope Francis put it this way, "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. This debt can be paid partly by an increase in funding to provide clean water and sanitary services among the poor"²⁹ (LS 30).

Although not of major concern at present, privatization of the resource can become a problem because of the growing demand for freshwater globally. Government and private companies must not only perceive the profits that can be made from the commercialization of water, for in doing so the cost of water will be dictated by world market prices and laws which will

²⁹ By its very nature water cannot be treated as just another commodity among many, and it must be used rationally and in solidarity with others. The distribution of water is traditionally among the responsibilities that fall to public agencies, since water is considered a public good. If water distribution is entrusted to the private sector it should still be considered a public good. The right to water, as all human rights, finds its basis in human dignity and not in any kind of merely quantitative assessment that considers water as a merely economic good. Without water, life is threatened. Therefore, the right to safe drinking water is a universal and inalienable right. Pope John Paul II, *Compendium of the Social Doctrine of the Church*, no.485.

eventually drive the cost of water beyond the means of the poor (LS 30). While the Church is not against the ownership of private property and goods, it must, however, be an advocate for the common good.³⁰

d. An Integral Ecology

What is needed by the Diocese of Roseau in its response to the problem of water perception, wastefulness and “couldn’t-care-less” attitude of Dominicans is the promotion of integral ecology “which accords taking time to create a serene harmony with creation, reflecting on our lifestyles and our ideals and contemplating the Creator who lives among us and surrounds us” (LS 225). This can only be achieved through what Pope Francis calls this ecological conversion- changing the people’s misconceived relationship with nature.

The Diocese must take up the task of educating Dominicans on the urgent need to be good stewards of creation through its homilies, catechesis, radio and television programs and social media platforms. Parishes can make ‘care for our common home’ part of their catechetical programs. The schools and other institutions under the management of the Diocese should get engaged in practical ways to conserve and protect the natural environment. Green technology should be incorporated in new buildings being constructed, such as the Cathedral. Renewable energy, smart water use equipment and wastewater management systems should replace outdated structures. Church leaders should promote World Water Day and World Rivers Day activities and

³⁰ In his chapter “Water as Sacrament, Global Water Crisis and Sacramental Stewardship” Allman writes, The Compendium of the Social Doctrine of the Church describes water as a gift from God to which everyone has a right and decries treating water as just another commodity among many or as merely an economic good. Therefore it ought to be managed according to the ethical principles of subsidiarity, participation and the preferential option for the poor. It is important to note that Catholic Social Teaching on water describes access to water as a right and decries the treatment of water exclusively as a commodity but does not preclude the privatization of water. Instead, it engages the Church’s teaching on private property, which distinguishes between ‘use’ and ‘ownership’. In Catholic social Teaching water is both a common good (given by God for the use of all) and material good that can be privately owned so long as access to safe water and sanitation for all are guaranteed. (Water Marks Our Life pp. 46-47).

participate actively in these and other ecological events. This will create a nexus between the Church's theology and praxis.

Since Dominica sells itself as the 'Nature Isle' plants should be part of the landscape of all public spaces and buildings, this will reduce evaporation and help keep the environment cooler. The implementation of rain-harvesting techniques for domestic and commercial use should be advanced. As a health promotion, drinking water fetched from springs should be encouraged. Properly treated wastewater can be reused in agriculture, also in arid areas crops that require little water for growth should be planted.

We cannot neglect the economic benefits of freshwater. The millions of gallons of water flowing freely into the sea daily can be collected and sold to regional and international countries. This will encourage local ownership of the resource and help raise awareness about the value of water. The government can also offer financial incentives to businesses that implement sustainable water practices. These recommendations are given to promote water stewardship and aid in developing an ecologically conscious island.

CONCLUSION

This project has laid out the value of freshwater. Like air and land, it gives and sustains life and is a basic human right. Globally freshwater is a scarce resource and freshwater security is threatened by many factors, most if not all are linked to humans' ill-considered use of earth's resources. As identified in this thesis what is needed is an integral ecology. Humanity must become increasingly conscious of the connection between themselves and the rest of creation, that is, the good of civilization is profoundly intertwined with the good of nature.

In a land whose Coat of Arms bears the inscription '*Après Bondie C'est La Ter*' which translates, "After God the Earth", every Dominican should regard the care and protection of the island's natural gifts as a priority. The Catholic Church must take up the divine responsibility for the ecological conversion of its members. Though ecological conversion demands a change of conscience at the level of the individual, the qualitative and quantitative impact on society can be phenomenal. Dominicans cannot continue to view water as something that "will always be there" because the reality is that in many cases the water levels in the rivers and streams keep decreasing, while water demand is constantly increasing.

To achieve this new ecological paradigm, better collaboration must be forged among all stakeholders, families, schools, government, NGOs and churches. Because of the seriousness of water scarcity and other environmental issues, eco-theology should become a priority in the mission of the diocese of Roseau.

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APPENDIX A

Glossary

Anthropocentrism: The worldview that places human beings at the center of the universe, considering human interests and needs as paramount, often at the expense of other species and ecosystems.

Conservation: The sustainable use and management of natural resources, including land, water, wildlife, and forests, to ensure their continued availability for future generations.

Common Good: The collective well-being of a community or society, where social and environmental justice are prioritized for the benefit of all members.

Diocese: A geographical region or district under the jurisdiction of a bishop in the Christian Church, typically divided into parishes for religious administration.

Ecology: The scientific study of the relationships between living organisms and their environment, including the interactions between organisms and their physical surroundings.

Ecological Conscience: An individual's moral awareness and responsibility towards the environment, recognizing the interconnectedness of all living beings and ecosystems.

Environment: The surroundings in which an organism, species, or community lives, including the air, water, soil, and other living organisms.

Freshwater: Water from sources such as rivers, lakes, and groundwater that has low salt content and is suitable for drinking and irrigation.

Integral Ecology: A holistic approach to environmental issues that considers the interconnections between ecological, social, economic, and cultural dimensions of sustainability.

Interconnectedness: The concept that all living organisms and ecosystems are interconnected and interdependent, highlighting the importance of recognizing these relationships in environmental stewardship.

Sacrament: In Christian theology, a visible sign of an invisible grace, often associated with religious rituals and practices in the Catholic Church.

Stewardship: The responsible and sustainable management of resources, recognizing that humans are caretakers of the Earth and have a duty to protect and preserve it for future generations.

Watershed: The area of land where all the water that falls within it drains into a common waterway, such as a river, lake, or ocean.

Water Ethics: The moral principles and values guiding human interactions with water resources, including considerations of fairness, sustainability, and respect for the rights of all beings.

Water Resource: Any source of water that can be used or managed, including rivers, lakes, groundwater, and reservoirs, which are essential for human survival and ecosystem health.

APPENDIX B

Questionnaire 1

Laity

I am Darril Thomas, a theology student at the St Augustine Campus of the University of the West Indies (S.I 816028876), I am conducting research for my thesis on the topic *the role/responsibility of the Catholic Church in the Diocese of Roseau in the preservation and conservation of the islands freshwater resource*. To be able to complete the research, I am required to interview both clergy and laity of various parishes of the diocese of Roseau to assess their awareness and participation in fresh water-related issues.

The study will benefit the church community in various ways, such as the level of awareness and participation of the church in environmental issues with specific focus on freshwater. This can provide vital information for identifying interventions that may contribute to the church's involvement in environmental issues.

Note: Those that participate in the study do so voluntarily. Your voluntary participation to make this study possible is highly appreciated.

The aims of the questionnaires are to establish the members of the church's current level of awareness and participation in freshwater related issues.

Please tick the appropriate box and fill in the blank spaces:

1.1 Your age: 18–20 years ☐ 21–24 years ☐ 25–29 years ☐ 30–35 years ☐ 36–40 years ☐ 41–50 years ☐ 51–60 years ☐ 60+ years ☐

1.2 Gender: male ☐ / female ☐

1.3 address _____

1.4 Parish _____

1.6 Parish involvement/ position(s) in church

Number	Questionnaire Item	Strongly Agree	Agree	Disagree	Strongly Disagree
1	The local church is active in issues affecting water in the society.				
2	The church believes that God has given them the mandate to look after the earth's resources.				
3	A good church is active in matters of water pollution.				
4	The participation in matters of water conservation and water pollution is for all members of the church.				
5	Members of the local assembly take part in community forum dealing with water issues.				
6	The local assembly is directly affected by water- related issues.				
7	Our pastor has dedicated teachings on environmental issues.				
8	The local church participates in social environmental issues.				
9	The Bible teaches us that we should care for the environment, which includes caring for water.				
10	I know individual members in the church who take part in environmental issues.				
11	I know individual members in our church who take part in matters of water pollution and water conservation.				
12	Our church teaches the community about environmental responsibility.				
13	Our church believes that it is affected by the water issues in our country.				
14	Dominica has no concern for water conservation because it is classified as a water- abundant country				
15	What happens in our environment does not affect our church members.				
16	My community does not have water pollution problems.				
17	The church is too small a group to create a meaningful impact on the environmental problems that the communities face.				
18	The pastors are the only people who can deal with environmental issues.				
19	Our church leadership is actively involved in water and environmental issues.				
20	Are Church documents eg. Laudato Si discussed in the parish?				

APPENDIX C

Questionnaire 2

Priest

I am Darril Thomas, a theology student at the St Augustine Campus of the University of the West Indies (S.I 816028876), I am conducting research for my thesis on the topic *the role/responsibility of the Catholic Church in the Diocese of Roseau in the preservation and conservation of the islands freshwater resource*. To be able to complete the research, I am required to interview both clergy and laity of various parishes of the diocese of Roseau to assess their awareness and participation in fresh water-related issues.

The study will benefit the church community in various ways, such as the level of awareness and participation of the church in environmental issues with specific focus on freshwater. This can provide vital information for identifying interventions that may contribute to the church's involvement in environmental issues.

Those that participate in the study do so voluntarily. Your voluntary participation to make this study possible is highly appreciated.

The aims of the questionnaires are to establish the members of the church current level of awareness and participation in freshwater related issues.

Please tick the appropriate box and fill in the blank spaces:

1.1 Your age: 25–29 years ☐ 30–35 years ☐ 36–40 years ☐ 41–50 years ☐ 51–55 years ☐ 56–60 years ☐ 60+ years ☐

1.2 Parish _____

1.3 Years of Formal Theological studies: None ☐ 1–2 ☐ 3–4 ☐ 5 and above ☐

1.4 Years in ministry: 1–3 ☐ 4–6 ☐ 7–10 ☐ 11–15 ☐ 16–20 ☐ Above 20 ☐

Number	Questionnaire Item	Strongly Agree	Agree	Disagree	Strongly Disagree
1	The local church is active in issues affecting water in the society.				

2	Church documents eg. Laudato Si are part of the parish pastoral planning resources				
3	The church believes that God has given them the mandate to look after the earth's resources.				
4	The church has the structure for facilitating participation in environmental matters.				
5	The parish is not facing water issues.				
6	I know individual members of the church who take part in water and environmental issues.				
7	I know group(s) in our church who take part in matters of water pollution and water conservation.				
8	The Church believes that it is affected by the water issues in our country.				
9	Dominica does not have water issues.				
10	The government ministers are the only people who must participate in challenges related to water issues.				
11	Caring for creation was part of my theological training.				
12	The church structure encourages us to teach about caring for creation.				
13	Caring for creation is an integral part of leadership seminars.				
14	The leadership at various levels in our church, participates in water and environmental issues.				
15	Environmental issues form part of our standard agenda in our church conferences.				
16	My church communicates important environmental information and gives updates regularly.				
17	I encourage my church members to participate in World Rivers Day activities and other such events.				
18	Our church is "green" – that is, takes active steps to use renewable energy.				
19	Members in our church are encouraged to use "green" technology.				
20	Dominica has no concern for water conservation because it is classified as a water- abundant country.				

APPENDIX D

Questionnaire 3

small group and individual discussion:

1. We say water is a resource, what does that mean to you?
2. Do you know where your water comes from? Can you identify some of the sources of fresh water on the island?
3. What is your perception of water in Dominica? Do you think that Dominica can “run out” of water? Why?
4. How valuable is water to Dominica and Dominicans?
5. If “to conserve” means to use wisely or proper/right use, Do you think that this is practiced by most Dominicans? Why do you think so?
6. In what ways do you and your family use water? Do you all have water conservation rules and practices? What are they? If not, what are some that can be implemented within your family and community?
7. Do you have water issues in your community?
8. Who do you think is responsible for handling those water issues?
9. Do you think the church has a role to play in the conservation of water? In what ways?
B. Has your pastor or any of your church ministries promoted water conservation?
10. Have you heard the slogans “Water is life” and “Water is precious don’t waste it”, what do they mean to you?

APPENDIX E

STREAM

Twist,
Turn,
Bounce,
Spurn the boulders
And toss against the mossy ledge.
Air silver with sunlight drops
That float in rainbow arcs
Above the frothing waterfall.
The silent pool of see-through green
Sweeps soft beneath the emerald fronds
Of ferns and palms
And dripping boughs of forest foliage
Strung with serpentine lianas.

Clear water pours
Through long deep caverns
Carved by countless rolling pebbles
Scraping, moulding, smoothing
Speeding out in sunshine cataracts
Where cautious crayfish
Cower in the shadows.
Where mullet flaunt their scaly bodies
Dipping, leaping to the sky.
Wary of the heron's arrow eye,
Its gawky body poised
Somewhere high
Among the treetops.

And in and out
And in and out
Between the sculptured rocks
Twist broken threads of water
Weaving patterns over stony bed.
And hear the gurgling music,
The watery beat
Up and down the valley,
The all day, all night harmony
From rainswept cloudy mountain
To the sandy salty shore.