

## **THE ROLE OF THE CHURCH IN SUSTAINABLE ENVIRONMENTAL MANAGEMENT IN ZIMBABWE: A CASE STUDY OF THE BULAWAYO ARCHDIOCESE OF THE ROMAN CATHOLIC CHURCH**

Steven Jerie

Department of Geography and Environmental Studies at Midlands State University, Gweru, Zimbabwe

### **ABSTRACT**

This paper focuses on the role of the church in environmental management for sustainable development in Zimbabwe using a case study of the work undertaken by the Roman Catholic Church in the Bulawayo Archdiocese. The study was based on field study using observations, questionnaires and interviews with the project proponents and beneficiaries of environmental management projects undertaken by Caritas which is also known as the Catholic Development Commission(CADEC) in the Matobo District of southern Zimbabwe. The projects visited and studied in depth involved the Restoration of Degraded Lands in Matobo World Heritage Site through Integrated Catchment Management for Improved Livelihoods. The successes of the project included improved livelihoods and incomes for local communities as well as relevant policy formulations for reduced loss of biodiversity through human agency. There has been improved knowledge, understanding, and appreciation of the value of the natural and cultural capital by 70% of the community. Other successes by the church driven project include improved use of forest resources, crop and livestock production, the development of craft production projects for women, bee keeping, agro-forestry projects, and the installation of bio-gas, bread stoves, and water harvesting techniques have been put in place so as to reduce soil erosion. These efforts have resulted in the reduction of biodiversity losses by 40% and implementation of relevant environmental management policies by 40%. The Roman Catholic Church has thus lived up to the church doctrine of keeping the Lord's Earth's habitable today and for future generations. There are thus advantages in undertaking environmental management projects with a faith based commitment and hence feeling responsible to God in the efforts to achieve sustainable development.

Key words: Environmental Management; Sustainable Development; The Church; Biodiversity; Livelihoods

### **INTRODUCTION**

This study explores the role of the Roman Catholic Church in managing the challenges posed by the environment with particular reference to projects initiated by the Bulawayo Archdiocese in Matebeleland North province of Zimbabwe. In Zimbabwe, the Roman Catholic Church has eight dioceses, and these include the following: the Harare Archdiocese, the Bulawayo Archdiocese, Chinhoyi diocese, Hwange diocese, Gweru diocese, Gokwe diocese, Masvingo diocese, and Mutare diocese. The Caritas branch (the developmental arm of the church) under focus in this study falls under the Bulawayo Archdiocese and covers the districts of Bulilimangwe, Umzingwane and Matobo.

Overall, churches have been slow to make any official responses to the environmental crisis, and the Roman Catholic Church had tended to stay on the fringe rather than get involved (Deane-Drummond, 1997; Deane-Drummond, 1996). The natural world was still viewed in an instrumental way-i.e. for the exclusive use by human beings. The Roman

Catholic Church was initially reluctant to be full participants of the World Council of Churches meetings which addressed these issues (ACORA, 1990; Clark, 1994; Althus, 1992). Thus as observers only, the Roman Catholic Church's contribution was weaker than it could have been. The Vancouver World Council of Churches Assembly in 1983 first coined the phrase, 'justice, peace and integrity' emphasising the link between human justice, peace issues, and environmental concerns. In 1985 the German Roman Catholic Bishops Conference issued a joint statement with the Council of the Evangelical Church entitled 'Exercising Responsibility for Creation'- a statement that urged a change in attitude to animals and creation, a change of pattern of lifestyle and consumption of resources. The other positive statements on the environmental issues included one by the Justice Peace Commission of the Roman Catholic Church in Ghana in 1982 which linked desertification with human survival and urged the church to preserve the land for the sake of future generations (Berry, 1981).

In his 1990 World Day of Peace Message, the Pope began to speak of the environmental crisis as an important moral issue (Deane-Drummond, 1997). The Papal statement raised a number of key issues that had a link with the environment. He made reference to the indiscriminate application of advances of science and technology which resulted in global pollution of common resources and self destruction from an indiscriminate genetic manipulation, which, left unchecked, leads to rejection to the respect for life and the integrity of creation. He identified greed and selfishness as the major causes of the environmental crisis, both at an individual and corporate level and called for an internationally co-ordinated approach to the management of the Earth's goods. The past two decades have also seen increasing attention in Christian spirituality and theology to environmental matters. Within the environmental movement the Christian churches have sometimes been seen as social institutions at odds with social and ecological transformation. Some scholars have regarded the Christian religion as one of the root causes of the ecological crisis (White, 1967). The evidence to this can be traced in environmental history, cultural geography, biblical hermeneutics, and theology (Naess, 1989; Bowers, 1993).

There are many reasons for engaging in the effort to enhance environmental awareness and action within the Christian church communities. There are thus considerable resources for a pro-environmentalist stance. Recent decades have seen an explosion of writings on eco-theology and eco-feminist theology (Brulle, 2000; Oelschlaeger, 1994). In his typology of discourses of environmentalism, Brulle lists eco-theology as one the articulations of the human-environment nexus (Bibby 2004; NSNVO, 2004). There are thus a number of opportunities that are favourable to effective faith based environmental learning and responsive learning ( Anderson, 2006; Ellis and Bochner, 2000). Sub-cultural opportunities refer to the social practices of congregations that lead to more effective learning occasions. Churches promote engagement with issues and important life questions through study and fellowship groups. Motivational dimensions potentially increase the effectiveness of environmental awareness because of the faith-based commitment. Feeling responsible to God the Creator could be a powerful incentive to pro-environmental concerns. Finger (1997) observes that each tradition has distinctive characteristics that may assist the critical conversations with culture. According to Gottlieb (2003) environmental degradation is not only a health danger, an economic catastrophe, or an aesthetic blight but also sacrilegious, sinful, and an offense against God. The basic Christian message includes the motivation for committed action to make the earth a better place: more in line with the Creator's presumed intents. It has a public critic of greed, self-centeredness, materialism, and the hubris of an over-emphasis on human rationalism and exuberant humanism that there are many reasons to expect a favorable result from engaging in pro-environmental work in religious contexts.

A number of obstacles to faith-based environmental engagement have been highlighted in the literature (Altfield, 1993; Berry, 1981; Bratton 1992; Kearns, 1995; Kollmus and Agyeman, 2002; Redekop, 2000; Robolton and Hart, 1995; Shibley and Wiggins, 1997; Walsh, 2004). Pragmatic obstacles include elements of theological beliefs or worldwide views that disable attention to environmental concerns. A good example is the concern by some Christians that environmentalism may be founded on nature worship or other aberrant belief systems (Booth, 1999; O' Sullivan, 1999). There has also been deliberate dismissal by some environmentalists of the Christian religion as having anything constructive to offer about human-Earth relationships (Booth, 1999; Naess, 1989). Applicability obstacles are those conflicts over the appropriate attention to give environmental concerns. Human social concerns are regarded as more urgent than environmental concerns hence working against poverty, homelessness, anti-war movements, or food banks are considered more important. In religious circles this obstacle may be buttressed by the theological contention that God is concerned with the humans made in His image (Shibley and Wiggins, 1997). However, over the years these obstacles have lessened and people are surprised that anyone would question the legitimacy of Christians being concerned about the environment.

## **METHODOLOGY**

The study was based on field visits, observations, and analysis of the projects undertaken by the Roman Catholic Church in the Bulawayo Archdiocese that involved environmental management. The projects visited and studied in depth involved the Restoration of Degraded Lands in Matobo World Heritage Site through Integrated Catchment Management for Improved Livelihoods. This project was facilitated through the Global Environmental Facility Small Grants Program (GEF-SGP). The project title was 'Integrated Management of Historical and Cultural Diversity for Improved Livelihoods: Community participation in the management of protected areas of the Matobo World Heritage Sites'. In-depth interviews were also undertaken with officials of the Catholic Development Commission (CADEC) project partners such as Umzingwane Rural District Council, Matobo Rural District Council, Africa 2000 Network Foundation, National Parks and Wildlife Management Authority, National Museums and Monuments of Zimbabwe, Agricultural Research and Extension, Environmental Management Agency, Dabane Trust, Help Age Zimbabwe, Desert Margins Program, International Crops Research Institute of Semi-Arid Tropics and the National University of Science and Technology. The purpose of the interviews was to gain a fuller insight into the role of the church in environmental management though the projects aimed at sustainable livelihoods.

## **RESULTS AND DISCUSSION**

All Caritas personnel in Zimbabwe work under the direction and guidance of the Bishop of their diocese. At the time of its inception, Caritas Bulawayo, also known as CADEC (Catholic Development Commission) was known as The Commission for Social Services and Development (CSSD). It was established by the Rhodesia Bishops' Conference in 1972 and from the onset the organization defined itself as an arm of the Catholic Church. As highlighted in the name, the Commission for Social Services stressed on the Christian spirit of charity and services and hence thrives to alleviate the plight of the less privileged in a manner which encourages self-sustenance. The development aspect in the name points to the Church's mission in the field of all the facets of human development . The rationale behind its inception is captured in the social teachings of the Catholic Church, which emphasize that the social message of the gospel must not be considered a theory but a basis and motivation for action. The name CSSD was changed to CADEC in 1985, but the change did not entail a change in principles and core business of the organization. Caritas' main aim has been that of

assisting communities that live in marginalized rural areas to have better lives through programs that are designed and geared towards meeting the needs of concerned communities that are usually left behind in development initiatives thus manifesting the role of the church in environmental management (Altfield, 1993; Clark, 1994; Redekop, 2000).

Caritas is mainly concerned with assisting people in a manner which is sustainable through empowerment processes. The organization targets marginalized groups in society regardless of their faith (religion), political affiliation, or gender. In implementing its programs, Caritas seeks to capacitate target communities in the districts of operation to be highly participatory in the development of their communities and hence break the dependency syndrome. Most of the services offered by the organization are meant to address the millennium development goals of eradicating poverty and food security. Hence the focus of Caritas is on long-term food security, improving access to clean water, entrepreneurship through micro-projects, gender equity and equality, and natural disaster preparedness. Caritas meets a number of challenges in its operations that hinder the smooth flow of development processes. The major problems include the changing environmental trends, cultural trends, and the attitudes of people towards non-governmental organizations. Recurrent droughts and long dry spells in most areas result in the communities becoming more vulnerable to food insecurity (Finger, 2004; Kollmus and Argerman, 2004).

### **The Matobo Project on Restoration of Degraded Lands**

#### Project Background

The working title of the project is Management of Biodiversity in Matopos National Parks, and the project executing non-governmental organization being Caritas otherwise known as the Catholic Development Commission (CADEC). Caritas was working with a number of project partners that included the following: Umzingwane Rural District Council, Matobo Rural District Council, Africa 2000 Network Foundation, National Parks and Wildlife Management Authority, National Museums and Monuments of Zimbabwe, Agricultural Research Extension, Environmental Management Agency, Dabane Trust, Help Age Zimbabwe, Desert Margins Program, International Crops Research Institute of Semi-Arid Tropics, and the National University of Science and Technology (Table 1). The project focused on land degradation in the area, and the priority being capacity building for the implementation of innovative and indigenous sustainable land management practices. The Matobo Hills World Heritage Site (MHWHS) is a landscape that offers a unique combination of natural and cultural capital of exceptional aesthetic, scientific, and educational significance. Its natural landscape comprises scenic geological formations that create microenvironments and habitats that are home to a wide range of important flora and fauna. The diverse cultural heritage spans a period of more than 500,000 years with 100,000 years of continual human settlement. Numerous rock paintings, rock shelters, historical buildings, burial sites, and various artifacts depict the time-depth and cultural diversity that are worth of mention and preservation. This natural and cultural property covers a total area of 3,100 square kilometers with 2,050 square kilometers being the Matopos National Park and 1,050 square kilometers being the communal areas.

The MHWHS lies in the two districts of Umzingwane and Matobo in Matebeleland South province of Zimbabwe. The MHWHS has two distinct areas: the Matopos National Park and the Umzingwane and Matobo communal areas that lie outside the national park. The national park is on state land while the communal lands are under the jurisdiction of the Rural District Councils.

Table 1 Organizations and their relevance to the project

Name of organisation	Relevance to the Strategic Project
Rural District Councils(Umzingwane and Matobo)	Nine of the wards in the site fall under the Umzingwane Rural District Council and seven under the Matobo Rural District Council. The council is the administrative body of the district, and all development initiatives should comply with the district development initiatives. The project will use the existing development structures (councillors, chiefs, and ward committees) to mobilize and institutionalize project processes. The CAMPFIRE manager is responsible for the community resources and responsible for the community resources and training of communities.
Dabane Trust	The organization seeks to assist rural communities in arid and semi-arid areas to develop water resources and increase their food production capacities. The key competences available in organization are mainly in the fields of water resources management, infrastructure development, and environmental and food security.
Help Age Zimbabwe	A national development and relief organization that has experience in implementing community based projects.
Organization of Rural Associations for Progress (ORAP)	A non governmental organisation whose aim is poverty reduction among rural and urban grassroots disadvantaged communities through empowerment and capacity building.
Desert Margins Program	A program that supports participatory initiatives for natural resources management and also addresses livelihood issues.
Environmental Management Agency (EMA)	The custodian of natural resources in Zimbabwe and is responsible for policy and legislation formulation, policing and training of communities in environmental management.
National Museums and Monuments	Custodians of historical and national heritage sites.
National Parks and Wildlife Management	An organisation with the expertise in wildlife management and habitat protection. .
Department of Agricultural Research and Extension	An organisation whose mandate is to research and disseminate findings to communities and offer technical advice in crop and livestock management and ensuring continuity in best practices.
Department of Livestock Production and Development	A department whose role is to ensure efficient livestock management and development.
National University of Science and Technology	An academic institution with research capacity in water and natural resources management, water resources management, information management, and forestry and wildlife management.
International Crops Research Institute of Semi-Arid Tropics(ICRISAT)	An organisation that has a fully equipped Geographical Information Systems (GIS) laboratory for mapping and is also involved in livestock marketing, fodder production, and conservation farming.
Primary and secondary schools in MHWHS	There are twenty-two schools with about 8,000 pupils. The school's curricula have environmental science as one of its major subjects.
Africa 2000 Network	An international non governmental organisation that is already implementing capacity building programs in Matebeleland South province in Beitbridge, Matobo and Umzingwane district.

### The Current Management System

The management of the MHWHS currently rests with three statutory bodies that have the legal standing to administer the three categories of property in the heritage site. These are namely the two rural district councils of Umzingwane and Matobo that have administrative authority over the communal areas and private properties within the site through the Rural District Council Act Chapter 29:13. The Department of National Parks and Wildlife Management has management authority over the Matopos National Park and Lake Matopos Recreational Park. The National Museums and Monuments Act (Chapter 25:11) empowers the National Museums and Monuments of Zimbabwe authority to administer and conserve museums, national monuments, and all cultural and historical property within the world heritage site. The

Forestry Commission through the Forestry Act empowers the commission to manage the demarcated forests within the park and also to run programs in the commercial and commercial farming areas. Similarly the Environmental Management Agency (EMA) through the Environmental Management Act is empowered to provide conservation and improvement of natural resources in communal areas. All these statutory bodies are responsible for the management of the various aspects and parts of the MHWHS. However, through a process of co-operation and realization of the need to work together in an integrated manner for the good of the heritage site, the statutory bodies and other stakeholders decided to create a management committee that co-ordinated the management of all activities in the heritage site. The committee is made up of the statutory bodies mentioned above, community leaders, and representatives of organizations such as Caritas. The management committee has a technical committee that carries out all activities necessary for the development and conservation of the site.

### **Problems addressed by the Caritas Project**

#### Lack of Appreciation of the Value of the World Heritage Status

There was general lack of understanding of the World Heritage Site and the related implications by agencies that have management authority including communities and private property owners. The lack of awareness is a problem in that the communities do not see the value of in natural and cultural capital and this leads to mismanagement causing degradation of the valuable environment.

The problem has its key manifestations in that communities and administration agencies pursue different objectives and thus implement isolated management strategies and programs aimed at one aspect of the MHWHS and this benefits a particular agency or community. This lack of co-operation or competition among key stakeholders is further seen in the non-establishment of a co-ordinated management system that ensures sustainable benefits to the natural and cultural landscape as well as all stakeholders involved. Initiatives facilitated by Dabane Trust have made a significant improvement as manifested by the community in livelihood options such as eco-tourism. However, besides the baseline survey, which covered the whole site and its buffer zones, no project initiatives have been implemented in Matobo District. The administrative divide in the MHWHS has resulted in separate efforts in terms of conservation of the site. If the MHWHS is going to be effectively managed, the awareness levels need to be raised of the site. If the MHWHS is going to be effectively managed, the awareness levels need to be raised throughout the site so as to make way for the development of a consolidated management system.

#### Poverty and Food Security

The problem of poverty and food insecurity affects the majority of households in the communal areas within and around the MHWHS. The most vulnerable groups are the elderly, female, and child-headed households as well as orphans. Help Age Zimbabwe initiatives mainly focus on the elderly on the Umzingwane side of the MHWHS. The agro-ecological conditions cause harvest failures that result in year on year food insecurity at household level resulting in most families food handouts from non governmental organisations. However, a number of opportunities are available through irrigation development and development of small gardens and also through a systematic harvesting strategy of trees and reeds for curio and basket making as well as agro-forestry and bee keeping.

### Land Degradation and Loss of Biodiversity

Engagement in some alternative livelihoods (stream bank cultivation, tree cutting for curio making, poles for construction, and firewood for energy purposes and for sale) has resulted in an increase in the number of cases of poaching of both wild animals and wood from protected forests. This has led to land degradation; degradation of cultural property; and loss of biodiversity in the parks, communal, areas, and private property. The most affected trees include the Terminalia species, Miombo woodlands, and other isolated species such as Kigelia Africana, Pterocarpus Angelonsis, Sclerocarya caffra, and Lannea Stuhmanii. These are used in the manufacture of various artifacts that are later sold along road sides. Natural disasters are also a major cause of stress to flora and fauna in the MHWHS. These include droughts, floods caused by cyclones, wild fires, and invasive alien species especially Lantana Camara and Dichrostachys cinere.

### Decline in Tourism

There has been a decline in tourist arrivals in the area since 2000 when economic and political problems bedevilled Zimbabwe. The hyper-inflationary environment severely reduced the ability of citizens to travel to scenic places on holidays within the country. Increase in tourism could result in infrastructure development, employment, and development of income generating projects, thus improving livelihoods.

### Exclusion of Communities in the Management of World Heritage Sites

Communities living in and around protected sites/areas have been excluded from actively and effectively participating in the management process. This is a result of the existing policy and legal framework that guides the management and administration of such properties. The framework seeks to protect the natural resources from people living in and around them, thus creating room for poaching, vandalism, and degradation due to lack of ownership and benefit. The key manifestations of this problem include a fragmented management system that excludes communities, poaching of animals, timber and non-timber forest resources, and lack of co-ordinated response to natural disasters such as rangeland fires, droughts, and invasive species. The project seeks to develop a forum for the review of policies governing the management and utilization of resources of the MHWHS so as to include all communities who are the custodians of the resources.

### **Project Successes**

The project impacts include improved livelihoods and incomes for local communities and relevant policy formulations for reduced losses of biodiversity through human agency. This meant a number of objectives were realized through a number of activities.

The first objective was to build and consolidate on the process of raising awareness of the MHWHS's status to all stakeholders (the local community institutions, private sector organizations, local authorities, non governmental organisations, and state agencies at local and national levels) through availability of information. The activities undertaken to meet this objective included developing and distributing documents, posters, and pamphlets showing location and characteristics of various natural and cultural capital showing potentials and challenges. Training workshops for key players and drivers of development in the areas were held. A total of 500 informational materials were distributed to the four sectors that included communities, non governmental organisations, government departments, and local authorities. Four awareness workshops and two inter-schools competitions were conducted with forty-four teachers and

headmasters. Twenty school leavers per ward were included in poster, poem, drama, and music competitions. The results of these activities included improved knowledge, understanding, and appreciation of the value of the natural and cultural capital in the site. There was increased capacity of local people to sustainability management and utilization of the natural system for eco-tourism. As a result of these initiatives 70% of the community and listed stakeholders have knowledge and are now aware of the world heritage. There has also been 50% improvement on incomes for local people improved in eco-tourism.

The second objective was to improve the livelihoods of local communities in the MHWHS and its buffer zone through improved use of forest resources and crop and livestock production. The activities supported by Caritas as a church organization to meet this objective included sustainable craft production, mainly for women; various cropping technologies and use of wetlands; various livestock technologies; agro-forestry; and bee-keeping. Biogas units and bread stoves were installed. There was soil erosion control and gully reclamation as well as the use of rangeland reclamation and sustainable grazing techniques. Bush encroachment control measures have been put in place, grass seed banks have been established, and degraded areas have been reseeded. Water harvesting techniques have been put in place to reduce soil erosion. The results of these measures include the improved and sustainable supply of forest resources for household and marketing purposes. Specific activities spearheaded by the church organization in an endeavour to improve people's livelihoods in the utilization of forest resources included eight training workshops on forest resources management (resulting in 240 people being trained in forest management for craft production) and sustainable harvesting for craft production and the development of a crafts marketing strategy. Twenty bee keeping projects were established with a marketing strategy for the honey and other products. Fuel saving technologies (biogas and stoves) have been promoted and biogas units have been established in two schools, and twenty households have been installed with bread stoves. Crop and soil fertility management, water harvesting techniques, and use of wetlands strategies have been established through training, development of a wetland management plan, the establishment of gardens, implementation of conservation farming, and gully reclamation. Two hundred forty people have been trained in implementing crop and soil fertility management, water harvesting techniques, sustainably utilizing wetlands, and practicing conservation farming. Four dairy schemes have been established and 200 people trained in livestock and fodder production. There has been increased knowledge of irrigated cropping among farmers in the project area and beyond. Other increases have been seen in the sale of surplus grain, livestock production, soil fertility, household consumption of livestock products, and livestock take-off to the markets. These positive results have also seen increased stability in schools in the areas concerned as teachers have opted to stay for longer periods before transferring or looking for greener pastures. In terms of outcomes there has been 50% increase in alternative livelihood options for the local communities, 26% improvement in biodiversity in the Matobo area, 50% improvement in community food security and household nutrition, and 40% of degraded lands have been restored with 30% of identified gullies having been reclaimed.

Community institutions have been developed and institutionalized in order to empower local communities and community institutions to participate meaningfully in tourism development and the overall management of biological diversity in the MHWHS. Local by-laws, policies, and procedures have been reviewed to enable community institutions to engage. Existing eco-tourism sites have been set up or refurbished and as a result communities have been able to generate higher incomes and make savings from eco-tourism projects. Local people's appreciation of the value and availability of knowledge on the how to take care of the environment has increased. The rate of biodiversity losses

through human agency has been reduced by almost 40% and existing relevant policies have been implemented in 75% of the wards of Matobo.

## CONCLUSION

In the Conciliation Process for Peace, Justice, and Preservation of Creation, churches have been speaking up for sustainable development since 1983. This is a mission statement where ecological caution, economic vision, and social considerations are simultaneously in the picture and has been affirmed by the projects being undertaken by the Roman Catholic Church in Matebeleland Province through its developmental organizations such as Caritas. This is in line with the Christian doctrine in Psalm 24 which has the message, 'Help us keep the Lord's earth habitable for the earth is the Lord's and all that is in it'. As a result the communities in and around MHWHS are now aware of the world heritage status of the area and the implications and benefits for them. The project communities are now better positioned to sustainably manage their natural resources. They have better networking and technical skills in the areas of resource management, crop and livestock production, and curio making. With marketing schemes in place, livelihood options are now more sustainable while enterprise development has expanded. Due to their participation in the policy change debates, the community has been equipped to play an advocacy role in other areas of their well being. These efforts have extricated the Roman Catholic Church from the fringes of the environmental crisis by carrying the basic Christian message for commitment to make the world a better place live in. Thus responsibility to God as the Creator has been a powerful incentive to pro-environmental concern in the Roman Catholic Church in Zimbabwe.

## REFERENCES

- Archbishop's Commission on Rural Areas (ACORA) (1990). *Faith in the countryside*. Churchman Publishing, West Sussex
- Altfield, R. (1993). *The ethics of environmental concern*. New York: Columbia University Press.
- Althus, M. (1992). Could there be squirrels in heaven? *Theology in Green*, (4), 17-27.
- Anderson, L. (2006). Analytic auto-ethnography *Journal of Contemporary Ethnography*, 35(4), 373-395.
- Berry, W. (1981). The gift of good land. *Sierra Magazine*, No. 64. Bibby, R. (2004). *Restless Gods: The Renaissance of Religion in Canada*. Novalis, Toronto.
- Booth, A. (1999). Does the spirit nerve you? Environmental spirituality. *Environmental Values*, (8), 89-105.
- Bowers, C.A. (1993). *Critical Essays on Education, Modernity, and the Recovery of the Ecological Imperative*. New York: Teachers College Press.
- Bratton, S.P. (1992). Loving nature: Eros or agape? *Environmental Ethics*, (14), 3-25.
- Brulle, B. (2000). *Agency, Democracy and Nature*. Cambridge, MA: The Massachusetts Institute of Technology Press.
- Clark, C. (1994). How to Think about the Earth, Available at <http://www.statcan.ca/bsolc/english> Mowbray retrieved 20/08/2010
- Deane-Drummond, C. (1997). *Theology and Biotechnology: Implications for a New Science*. Geoffrey Chapman, Australia.
- Deane-Drummond, C. (1996). *A Handbook in Theology and Ecology* SCM Press, London.
- Ellis, C. & Bochner, A.P. (2000). Auto-ethnography, personal narrative, reflexivity: Researcher as subject. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Quantitative Research, 2<sup>nd</sup> Edition*, (733-768). Thousand Oaks, CA:

Sage Publications.

- Finger, R.H. (2004). Cultural attitudes on Western Christianity toward the community of goods in Acts 2 and 4. *Mennonite Quarterly Review*, (78), 2.
- Gottlieb, R.S. (2003). Saving the world: Religion and politics in the environmental movement. In Roger Gottlieb (Ed.), *Liberating Faith: Religious Voices for Justice, Peace and Ecological Wisdom*. Lanham, M.D: Roman and Littlefield.
- Kearns, L. (1995). Saving the creation: Christian environmentalism in the United States. *Sociology of Religion*, 57(1), 55-70
- Kollmus, A. & Agyeman, J. (2004). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8(3), 239-260.
- Naess, A. (1989). *Ecology, Community and Lifestyle*. Cambridge: Cambridge University Press.
- NSNVO. (2004). *National Survey of Non-profit and Voluntary Organisations (NSNVO)*. Ottawa: Canada.
- Oelschlaeger, M. (1994). *Caring for Creation: An Ecumenical Approach to the Environmental Crisis*. New Haven, C.T.: Yale University Press.
- O'Sullivan, E.O. (1999). *Transformative Learning: Educational Vision for the 21<sup>st</sup> Century*. University of Toronto, Toronto: ZED Books.
- Redekop, B. (2000). *Creation and the Environment; An Anabaptist Perspective on a Sustainable World*. Baltimore, M.D.: Johns Hopkins.
- Robotton, I. & Hart, P. (1995). Behaviourist EE research: Environmentalism as individualism. *Journal of Environmental Education*, 26,(2), 5-9.
- Shibley, M.A. & Wiggins, J.L. (1997). The greening of mainline American religion: A sociological analysis of environmental ethics of the Natural Religious Partnership for the Environment. *Social Compass*, 44(3), 333-348.
- Walsh, B. (2004). *Colossians Remixed: Subverting the Empire*. Downers Grove IL: Intervarsity Press.
- White, L. (1967). The historical roots of the ecologic crisis. *Science*, 155, 1203-1207.

**ABOUT THE AUTHOR:**

Steven Jerie is a lecturer in the Department of Geography and Environmental Studies at Midlands State University, Gweru, Zimbabwe

The role of the church in society.Â Roman Catholic theologians often deal with heresy, paradoxically, as a necessary step in the development of dogma. They point out that the questions raised by heresy are often legitimate, though heretics too quickly assume a one-sided and exclusive view of the doctrine they wish to impose on the entire church. Modern studies have noted that many of the criticisms of the church made by the heretics of the early 11th century were made by the papal reformers after 1050. In recent times many of the theses of Modernism, which were condemned vigorously by Pius X in 1907, found their way into Catholi...