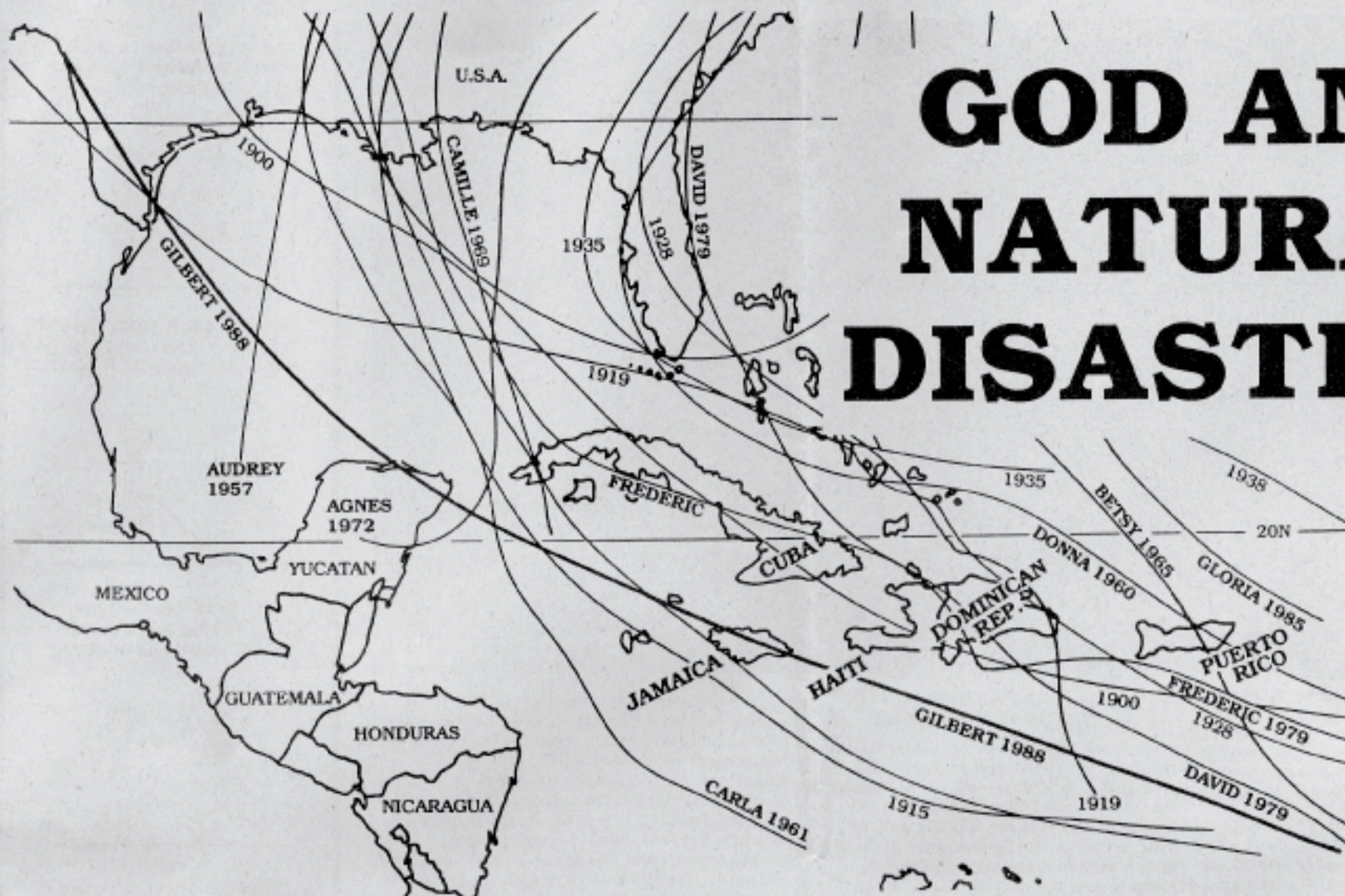


GOD AND NATURAL DISASTERS



A Pastoral Letter from Archbishop Samuel E. Carter, S.J.

1. HURRICANE Gilbert raised for most people the question of God's presence, role and responsibility in the midst of natural disaster. Put simply, if God is all good, why would He allow such destruction? If He is all powerful, could He not have intervened to prevent the tremendous hardship which so many innocent people suffered? If God could have stopped the hurricane, why did He not do so?

2. Many people believe that God sent Gilbert as a punishment for our sin, as a warning against our wickedness, as a reminder that He is God and we are creatures. Yet, why do we so readily believe God to be vindictive and punitive in His desires and actions? At the heart of the matter lies the fundamental question of why a good and loving God allows suffering and evil. As Christians, we must struggle with the question of good and evil in the world in order to deepen our experience and understanding of God's presence and action in our lives.

As a believing people, what should be our attitude when confronted with the magnitude of suffering which Gilbert caused?

HOW ARE WE TO UNDERSTAND NATURAL DISASTERS?

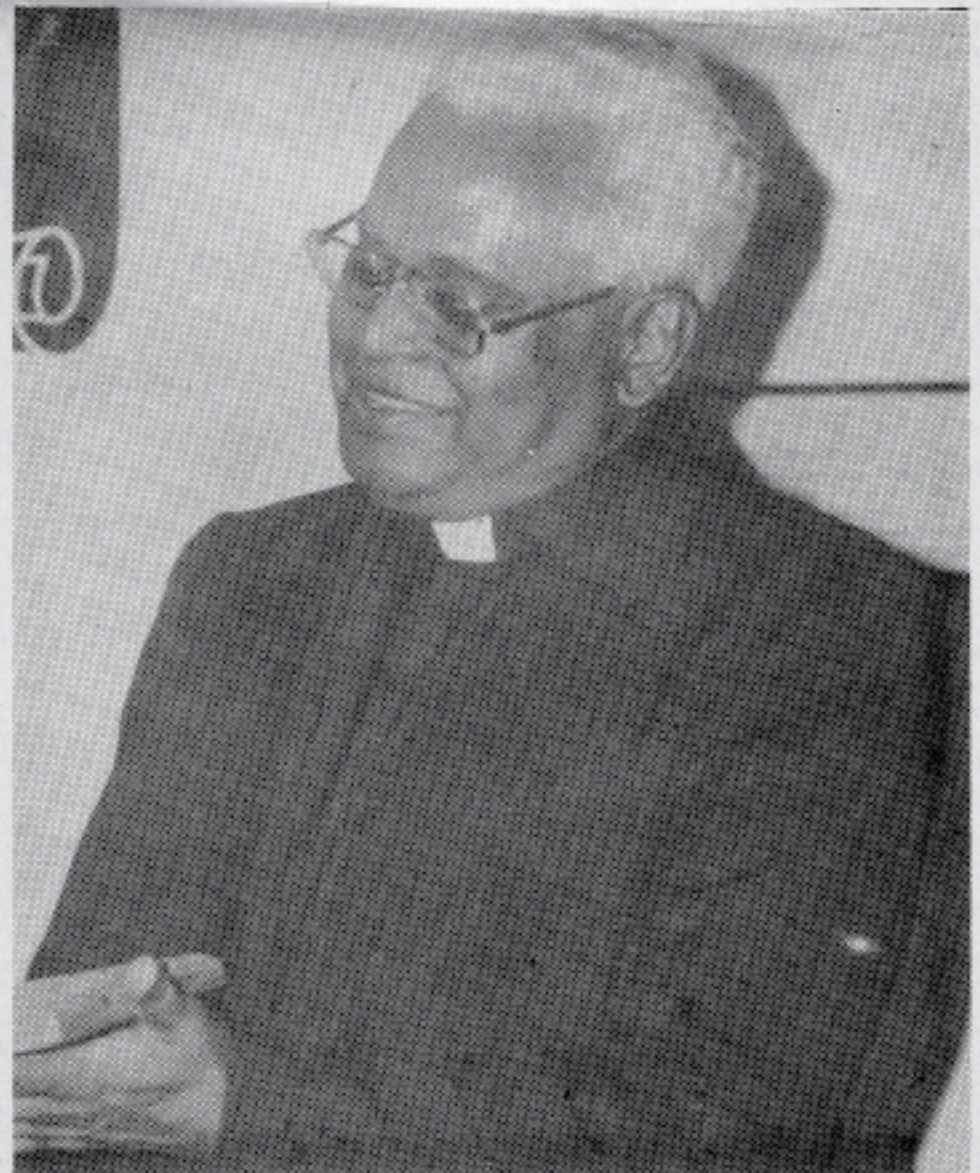
3. To discover the extent and nature of God's presence in natural disasters, such as hurricanes, floods and earthquakes, first, we must try to understand how such events take place. From where do the winds of the hurricane come? Why is there not more balance between the rainy and the dry seasons in order to prevent flooding? What causes earthquakes? Can we answer these questions scientifically or do they require a supernatural explanation? Surely, our first responsibility is to use our God-given intelligence to understand, even if only partially, the natural causes of these disasters. Then we can appeal to the resources of our faith tradition to shift our understanding of natural disasters to a new level, one where we can raise questions of human suffering and the presence of God in that suffering.

While it is the goal of this pastoral letter to bring the Christian tradition to bear on our understanding of natural disasters, the following scientific explanations of hurricanes, floods and earthquakes are not a matter of Church teaching. Rather, they simply express current scientific theories which are intended to provide some basic understanding of the causes of natural disasters.

HURRICANES

4. The origins of hurricanes are still not entirely understood. They form over tropical seas where temperatures are above 27 degrees centigrade. A hurricane may form after an initial disturbance of air starts a process of air convergence and rotation (anti-clockwise in the northern hemispheres). Moist air, heated by the sun, rises from the surface of warm tropical seas. As this moist air rises, it cools and condenses into rain. The condensation feeds large amounts of latent heat back into the air, which in turn causes even more air to rise. Hot, moist air rushes in from all sides in a spiralling motion. The winds circle around an "eye", an area of calm a few miles in diameter. At the same time, the falling rain, acting like water flowing out of the bottom drain of a full wash tub, adds to the force of the wind around the eye.

Of the many tropical disturbances in a given year, only a few will develop into tropical storms and fewer still into hurricanes. These storms usually have as their beginning a great distance from where they become hurricanes. Hurricanes which affect the Caribbean often begin on the other side of the Atlantic, as far east as the Cape Verde Islands off the coast of Africa. Hurricanes are





one of nature's ways of balancing temperatures and reducing the concentration of hot air in the tropics. North of the equator they move westwards, eventually turning north, but their paths are not predictable with great certainty. Once a hurricane moves over land, it quickly begins to lose force.¹

FLOODS

5. Until rain reaches the ground, we have little influence over it. Once on the ground, whether rain water becomes a productive resource or a destructive force depends very much on human management of vegetation and soils. Worldwide, floods affected an average of 5.2 million in the 1970s, an almost threefold increase. Between 1964 and 1982, floods killed 80,000 people and caused damage to the property of 221 million people worldwide.²

There is every indication that this increased incidence of flooding is a result of deforestation, especially around rivers and streams. When rain falls, barren land retains less water, and more flows into streams and rivers, taking with it, sand and gravel, which fill up river beds. This causes the rivers to overflow their banks and flood the surrounding land. Studies show that sediment accumulation may increase by 1,000 times as a result of deforestation.³

EARTHQUAKES

Earthquakes are the least understood and the most poorly predicted of the major natural disasters. The most common understanding of how earthquakes occur is that the outer shell of the earth is made up of seven major and some smaller plates or layers which are constantly pushing against, pulling away from or grinding past one another. Ordinarily earthquakes are limited to the area of the plate boundaries, where the plates collide with one another, releasing energy which we experience as a shifting of the ground underneath us.⁴

In the Caribbean over the past 300 years, earthquakes have killed about 16,000 people. The Lesser Antilles experience between three and eight damage-causing quakes per century; Trinidad suffers about 14 such earthquakes per century, while Jamaica is subject to 17 serious quakes every 100 years. Seismologists note that the Caribbean plate has been very quiet recently, and a 1979 report by the United Nations Environment Programme and the Economic Commission of Latin America remarked that "it can, therefore, be concluded that the present deficits in earthquake energy release are temporary and will ultimately be compensated by higher than normal activity".⁵ Their studies would suggest that the Caribbean seems due for more earthquakes.

IMPACT OF NATURAL DISASTERS

7. Some would have us believe that natural disasters strike rich and poor alike. It is true that a hurricane will inflict damage on the shanty house of the small farmer as well as the mansion of the wealthy person in the hills. While we sympathize with all those who suffer, seldom is the impact of the damage on the poor and the rich the same. When a one-room house is flattened, the family's shelter and belongings are destroyed, and more often than not, they have nowhere to turn for help.

Unlike the wealthy, the poor cannot afford the insurance which would enable them to repair and rebuild. The majority of the poor are still suffering from the damage caused by hurricane Gilbert. In short, the devastation the poor suffer in the wake of a disaster such as a hurricane greatly exceeds that felt by the wealthy. This inequality is not the result of the natural disaster itself, but of the poverty which renders the lives of the poor more fragile and vulnerable. One need only think of the shacks which dot the landscape of River-ton City on the edge of Kingston, or of Poor Man's Corner in St. Thomas, or, for that matter, the housing developments such as exist in Portmore, in St. Catherine, built as they are on landfill adjacent to water, to appreciate the exposure of many of our people. A significant earthquake in Portmore could turn the entire area into a sea of mud in very short order.

8. If poor people as individuals are less able to protect themselves from natural disasters and have fewer resources to cope with disasters when they strike, the same can be said of poor countries in relation to rich countries. For example, poor countries suffer more fatalities than do wealthy countries when the same kind of disasters occur.⁶ This difference in the loss of life is due to the fact that in developed countries, buildings, roads and protective measures, such as breakwaters and dams, are better constructed. Furthermore, the warning systems and community emergency preparation and relief programmes are more extensive. Comparing the number of people killed per disaster to the income of the country involved, reveals a steep rise in mortality as income levels decrease (Fig. 1).

In low-income countries, there are on average more than 3,000 deaths for every disaster, while high-income countries experience less than 500 fatalities per disaster. For example, for the period 1960-81, Japan, a rich country, suffered 43 earthquakes and other disasters, resulting in 2,700 deaths, an average of 63 deaths per disaster. Peru, a poor country, suffered 31 disasters, leaving 91,000 people dead, or 2,900 deaths per disaster.⁶

"Each year some 15 million children die of malnutrition-related causes. The disappearance of these children from the face of the earth seldom is described as a disaster."

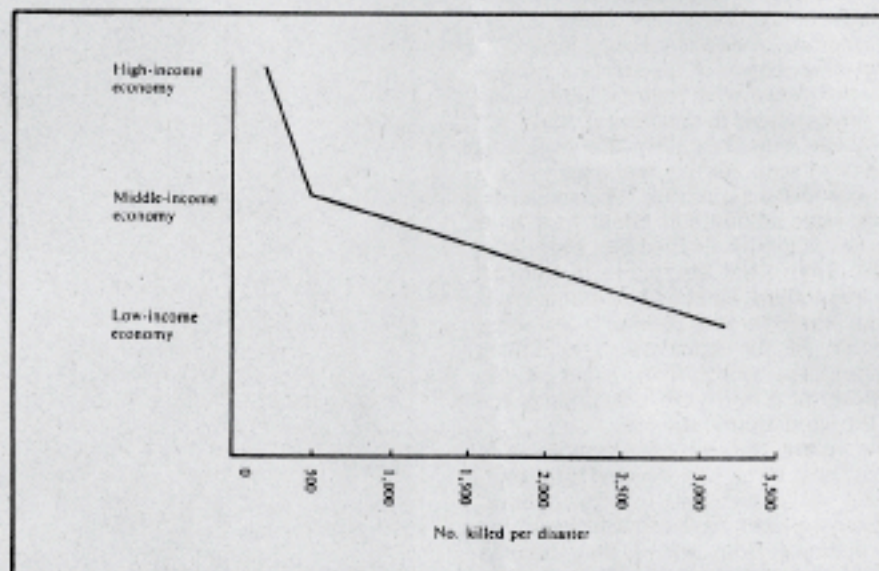


Figure 1. Disaster mortality per event (1960-81). The poorest countries have the highest mortality rate per disaster event. Middle-income countries do not have much higher death rate per disaster than the rich countries. (Source: Prevention Better than Cure, Swedish Red Cross, 1984, based on League of Red Cross and USOFDA statistics.) 7

MR. POLITICIAN, WHY DO 250,000 CHILDREN AROUND THE WORLD GO BLIND EVERY YEAR...



WHEN OUR GOV'TS COULD PREVENT IT BY GIVING EACH CHILD JUST 15¢ WORTH OF VITAMIN 'A' A MONTH?



BECAUSE WE FEEL THAT OUR INVESTING IN POOR CHILDREN RIGHT NOW IS LESS IMPORTANT...



THAN OUR INVESTING IN OUR MILITARY, OUR BUREAUCRACY OR OUR INDUSTRY!!



AND I THOUGHT I WAS BLIND...



The poor countries, most vulnerable because of their poverty, are also the countries in which environmental deterioration is occurring most rapidly. Countries with severe deforestation, soil erosion, over-cultivation and overgrazing tend to be the hardest hit by disasters.

9. It is becoming apparent that while forces of nature cause natural disasters themselves, these forces are insufficient to account for the full impact of any given disastrous event. There can be little doubt that the suffering and hardship brought about by natural disasters are deeply exacerbated by poverty and inequality, deteriorating environmental conditions, and overpopulation, especially overcrowding in urban slums. For example, in a large urban centre like Kingston, the desperate shortage of housing is forcing people to build in even more dangerous and vulnerable locations. People and nations who do not have their fair share of the resources of creation are less able to take measures to limit the effects of natural disasters and repair the damage that occurs.

ONGOING DISASTERS

10. While the media focus their attention and concern on natural disasters, they say less about the day-to-day poverty that afflicts the majority of people in our world. Major disasters throughout the 1970s killed more than 142,000 people in a year, yet each year some 15 million children die of malnutrition-related causes. The disappearance of these children from the face of the earth, hardly given a chance in life, seldom is described as a disaster.

The deaths of these children are predictable: governments and their agents in the fields of health and welfare know which infants are at risk. United Nations organizations have recently devised relatively inexpensive ways of preventing about half of these deaths. As yet, there is little indication that governments and agencies will put up the necessary money. It appears that this ongoing disaster is politically and socially acceptable.⁹

The austerity programmes which the International Monetary Fund (IMF) impose on indebted countries, and which the banks and governments of the richer countries insist upon as a condition for further aid and credit, contribute to this ongoing disaster. In many cases, the political and financial powers of the First World consider that it is more important for poor countries to pay interest on foreign debt than to finance programmes that would reduce or eliminate malnutrition among children. In Jamaica, forty-two per cent of government expenditure and forty-six per cent of all foreign exchange earnings are going to service debt. At the same time, as the statistics reveal an increase in malnutrition, the government is forced to remove subsidies from basic food prices in order to free up revenue to pay foreign creditors.

For reasons of short-term economic gain, the social, economic and environmental infrastructure of entire nations is being sacrificed, leaving them poorer and more vulnerable to natural disasters and the ongoing disaster of malnutrition.

GOD'S ROLE

11. What then are we to understand about God's role in natural disasters, hurricanes, floods and earthquakes? We believe that God the Creator made nature: the earth, seas, sky, air, wind and all matter and energy. Moreover, He created people with the capacity to love and the ability to understand. He gave us intelligence so that we might understand creation and co-operate with it. God wants us to help Him achieve His loving purpose in harmony with nature, to create with Him a kingdom of love, peace and justice. He sent His son Jesus so that we might know the way.

We believe, as Christians, that God has revealed and continues to reveal Himself in creation, in the words of Scripture, and in the Church. The Bible shows us that God has chosen to reveal Himself to people throughout the ages. The Scriptures are, above all else,

an account of the history of salvation, an account of how God has acted in the life of the Jewish people and in the life of the Church.

We must note carefully that the Bible is not, nor can it ever be read as, a scientific explanation of the origins and workings of the material universe around us, including the many momentous phenomena which occur, such as natural disasters. In terms of comprehending the causes of natural disasters, at the very most, the Bible stands as a record of what people in ages past understood to be the world around them. People of those distant times, however, had not developed the scientific understanding that we have today and which allows us to explain more fully such phenomena. Faced with happenings like hurricanes, floods and earthquakes that revealed a power and energy beyond anything they could imagine, ancient people understandably regarded disastrous events as direct and immediate manifestations of God's anger and retribution, just as bountiful harvests were indications of His favour and blessing.

Today, with a more complex understanding of nature, of its many laws, its intricate balance, its ongoing evolution, we no longer believe that every cloud, every storm, every earthquake and flood are expressions of God's immediate will and action in human history. While we believe that God created nature, we do not believe that He intervenes indiscriminately for purposes of revenge and punishment, or favour and assistance.

12. One of the most trenchant and poetic Biblical probings of the question of suffering and evil in our world occurs in the Book of Job. The manifestation of Job's deep faith in God is most strongly expressed in his rebellion against the suffering of the innocent, against a theology that justifies it, and against the image of God that such a justification implies.¹⁰

God is revealed as a good and loving God, rich in mercy and kindness. There are many reasons to believe that God does not punish His people in this world. In the teachings of Jesus, poverty and sickness are not signs of sinfulness, nor are wealth and prosperity indications of holiness and God's special blessing. On the contrary, it is to the poor, the suffering, the broken that Jesus shows His preferential love. On the other hand, material wealth and prosperity, if they are not shared with the poor, make it practically impossible to enter the Kingdom of God.

While it is true that in many places the Bible regards poverty, sickness, an early death and disasters all as expressions of God's will to punish and chastise people, over and against this Biblical representation of the world and of God's action must be weighed another, more pervasive Biblical world-view, one beautifully expressed in the Book of Wisdom: "God did not invent death, and when living creatures die, it gives Him no pleasure. He created everything so that it might continue to exist, and everything He created is wholesome and good. There is no deadly

Developing Country Debt



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"Material wealth and prosperity, if they are not shared with the poor, make it practically impossible to enter the Kingdom of God."

THE HURRICANE SEASON IS HERE



**PREPARE
PREPARE
PREPARE**

- CHECK BUILDINGS
- BUY EXTRA FOOD
- LISTEN FOR WARNINGS
- EMERGENCY SUPPLIES
- STORE WATER



poison in them. No, death does not rule this world, for God's justice does not die" (Wis. 1:12-15).

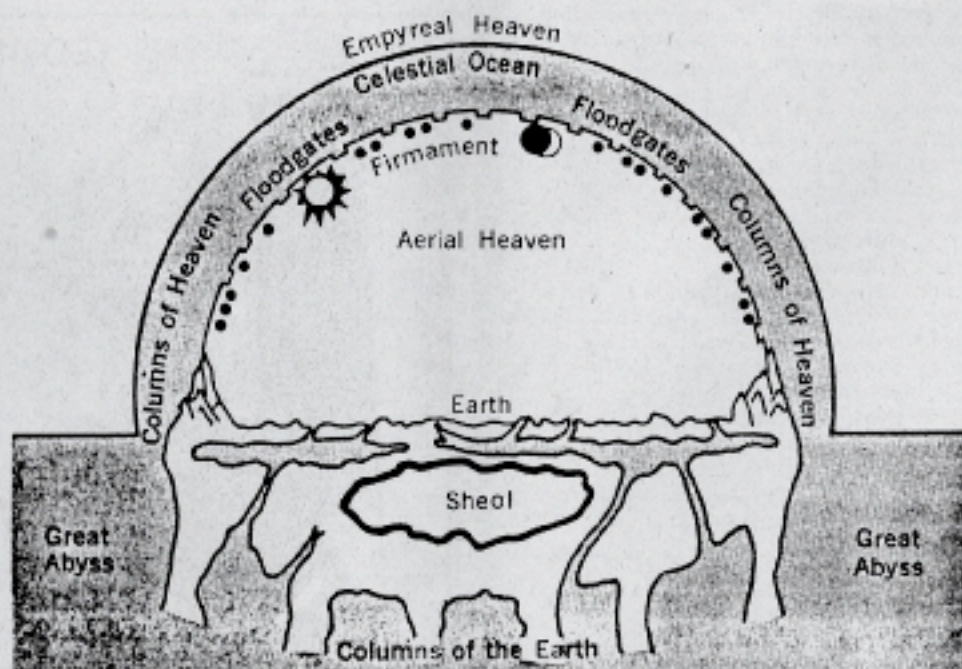
Furthermore, to look to Scripture for an explanation of all that happens in the natural and social world would be to ignore the achievements of human intelligence, achievements which have enabled men and women to deepen their understanding of the way the world works. For example, none of us would continue to accept the Hebrew conception of the universe. The people of the Old Testament conceived the earth as a flat disc which floated on water (Ps. 136:6). At either end of the earth were mountains which held up the firmament (Job 26:11). The firmament, which in fact was the sky, was viewed as a bowl covering the earth (Job 37:18), and as serving to protect the earth from the waters above it (Gen. 1:7; Ps. 148:4). Every now and then, God would open the sky to let the water descend down onto the earth, something today we call rain (Gen. 7:11; 8:2; Ps. 78:23). Because the firmament joined the extreme ends of the earth, the earth was kept dry. Underneath the earth there were still more waters which gushed forth to form rivers, lakes and seas. The firmament also served to provide a resting place for the sun, the moon and the stars (Gen. 1:17). Finally, to round out their view of universe, the Hebrew people believed that the earth was fixed and that the heavenly bodies moved about on the surface of the firmament.

Now, it is quite obvious that such a view of the universe is no longer considered valid. While it may have served the people of Old Testament times as a helpful explanation of the world in which they lived, it does not represent a world-view which we subscribe to, today. Does this diminish our respect for the Scriptures? Obviously not, for we still cherish the Bible as a source of revelation of God's love, of God's saving activity in human history, even though we do not look to it to help us to understand all aspects of human and natural life. To resort to the Bible to prove that hurricanes, floods, earthquakes or other natural disasters are God's way of punishing human beings for their sinfulness would be like using the Bible to provide a scientific model of the universe.

PRAYER

13. How then should we pray in the hurricane season? Prayer is an integral part of any response of a people to the action of a loving and caring God. If we do not believe that natural disasters are the direct intervention of God as punishment, nevertheless, we do not hesitate to turn to God in times of disaster, as we would at any time. Our prayer is not an attempt to negotiate or bargain with God, but rather to experience His presence, love, courage and strength for whatever might happen. To pray in the face of imminent disaster or in its wake is a vital and deeply human way of confronting who we are as a people, as individuals, as creatures. For to pray is to recognize our dependence, our dependence on God and on each other. In moments of crisis, or approaching crisis, prayer marks a return to the foundations of our life, where we plumb the depths of our existence, where we are able to cry out with the Psalmist, "My God, My God why have you abandoned me?" and "I place myself in your care. You will save me Lord: you are a faithful God" (Pss. 22:1; 31:5).

We pray, then, that if disaster strikes, we shall be inspired by God's love to help one another, especially those most in need. Second, remembering Gilbert and the ever-present danger of the hurricane season, we pray for the humble awareness that we are God's creatures, made in His image and likeness, but sinners nonetheless, seeking to be transformed by God's love. Third, we can pray that God will accept our suffering in solidarity with Christ on the cross, and crucified even today in His people who are victims of disease, abandonment, loneliness, addiction, political oppression, hunger and every form of injustice. Fourth, we might ask God that we would not doubt His love for us. Finally, we



Ancient Hebrew concept of the universe.

DURING AN EARTHQUAKE

FOLLOW THESE PRECAUTIONS:

- **Protect head and face!**
- **Remain Calm. Do not rush for exits.**
- **If inside stay there, If outside stay there!**
- **If inside a building stand in a strong doorway or get under a desk, table or bed**
- **Move away from windows, glass doors, heavy mirrors, pictures, bookcases, hanging plants and heavy objects.**
- **Watch for falling plaster, bricks, light fixtures and other objects.**
- **Avoid using elevators as power may fail.**
- **If you're in an automobile, don't stop under or near to electrical poles or buildings from which debris may fall**
- **Try to remain calm and reassure others.**
- **If you are in a store or shop, move away from display shelves containing bottles, cans, or other objects that may fall.**

SAVE YOURSELF AND OTHERS FROM INJURY

pray that God would inspire us to create a just world, one in which the majority of our people are not made to suffer the daily indignity of living impoverished lives, of being particularly exposed when disaster strikes.

CONCLUSION

14. The truth of our faith and our prayer is most forcefully made evident in our action.

"By their fruits you shall know them," (Mt. 7:16). It is very often true that we come to discover the depth of ourselves and others when we are under pressure or in some difficulty.

Hurricane Gilbert occasioned such awareness. Looking back we see the tremendous resilience of our people, the courage and strength, the patience and love, the vision and hope to participate in the rebuilding of the nation. We could not help but be touched by the concern and assistance from abroad, from our Caribbean and Latin American neighbours, from North America, Europe and Asia, and from the many Jamaicans who live abroad. At the same time, it was clear to all that we were not as prepared as we might have been: aid, generously given, was not always distributed according to need; stealing and looting necessitated a curfew in Kingston and Spanish Town, and revealed some deep-seated problems in our social fabric.

Have we learned from this experience? Have we learned environmental responsibility, conservation of our forests and the vegetation of our river banks in order to prevent flooding? Have we ensured that our river beds and gullies are cleared, hurricane straps used, shelters organized? Have we properly put in place a natural disaster committee to mobilize the resources of the nation and utilize the organization of the churches in the event of new disasters? Do we have local committees in which Ministers, Fraternals and local congregations are ready for action? Are there committees in each parish and each community that might quickly organize shelters, food distribution, health care? Are we building a society and a nation in which increasingly fewer and fewer people are left destitute? Where everyone has adequate housing?

15. I strongly believe that God, in this hurricane season, does not want us to see Him as a vindictive and punitive God. Rather, He wants us to be made anew in His image so that we might build a community that is united in His love. As Jesus reminds us, God chose us, "to go out and to bear fruit, fruit that will last; and then the Father will give (us) anything that (we) ask in His name." What Jesus commands is that we love one another. (Jn. 15:17).

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