

## An Ecological Interpretation of Leviticus 11-15 in an African (Nigerian) Context

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### **ABSTRACT**

*Leviticus 11-15 contains regulations to distinguish animals which are fit for consumption from those which are not, and regulations to control and prevent certain skin and emission diseases. Although these rules were originally meant to regulate ritual cleanliness, they also anticipate certain aspects of modern environmental sanitation thereby making possible an ecological interpretation of the text. These regulations are particularly relevant in contemporary Africa where preponderant environmental pollution and frequent outbreaks of communicable diseases prevail.*

### **A INTRODUCTION**

In Leviticus 11-15 certain regulations pertaining to ritual cleanliness are made. These regulations contain aspects mandating proper care of the environment in order to prevent infection and the spread of existing diseases. Although the primary aim was ritual cleanliness, the concern for environmental hygiene makes an ecological interpretation of the text possible. The controversy concerning the viability of ecotheology poses no impediment for this approach as it is based on the simple definition of ecology as the relationship between organisms and their environment. After establishing this position, this essay studies Leviticus 11-15 in the context of the Priestly Code; from there it moves on to assess the relevance of the text for environmental sanitation generally, and particularly in Africa.

### **B THE QUESTION OF THE ECOLOGICAL RELEVANCE OF THE OLD TESTAMENT**

Much controversy surrounds the viability of ecotheology. In a painstaking study Van Dyk (2009:186-204) contends that ecological issues previously played an insignificant role in biblical theology and that the Bible is often accused of being hostile or indifferent towards the environment. This accusation derives from the idea expressed in some Biblical passages, particularly Genesis 1:28 and Psalm 8 that humans should subdue the earth and rule over it. Thus in the creation narratives a definite anthropocentric view is taken when humans are described as the rulers over the earth, created in God's image and acting as God's representatives. The earth was created to support human life, and its plants and animals are given to humans as food and for general usage. The associated implication is that environmental issues can never become more than a mere afterthought to biblical theology. Certain texts, for example Deuteronomy 20:19, which apparently prohibits the destruction of forests during war, may be interpreted as advocating a careful treatment of nature. However, the purpose is not for the sake of nature but for humans; hence they are examples of an anthropocentric perspective.

Habel (2007:1-8) admits this acclaimed anthropocentric nature of the Old Testament but still believes ecological hermeneutics is possible, though it would have to involve a radical reorientation towards the text. The interpreter should identify the hidden values of the earth which the anthropocentric tradition has always suppressed. For example, in Genesis 1 the interpreter becomes aware of, and emphasises the fact that the earth is a character that plays a lead role in the narrative. Several creatures come forth from the earth; hence she is their mother, a partner with God in the creation process.

However, in my own view, this controversy is really unnecessary if the term 'ecology' is understood simply as the relationship between organisms and their environment. The type of ecological hermeneutics that seems to be acceptable to opponents of ecotheology is one in which environment and humans would be given equal rights. Also, for the actual presence of ecological concerns in the Old Testament, interest for environment must be for the sake of nature, not for the sake of humans only. For me, these claims are irrelevant from the point of view of the concept of ecology. Hence the present study takes as its own point of departure the simple definition of ecology as the relationship between organisms and their environment.

According to *Encyclopaedia Britannica*, the term 'ecology' was coined by a German Zoologist, Ernst Haeckel, who applied *oekologie* to the "relation of the animal both to its organic and inorganic environment" (Ecology 2009). The word comes from the Greek *oikos*, meaning "household, home or a place to live." The encyclopaedia further states that ecology is also called bioecology, bionomics, or environmental biology. Thus ecology deals with an organism and its environment. Similarly, Smith (2007) defines ecology as the study of the relationship of plants and animals to their physical and biological environment. Conradie (2003:122-123) restricts the term 'ecology' to the scientific disciplines that study the functioning of various ecosystems, but agrees that the adjective 'ecological' may be used to describe the health of ecosystems; 'environment' may be understood in terms of a number of concentric circles, starting in the centre with our own bodies as an integral part of the earth's ecosystems, the environment in which we live (our homes), the environment in which we work, the environment as "nature out there."

If ecological hermeneutics or ecotheology is viewed from this simple definition, the claim that the Old Testament is indifferent towards the environment, and therefore ecologically irrelevant, cannot be sustained. Some scholars, apparently in recognition of this fact, have applied the Old Testament to ecological studies. Wittenberg (2008:74-81), for example, demonstrates that the law codes in the Torah show an interconnectedness between humans and their environment. We see in the Book of the Covenant (Exod 20:22-23:33) that obedience to the laws of Yahweh was not restricted to the human sphere but also includes what we call nature. Hence Exodus 23:4-5 stipulates:

When you come upon your enemy's ox or donkey going astray, you shall bring it back.

When you see the donkey of one who hates you lying under its burden ... you must help to set it free.

Thus in the view of the Covenant Code there is no distinction between humans and animals. This is corroborated in Psalm 36:7 which proclaims that God saves animals as well as people.

This interconnectedness between humans and animals is found also in the D Code (Deuteronomy 12-26). It formulates stipulations concerning the treatment of animals as binding instructions from God. According to Deuteronomy 25:4, the farmer “shall not muzzle an ox while it is treading the grain” which shows that both humans and working animals are allowed to eat from the harvest. The same code (Deut 20:19-20) forbids that trees which produce food are cut down during war. This prohibition demands that a distinction be made between wild trees that are valuable to humans for consumption and those that are not. In the opinion of Wittenberg the prohibition, rather than being an afterthought as opponents of ecotheology claim, is probably a reaction to the general tendency in warfare to destroy wild trees. It was a practice also present in Israel (cf. 2 Kgs 3:19, 25). Evidently there were ecological considerations even in warfare.

The Holiness code (Lev 17-26) suggests an interconnectedness between humans and the land. Leviticus 25:1-7 contains the ordinance for the sabbatical year. It spells out the practice of leaving the land fallow for six years. In six years the land shall be sown and planted; every seventh year it shall observe a Sabbath for Yahweh. Thus the Torah recognises the value of the land, especially land which has productive use for human beings. Says Wittenberg (2008:81): “It ... has eliminated all utilitarian thinking which degrades nature to a mere object, a source for human exploitation.”

To me, this approach of Wittenberg’s represents an ecological interpretation of the Torah in the sense that it treats relationship between human beings and their environment with the latter defined in terms of animals, plants and farm land. In this sense Leviticus 11-15 is also tenable for an ecological interpretation as it contains regulations that engender interaction between the ancient Israelites and their immediate environment with regulations pertaining to environmental sanitation. However, before discussing the ecological value of Leviticus 11-15, it is necessary to examine the text in its literary context.

### **C LEVITICUS 11-15 WITHIN THE CONTEXT OF THE PRIESTLY CODE**

The Torah consists of laws in one form or another, all of which are attributed to Moses by tradition, and to the time that Israel spent at Horeb/Sinai. However, from the point of view of the Documentary Hypothesis they all belong to the authors of the Pentateuch (J, D, and P), and consist of many different types, reflecting a long tradition of laws and customs from different periods in the history of Israel. Scholarship identified several codes into which these laws were compiled, namely, the Covenant Code (Exod 20:22-23:33), the Deuteronomic Code (Deut 12-26), the Priestly Code (Exod 25-31, 35-40; Leviticus; Num 1-10, 15, 18-19, 28-30); and a Holiness Code (Lev 17-26) which has been identified within the Priestly Code (Van Seters 1998:45).

The Priestly Code, as the name implies, deals with the priestly regulations of worship: the forms and furnishings of the tabernacle, the investitures of the priests and Levites and their offices and duties, sacrifices and festivals, purity laws, et cetera.

This code was apparently prepared in the exile for instruction when the Judahites returned home, and to strengthen its authority the author clothed it with the ancient Mosaic traditions. This is the popular opinion expressed by scholars in various ways. Van Seters (1998:47) suggests it might have been formulated by the priests of the Babylonian exile as a program in support of a theocracy with the high priest as head of state and supreme authority over religious and all matters. As Patrick (1985:146) puts it, the classical formulation of the Pentateuch hypothesis dates the Priestly writer to the exile or afterwards, that is, between 587 and 450 B.C.E. He wrote from the point of view of the Jerusalem temple priesthood deported to Babylon, who hoped to return to Jerusalem, to reconstruct the temple, and to revive the sacrificial ritual at the heart of temple worship.

Gottwald (1985:140, 207) affirms that the stipulations in P represent a late exilic and an early post-exilic priestly community that aimed to establish legitimacy of its leadership in a restored Judahite community. But he also maintains that there are elements in the code which are older than the source as a whole and which go back to tribal times, if not to Moses (1985:140, 207). Gerstenberger (2002:207, 222) identifies the priestly code among Israel's fundamental documents of faith. The book of Leviticus, for example, might have been intended for community catechesis. The rules for sacrifices, cleanness and other matters pertaining to the cult are not notes for the cultic official, but are instructions for the regular member of the community. This fact is suggested by the 'sacrificial Torah' of Leviticus 1-7, the laws about food and cleanliness in 11-15 and the 'priestly rules' in chapter 21.

Leviticus 11-15 belongs in the third of the five sections of the book. It deals with ritual uncleanness caused by various means such as eating certain animals, by contact with dead animals, uncleanness after childbirth, and from certain skin and emission diseases. In Snaith's interpretation (1982:241, 246) of this section, the priests of the Babylonian Diaspora acted on the theory that God is concerned with every aspect of life as well as the whole of life. This wholeness and interwovenness led them to bring all these primitive laws, based on early natural religion, within their religious system. In this manner rules which as a sanitary necessity involved exclusion from the community, also came to involve exclusion from worshipping God within the post-exilic religious community. Looking from a canonical perspective Childs (1979:185) states that Leviticus 11-16 and the Holiness Code of 17-26 assume the establishment of a covenant between God and Israel at Sinai. God has separated Israel to himself as a holy people and sanctified them (cf. Lev 21:23). Israel was to reflect the nature of God's holiness by separating themselves from all that was un-holy. As holiness can be forfeited by contamination with the profane the laws spell out in detail the distinction between the holy and the common.

Leviticus 11-15 is part of that code prepared in the exile, the purpose of which was to guide the ritual life of the restored community in Judah. However, the present study examines the text from the perspective of its ecological value, specifically its relevance for environmental sanitation.

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## D LEVITICUS 11-15: RELEVANCE FOR ENVIRONMENTAL SANITATION

In Leviticus 11 lists are provided of what is permissible for food among land animals, birds, insects and fish. Apart from its original purpose of ritual cleanliness this regulation may also have relevance for food hygiene. The concept of clean and unclean animals can be understood within the context of food customs or dietary laws. Although there are no universal food customs, the concept and practice of dietary laws seem to be universal, and they are not confined to either preliterate or advanced cultures; they are found at all stages of development. Current dietary theory (see Dietary Law 2009) draws a link between cultural values and nutritive factors. This relationship is difficult to explain, but its possibility poses a probability with regard to dietary regulations in Leviticus. Hence it is not impossible that in ancient Israel the regulation that some animals could render persons ritually unfit might also reflect the people's dietary customs. The relevance of the regulation to environmental health is brought out clearly in the prohibition from touching the carcasses of unclean animals (v. 8), which in itself mandates that any person who had contact with these carcasses had to wash his or her clothes (v. 25). Even cooking utensils such as ovens or stoves were contaminated by contact with carcasses of unclean animals, and should be destroyed (v. 35). This regulation incidentally anticipated certain modern scientific findings. Science has confirmed that contact with certain animals, dead or living, might cause diseases. Vorhaus (2008) confirms this when he states that tularemia is an acute disease of a variety of animals which can be transmitted to humans by direct contact as in skinning an infected rabbit (incidentally the rabbit is on the list of unclean animals; cf. v. 6). In April 2009 the whole world was, and is still being threatened by what is called Swine Influenza (or Swine Flu – H1N1 virus), an infectious disease believed to be transmissible from pigs to humans. Experts say that although the disease cannot be caught by eating pork, sporadic human infections with swine flu have occurred. Influenza viruses can be directly transmitted from pigs to people and from people to pigs. Human infection with flu viruses from pigs are most likely to occur when people are in close proximity to infected pigs, such as in pig barns and livestock exhibits housing pigs at fairs (see the information on H1N1 flu at the website of the centre for disease control and prevention – [www.cdc.gov](http://www.cdc.gov)). Thus the prohibition from touching putrefying animals anticipated ecological issues in modern times in the form of persons being rendered 'unclean,' not ritually but in terms of being infected with certain diseases.

The regulations on secretions that occur at parturition in Leviticus 12 should be understood similarly with the emission disease in chapter 15. Chapters 13 and 14 deal with various forms of diseases called *tsara'at* in Hebrew (13:3). It appears the actual meaning of this term is not certain; for while most English versions render it as 'leprosy,' others avoid the term, calling it skin disease. For example, the King James Version, the American Standard Version, the New Living Translation, the Living Bible and the Amplified Bible translate *tsara'at* as 'leprosy' while the New International Version and Today's English Version translate it as 'skin diseases.' The rendering of the term as leprosy may have arisen from its Septuagint translation as *lepra*, which has been consequently translated as leprosy by many English Bibles. Many interpreters, however, disagree with the translation of *tsara'at* as leprosy.

Snaith (1982:247) opines that while a few of the cases of skin diseases cited are true leprosy most of them are not, at least according to modern terminology. In the opinion of Richards (1991:405), the term denotes a wide variety of diseases that cause sores or eruptions on the skin. Hence he affirms that the New International Version's translation of "infectious skin diseases" is perhaps the most appropriate one. McFarlan (2003:158) is also of the opinion that the word leprosy was used in the Bible to refer to various skin troubles. It is quite possible, therefore, that *tsara'at* was a general term for certain types of skin diseases rather than a particular condition.

In Old Testament usage the term was extended to include mould or mildew in fabrics, as well as mineral eruptions on the walls of buildings, and possibly dry rot in the fabric of such structures. The legislation contains the procedure to be followed by the priests to diagnose the various forms of the disease. If the patient did not exhibit the disease in a sufficiently developed form, he could be quarantined for a period of time until a proper diagnosis could be established. The suspected person had to live outside the camp, or perhaps in company with other 'lepers' (cf. 2 Kgs 7:3). The principles of the transmission of disease by contact, which underlie the legislation of Leviticus 11:24-40 are applied to articles of clothing or other garments that might have been infected by victims of *tsara'at*. The principles of isolation which were employed for suspected patients were also applied to garments. The affected articles were inspected by the priest, and because the doubt existed at that stage they were shut up for a week (13:50).

There are also regulations for *tsara'at* in the form of eruption on materials of a house. If the eruption was red or green in appearance, and seemed to have penetrated the surface of the material, the house was ordered to be closed for one week. On re-inspection if the condition had spread into the walls of the building radical treatment of the affected area was deemed necessary. An intractable condition required complete removal of the affected masonry, which then had to be thrown in a place that was used for unclean articles. Once the stones of the structure had been removed, the lime plaster that had been put on the walls had to be scraped off and taken to an unclean place outside the city. When the deteriorated material had been taken out of the fabric of the dwelling, it was replaced with other stones and plaster, after which the house was considered fit for reoccupation.

As in the case of human victims of the disease, possibility of its recurrence on walls was recognised. When such an eventuality occurred the priest had no alternative but to order the demolition of the property. The entire fabric of the dwelling had to be taken to an unclean place, from which the materials would not be salvaged and re-used, thereby spreading the particular condition. The uncleanliness of the house extended under such conditions to people who had entered it while it was closed. Anyone who had taken residence in it had to wash his or her clothes.

From the foregoing description it is clear that the main purpose of the diagnostic guidelines for *tsara'at* was to prevent the spread of the disease and the consequent danger to the health of the community. This ecological value of the diagnostic process is set out particularly in the use of quarantine for suspected patients. The purpose of quarantine is to prevent the patient of a communicable disease from spreading it to his or her immediate environment. Apart from this local

use, quarantine is now an internationally employed device. Travellers across countries are inspected, and if one is found with a contagious disease he or she is isolated for a period of time. Waterson informs that Italians probably adopted quarantine from the Jews in the 14<sup>th</sup> century because of the relative immunity of the latter from certain plagues (1978:315). The significance of this information does not lie in whether it is accurate or not, but in the fact that the idea of quarantine as used in ancient Israel anticipated its employment in modern times.

The treatments prescribed for houses suspected to have been infected with *tsara'at* also have relevance for environmental sanitation. They anticipated modern methods of solid waste disposal, which involve the disposal of solid or semisolid materials, resulting from human and animal activities, which are useless, unwanted, or hazardous. Usually they involve the disposal of such wastes as those in Leviticus, like rubbish, ashes, dead animals, et cetera. Sometimes they involve the demolition of houses too (Huang 2008).

From the information given in chapter 15 it is not easy to ascertain the nature of the male emission referred to in verses 1-12 but here the ecological significance is clearly discernible in the regulations, as they would have engendered consciousness for a clean immediate environment. Not only did the discharges make the affected person unclean but contaminated other persons and objects that came into contact with him or her. Kitchen utensils, pallets, seats and clothing of victims were particularly vulnerable, and had to be washed thoroughly. One of the most interesting prescriptions concerns a ritually clean individual upon whom the infected person had spat (v. 8). Such a person is considered unclean, and had to wash both his and her body and clothes to be clean. If the infected person did not wash his or her hands before touching someone, he or she conveyed the pollution to the one touched, which suggests that the condition was considered contagious. The fear that the emission disease might be transmitted to others by means of sputum is ecologically relevant in contemporary times because modern medicine has recognised the possibility of infection through sputum. Diagnosis of tuberculosis, among other air-borne diseases, is established by the identification of the bacteria in sputum or other body fluids of the patient. And it is transmitted by inhaling the bacteria-carrying air droplets (Padilla 2008). Hence the regulation on spitting, in addition to its ritual purpose, would also help to create a disease-free environment.

## **E RELEVANCE FOR CONTEMPORARY AFRICA**

The above discussion is applicable to Africa as it is to other parts of the world. However, the regulations in Leviticus 11-15 are particularly relevant in Africa within the context of environmental health. Putrefying carcasses represent all forms of rubbish which render the community liable to health dangers. This is applicable to the situation in major towns and cities with their environmental degradation problems in form of various non-biodegradable household petrochemical products like polythene bags, plastic containers, styrofoam packages and tyres littering everywhere. This situation is often accentuated by poor waste disposal systems, which result in filthy gutters and drains with the attendant public health risks (Fasasi 2006:7). Environmental pollution of this form accounts for one reason why malaria cannot be eradicated from Africa. In addition to this, improper care of the environment has led

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to many instances of ecological disaster in Africa. An unforgettable example in Nigeria was the incident of the Ogunpa River in Ibadan in 1980. With its course being blocked with rubbish, the river was forced to overflow its banks, thereby killing so many people and rendering others homeless.

In Africa the regulations on *tsara'at* in the house, and those on the emission disease which require proper cleaning of clothes and utensils, apply to sanitation in the home environment. The general poor attitude to hygiene in the home reflects in dirty cities and towns. Past governments in Nigeria, for example, recognised the need for sanitation even right inside individual homes; hence community health personnel used to inspect people's homes regularly to ensure proper hygiene. This awareness is still there but not as strict as it used to be. In 1984 the military administration of Muhamadu Buhari instituted the so-called Environmental Sanitation Programme which made it compulsory for every home to clean its immediate environment in the morning of every last Saturday of the month. While a few states still adhere to the programme most have abandoned it; hence the sinking environment in most towns and cities.

This situation is compounded by inadequacy of water. The regulations in Leviticus are silent on the issue of water but in Africa water is highly crucial for environmental sanitation. There can be no clean homes and drains without water. Unfortunately the problem of water is still a great challenge in Africa. It is estimated that as many as 150 million residents, or fifty per cent of the urban population, do not have adequate supplies of water (Idowu-Osehobo 2004:2). In Nigeria government used to be the main supplier of water, but that is now history. The once-reliable water boards have slowly given way to boreholes, ponds and water hawkers popularly called *mai ruwa* (Hausa for 'water owner') in most cities.

Environmental pollution, compounded by insufficient water distribution in Africa, has often given rise to epidemics of water-borne diseases. The situation is affirmed by one source which attributes the decline in world population to the effect of diarrhoea, which is said to cause about 1.8 million deaths yearly (Idowu-Osehobo 2004:2). This report is corroborated by the prevalence of cholera outbreaks in parts of Africa. "Cholera, once uncommon on the continent, is now endemic in Africa. And outbreaks are associated with contaminated water supplies; and contamination has become ever more common in both rural and urban areas" (Newman, et al 2007).

We have established earlier that the regulation to avoid contact with the sputum of patients of the emission disease in Leviticus 15 would have helped to create consciousness for an atmosphere free from air-borne diseases. This regulation speaks to the African situation from the perspective of air pollution, which has often resulted in this type of diseases. In this regard the danger from sputum is preponderantly accentuated by pollution from various forms of gasses. Through activities such as refining of fuel, smelting of metals, burning of garbage, generation of electricity, using diesel and petrol engines, gasses are injected into the atmosphere in excess. Each of these industrial gasses has unpleasant physiological effects on human, animal and plant lives (Maduemezia 2006:12).

The pollution of the atmosphere and its effects on the environment can be illustrated from all parts of Africa. For example, the residents of Eric Moore in the Surulere area of Lagos have consistently complained of the hazards they are exposed to by the fumes emitted from Sunflag Nigeria Limited, a textile mill situated in their neighbourhood. They complain that the smoke coming out of the factory cause them to suffer from coughing, discharges from the eyes and itching (Irhabor 2009:14). Atmospheric pollution caused by the factories in the cities is complemented by the gas from household electricity generating sets due to the failure of successive governments to provide electricity for the populace. Because of this failure every home and every shop owner has had to purchase 'generators,' as they are commonly called, to produce electricity for various purposes. The effect of this situation is that day and night the atmosphere is polluted with smoke from these sets. Added to these sources is the pollution from traffic. Most vehicles are old and therefore produce smoke which pollutes the air. Hence air pollution has been one of the causes of the spread of tuberculosis, among other air-borne diseases in Africa since the 1980s (Newman, et al 2007).

## F CONCLUSION

This article examined the ritual regulations in Leviticus 11-15 concerning which animals are fit or unfit for consumption, and the control and prevention of certain skin and emission diseases. This text is part of the Priestly Code written apparently during the exile to guide the worship life of the Judahites on return to Judah. Although originally meant to regulate ritual cleanliness, the rules in Leviticus 11-15 anticipated certain aspects of modern environmental sanitation; hence the text is tenable for ecological interpretation. It is particularly relevant to contemporary Africa where there is still preponderant environmental pollution with its attendant frequent outbreak of communicable diseases.

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