Green Criminology at a Glance
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ABSTRACT
Talking about green criminology essentially means looking at the position of man in relation to his natural environment. Man by virtue of his position is the epitome of creation. Hence been referred to as the inheritor, conquer and vice glance of the earth. In search of better life, man was able to manipulate his natural environment by any means available to him; this has cause a lot of havoc to him, his environment and other living and non-living beings. The methods and means used to explore the environment are seen by many as necessary tools for advancement, this has dated back from the very beginning of man existence on earth surface. However as man continue to advance in his quest and achievements there comes the alarms as to the consequence of this adventure called ‘development’. The price to pay for this development includes the very sacrifice of man’s life, health and that of other living and non-living beings of the natural environment. The critical question here is does this achievements really worth the price? Who are those paying the price? Who benefit from this high price? And could this falls under acts that calls for legal attention and what are the legal remedies put in place to control these acts? Is there other alternative ways to explore nature thereby inflicting less harm? These and many other questions is what this research work seeks to answer.

Introduction
Green Criminology which is otherwise known as environment criminology was first coined in 1990 by Michael Lynch, it was aimed at addressing both green environment and green Political theories with a view of exposing environmental destruction as an outcome of the structure of modern capitalist production and consumption patterns. (Walter, 2010, p. 113).

The key figures in the founding of green criminology (Bierne and south) argued that green criminology, includes “those harms against humanity, against the environment (including space) and against non-human animals, committed by both powerful organizations, governments, transnational corporation, Military apparatus) and also by ordinary people. However in today’s concept, what has generated the greatest amount of green criminological concern is the acts of the powerful in causing a widespread and long term environmental damage.

Mark Allen Gray in (1996) proposed the legal concept of international deceit “ecocide which is defined as causing or permitting harm to the natural environment on a massive scale which would breach a duty of care owed to humanity in general”.

Beirne and South in their most recent book “issue in Green Criminology”, base the domain of green criminology on the principle of harm. The authors are of the view that green criminology should be a harm-based discourse that addresses violations of what some have variously termed environmental morality, environmental ethics and animal rights; this will uncover relevant sources and forms of power, including the states’ willingness or reluctance to construct certain forms of harm as crime, as well as social inequalities and their ill effect. (Beirne and South 2007; xiv).

Definition
Defining Green Criminology or what is otherwise known as environmental harm has been a difficult task, since there is no clear and single definition to environmental criminology However scholars of Criminology and environmental scientists has over the years tried to described what could be regarded as an environmental crime and thus falls within the ambit of green criminology.

The term ‘green criminology’ was first used in 1990 by Lynch (Lynch 1990) and has now been widely accepted as describing criminological work that focuses specifically on issues pertaining to environmental harm (Beirne and South 2007 reported by sollund, 2008,p 28)

Green Criminology was also used to distinguish what is environmental criminology which refers to a particular kind of urban study and crime mapping in essence the linking of urban environments to specific types of crime (Brantingham and Brantingham 1981). That is a kind of place based crime and prevention.

The term Green Criminology is also misconstrued to link itself with the notion of green parties which are formed political entities that contest democratic elections.

However, the exponents of green criminology is clear that though the term green criminology may philosophically aligned to social and ecologic justice, the term Green Criminology is much broader and wider than any particular social and ecological organizations, thus green criminology may have a political flavor, but it is considered as nonpartisan and independent organization. Thus, (Herbig et al, 2006) suggests that the term ‘conservation criminology’ be adopted rather than green criminology, however the term conservation criminology is ambiguous and narrow as to what green criminology really reflects.

Therefore the more preferably term to green criminology is environmental criminology; which allows a more urban environmental analysis as well as wider issues pertaining to environmental harm, as this also give a room for a more non

What is Green Criminology? Green Criminology could said to
political terminology. Hence the term green criminology and environmental criminology is used interchangeably, be an analysis of environmental harm from a criminological point of view, or the application of criminological thought to environmental issues. This involves thinking about offences that is, what crime or harm are inflicted on the environment, who commit such crime and for what are the reasons or purposes for such crimes and also trying to look at the responses to these types of crimes, in area of policing, punishment and prevention. Most definitions of environmental crime consider such crime to cover acts or omission that violates federal, state or local environmental standard and Laws (National White Collar Crime, 2004).

However, some acts, especially those committed by corporations may not violates the criminal laws of the state but a violations of regulatory laws (Burns and Lynch, 2004) many of this acts causes a great deal of harm to the environment, human health and safety and those should responsible should be treated as criminal (Lynch 1990).

The question of what is harm constitute a long term standing issue the usual divide is between those who adopt a strict legal – procedural approach to the definition of harm and those who opt for a broader socio-legal approach.

The first group while depending upon legal definition which prohibits certain actions in law and therefore term them as crime (Tappan 1947), the latter allows for a broader look and investigation of phenomenon such as white-collar crime and denial of human rights through references to conceptions of harms which are not necessarily criminalized by the state (Green and Ward 2000).

What makes environmental harm being in a critical situation that needs rescue is that many of the most serious forms of such harm are in fact construe as “normal social practice” and are quite legal even if environmentally disastrous.

The politics of definition are further complicated by the politics of denial – in which particular concrete manifestation of social injury and environmental damage are obfuscated, ignored or redefined in ways which represent them as being of little relevance to academic criminological study or state criminal justice intervention (Cohen 1993, 2001).

Therefore, environmental harm could be said to include those activities which may be legal or legitimate but which nevertheless has negative impact on people and environment.

Chapter I: Features of Environmental Crime

The intention of this chapter is to highlight and discuss briefly the various characteristic and features of an environmental crime. That is what are the forms and shapes in which environmental crime usually takes that distinguished it from other crimes. Some of the general features of characteristics of environmental crimes include:

1. The victims of environmental crime are often large in number, mostly the poor, weak and the less privilege in the society. This is identifies as environmental injustice, since no person, regardless of race, class or gender should suffer the consequences of environmental degradation Environmental Crime whether within the state or transnational level are often directed towards the weak, less resisting and the poor in the society or countries which are less developed.

This may be as a result of government direct/indirect policy in the act of protecting the right of its citizens. For instance, it could be asked that: is waste put near poor people or the people of color and the poor gravitate to the chapter housing near toxic sites? (Parrell, 2007).

While we may agree that the poor and the color people usually lives near wastes and not that waste are move to them, but the fact is that the means of acquiring accommodation in a clean environment are usually high that the poor are left with the choice of acquiring accommodation where they could afford “the garbage site”. Residents who live near waste whether they believe their health is directly affected by environmental degradation are saddled with numerous personal challenges. Not only must residents deal with the health consequence of pollution. They also are subjected to numerous emotional and economic maladies. Their homes less value, they worry about cancer and they are concerned about losing jobs in the very industry that pollutes them (Melissa, p.9 2007).

The environment crime when occurs in a trans-national environment, the less developed, weak politically governed country are used as dumping site by the well developed and politically powerful countries for example the case of Radio Corporation of American (RCA) is a classic example of developed nation use the less developed as polluting site, the developed capitalist countries located the factories in less developed countries to save on labor and environmental protection costs. Then they ship finished products home or elsewhere in the world to earn large profits (Jim High Tower, et al, 206).

It was examined that there is a widespread practice of exporting hazardous electronic waste (e-waste) from the United States to China, India and other low-wage newly industrializing countries.

This practice is usually labeled as “recycling” job provision or economic development, this practice makes the-recipient countries as a dumping site for waste, and thereby endangering the health and environment of the recipient countries.

2. Environmental crimes are often silent and unnoticed, that is people are somewhat pathetic and indifferent towards the problems caused by environmental crimes. This emanate from public unawareness of the real danger to health and safety posed by this type of harmful behavior, before an environmental harm is noticed it must have been a kind of harm that can easily be figured out as to the place of occurrence and where the cause of the harmful effect can easily be linked up to a particular source (Mayo and Holander, 1991. P.12). Whereas these are harms which are hidden or gain no attention because they are part and parcel of the societal values and therefore is less material or simply accepted conduct.

3. Environmental crimes are often backed up by economic reasons. The norm is that value of money and profits are placed above the value of public health by the perpetrators of environmental crimes. This crime ‘environmental crime’ is often committed to escape the cost of dealing with things properly. Hence, if compliance expenses are costly and the chances of being caught are minimal, a strong incentive to pollute exist especially where the penalty for environmental harm is just monetary measure in a way of fine (Albanese and Purely 1993, p317).

More often than not, monetary fine are usually based upon offences and not offenders, therefore the big companies who causes much more harm are saddled with the same monetary responsibility as the small companies, thereby making the measure ineffective and play in the hands of the big companies (Wilson, 1986).

Environmental crime apart from being an economic crime, it is also not separated from political influence of the perpetrator. In most cases, environmental injustice and economic processes that exist as all level of government. While state government,
most seeks to balance economic development and the community interest in health and safety, their decisions are often influenced and channeled by corporate donations. On the federal level, members of congress as well as presidential candidates are sponsored by industries campaign through heavy donations and this in turns is a way of lobbying for legislative decisions that may harm their interest (Pope, 2004). For example at the grassroot level, those who suffers environmental harm normally sought the help of governmental Agencies like EPA, the EPA which is under the intensive pressure from legislature who are in support of wealthy national and trans-national corporation (Robberts and Toffon-Weiss, 2001, 76).

4. The death caused through environmental crime is higher than that of homicide:- It has been suggested by researchers that the death rate of those who die by environmental crime is much higher than those who dies as a result of homicide. Environmental crime causes more illness, injuries and deaths than street crimes (Burns and Lynch, 2004). “We estimate that each year in the U.S. up to ten times as many people die from environmental crime such as exposure to toxics in the workplace, home, school as die by homicide” (Jarrell, 2007).

5. Environmental crime are often difficult to establish in criminal prosecutions: The perpetration of environmental harm is often simply part of the normal operations of industry, insofar as this is the case the matter of intention can become conflated with the issue of harm. That is, harms were not intended by the industries who are operating within their normal business axis. This problem could be solved when we accept that when companies dump chemicals into rivers, streams and landfills or alongside road ways, they do so purposefully and with full knowledge that the likely results of their actions will include injury and death to those exposed to the waste products, these are not accidents, they are planned actions no less serious than assault of killing (Stretesky and Lynch 1999, 169).

6. In environmental crimes, harms are often directed towards the natural environment like air, water and land. While the natural environment is a common heritage the use of it should be within the limit that harm many not be inflicted upon other creatures like, man, plants and animals. Environmental criminals tends to neglect the fact that there are other co-inheritors of the natural environment apart from the few individual who seeks to maximize it for personal again or profit, therefore exposing the health and safety of other inheritors of environment to danger, by committing pollutions of air, water or land.

Chapter II

The intention here is to identify and categories environmental crime in accordance with their nature and characteristics. Basically, Green Criminology could be divided into two b categories namely:

The Primary and Secondary green criminology (Carrabin et al. 2004). While the primary green crimes are those crimes that emanates directly from human actions which tends to destroy and degrade the earth resources, the secondary green crimes involves the crimes that arise out of the flouting of rules which are being established to regulate the environmental disasters.

Primary green crimes

Example of Primary Crimes includes

a. The crime of air pollutions: This is usually occurs as a result of direct emission of noxious and toxic substances into the air by companies while operating or a direct burning of corporate waste whereby toxic and noxious substance are emitted into the air or by simply dumping these toxic waste in an open environment, the case of the tsunami of boxing day 2004 in Somalia is a good example of how air pollution could cause serious health hazard an unknown number of people lost their lives after inhaling the dust of toxic waste dumped in their province courtesy of Europe which consequently followed by cancer ( White, 2006). Another serious air pollution case is smog from cars and factories that usually leads to closure of schools and businesses.

b. Water Pollution: - This occurs as a result of factories directly dumping toxic waste into rivers or water or as a result of transporting toxic wastes through water thereby polluting the water ways or where the waste is been buried making water unsafe for drinking. It has been reported that over one billion people around the world, mainly in developing countries, lack safe drinking water.

Fresh water ecosystem are in decline everywhere, men, women and children die daily from diseases directly related to drinking polluted water. (http://www.globalwater.org/).

c. Crime of deforestation: This includes the destruction of rainforests, which leads to species and plants declination. Millions of hectares of fertile and forest land yearly are lost to soil degradation is in turns leads to less land and more food needed, as farm lands are being lost, this has a direct link to displacement of native people who are being separated from their lands by those who exploit natural resources indiscriminately having little or no regards for ownership. Displacement of natives leads to “physical and mental bread down” e.g. depression, suicide, obesity and drug addiction etc. (Harrison and Pearce, 2000, p.390).

Secondary Green Crimes

These are crimes not necessarily committed directly to the environment but mostly a kind of reactionary efforts towards avoiding or flouting environmental laws or a form of violent suppression of populace seeking environmental justice for example the French bombing of the Rainbow warriors is a typical example of state violence against oppositional groups. (Carrabin, 2004,p.3 & 2009, p 394). Another importance aspect of secondary green crimes is hazardous waste and organized crimes. The dumping of toxic and general waste legally or illegally is a typical example of this type of crime, waste whether it legally dumped or illegally has the same devastating impact on environment. According to the united nation, about 20 million to 50 million tons of e-waste is generated worldwide annually (UN Environmental Programed 2006). The waste contain toxic such as lead and mercury or other chemicals that can poison water ways if buried or release toxic into the air when burned. Most of these wastes end up being transferred to poor countries as a material for recycling.

American brokers and scrap dealers are paid to hand away useless, computers which the then ship along with used laptops, working computers etc as gifts or aids to less developed countries. This method is used by the developed nations to avoid the cost of proper disposal and to shift toxic waste to other countries who are less developed and weakly government. Toxic and general waste dumping is an increasingly significant crime, (Ruggiero 1996, p 39-40) cities cases involving criminal groups from Germany transporting hazardous waste into France and an entrepreneur in Northern England who ran a legal waste-disposal firm and alongside this a service providing illegal dumping of hard to dispose of waste. Most of these illegal waste dumping has a political ineptitude, corruption and crime, which have prevented the establishment of an up to date and safe disposal system but maintained reliance on poorly managed landfill sites that have been corruptly used for tipping of hazardous material (, 2009, 396). As noted by Rugiero and reported by Eammon (ibid).
The illegal disposal of hazardous waste has been thoroughly studied in the USA, where in some cases the involvement of organized crimes reaches all aspect of the business, from the control of which companies are officially licensed to dispose of waste to those which earn contracts with public or private organizations and to the payment of bribes to dump site owners, or the possession of such site. Paradoxically with an increase of this illegal services run parallel with an increase in environmental awareness, the latter forcing government to raise cost for industrial dumping, which indirectly encourage industrialist to opt for cheaper solutions. The case of Somalia is also another good example of this type of organized crime. Bridge Land 2006 and others have pointed out that European companies taking advantage of the war in Somalia, used the country as a dumping site of toxic waste in an exchange of providing them with money for arms. It is estimated that around 500 million tons of toxic waste is discharged world wide each year, mostly by developed countries. In US and Europe it cost around US$400 to treat one ton of toxic waste, while it cost a tenth to treat same in developing countries (Rosoff et al. 1998).

Chapter III
Harm and Consequences
The traditional notions of harms and crimes, offences and injuries behaviors have been made clearer by scholars, however, it is necessary to reexamine the roles played by government, corporations in damaging and destroying our shared environment, the crime of environment destruction could be seen from the angles of air pollutions, water pollutions, deforestations, species decline and animal abuse etc.

It has been observed that a large number of human and non-human including plants and soil suffers as a result of improper use and exploitation of the natural resources. Some of these harms suffered are not easy to repair and in some cases beyond repair. In April 2001, studies showed that those who had worked with RCA’s Taiyuan plant during the previous 20 years, 1395 had been diagnosed with cancer of which 226 died and more than 100 had suffered various kinds of tumor (Jim Hightower, 2006, p.199).

Fossil-fuel burning releases billion tons of carbon into the air each year, which is on the rise since Industrial Revolution. Harm and crimes here result from pollution of the air by cars and planes as a result of wars, burning of corporate waste and those responsible are governments, big business and ordinary consumer (Carrabin, 2009, 389).

The diminishment in the quality and quantity of drinking water, worldwide and the influence of transnational corporations in controlling water resource is an example of world water crises. Water resource either directly or indirectly has become a major dumping site for hazardous waste. (White, 2008, p.90). It has been noted by Carrabin (ibid) that almost about 40,000 men, women and children die from disease directly related to drinking polluted waters (http://www.globalwater.org/) the poising of water does not only kill the human victims but also the water bodies in mass.

The inequalities in the distribution of environmental risks especially as this related to the poor and the minority populations (Bullard, 1994 reported by White 2008, p.90). Those poor and minority population not only suffers physically but also psychologically as they are being blamed for poor and unhealthy habits that exposed them to disease and they also receive the blow of losing lands to the government and companies seeking industrial expansions (Rush 2002) most of the indigenous people after losing their land, which also constitute the major sources of their livelihood (farming/fishing) become drug addicts, depressed and emotional wrecked individuals. The loss of species and rain forest is also a direct consequence of environmental crime. It has been reported that the planet is losing fifty species a day; 46% mammals and 11% birds, which put the extinction of a large number of species at risk (UK Environmental Agency website 2008). The consequences of environment harm were summed up by a German sociologist Ulrich Back in what he called “The Risk Society”, that is a society where modern technologies create new risk that were unknown in earlier days, new risk that are manmade generating new danger to lives and the plant, which includes global warming, Marine depletion, water shortage, deforestation, desertification, soil exhaustion, over spills, hazardous waste, acid deposition, nuclear risk, decline of the global eco system and so on (Carrabin, 2008, p.386).

Reactions to Green Crimes
The rise in global environment harm and its consequences gave birth to lots of social groups calling for environmental justice, clean and healthy environmental. Some of these pressure groups were met with serious action from the governments in order to suppress their voices like the case of the French government bombing the rainbow warriors was an example of this. However, there are other pressure groups like family member of the victims of RCA of Taiwan who die from cancer and other disease as a result of the company’s operation (High Tower, 2006, p 202). The action of the Activists protests Microsoft’s role in accelerating electronic product by pilling e-waste in front of the firm headquarters during the world Trade Organization meeting in Seattle, Washington, December 1999 (Hightower,2002,p 264), the local community’s resistance siting of companies in their nearby.

The pressure of the Activist and social groups has led to the formation of several legislations since 1969. This includes:
1. National Environmental Policy Act (1969),
2. The clean Air act of 1970,
3. Clean Water Act of 1972,
4. Federal Insecticide, Fungicide and Rodenticide Act (1992),
5. Endanger Species Act (1973),

Summary
1. In the recent years there has been concern about the rate of pollutions and its effect to human and non-human habitats of the planet, green criminology is a branch of criminology which focus crimes against the environment.
2. These crimes may be a direct flouting of rules of international and local laws regulating the environment or a consequence of various forms of exploitations, corruption, discriminations and abuse of powers and privilege by those in the authority.
3. Green Crime has it main focus and attention on the issue of global risk and the need for effective global safety measures, especially as it relates to the production and consumption patterns.
4. The task of green criminology includes:
   - Documentation of all forms of green crimes
   - Distinguishing the primary green crimes from the secondary ones
   - Analyzing the development and historical process of environmental laws
   - Assess the complicated political issues generated by green crimes.

Conclusions
Green Criminology is one the growing discipline in criminology that cut across other disciplines like environmental
justice, Human right. Green Criminology has the ability to provide not only a different way of assessing and evaluating various forms of environmental crimes or the responses and control of such but also make meaningful and much wider connections that are not generally well understood, with the help of green criminology the field of environmental law has become more developed, though the laws are not effectively implemented but the crime are now well understood as it relates to the environment and its subject to exploitation, and theft, just like other crimes, the laws and the fight against the crime of environmental exploitation requires expert, both in policing and enforcement of rule. The idea of global security will be meaningless without proper effort to preservation and care for the environment which is our habitant.

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