
A VIEW-POINT: ACCOUNTING FOR ENVIRONMENTAL COSTS DOES NOT INVOLVE COMPANIES ALONE AS IT ALSO INVOLVES INDIVIDUALS

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Abstract

What motivates this study is the unfortunate development that companies account more for their environmental costs than individuals whose environmental costs are even higher. Therefore, the paper argues that individuals should also account for their environmental costs just as companies are statutorily required to do since individual activities alone are responsible for over 60 per cent of the globe's greenhouse gas emissions and up to 80 per cent of the world's water use. The position of this paper is therefore, contrary to the views held in some quarters that individuals are not supposed to be made liable for their environmental costs which to them consist of external costs. Pieces of evidence from the secondary data collected from textbooks, journals and the internet were used to debunk the claims of these critics and give support to our own position. The study revealed the following: Individuals incur external costs just as companies do and even more; individuals don't need to depend on government or be financially buoyant before they can account for their environmental costs; ability of individuals to escape from paying external costs does not make government solely responsible for environmental costs; individual responsibility for environmental costs is personally and environmentally beneficial and has received public support; and government sanctions and green programs prove that individuals should also account for their environmental costs. The study therefore, recommended that government sanctions, pro-environmental behaviours and green programs be used to make individuals imbibe green lifestyles that will lead to environmental sustainability.

Keywords: Environmental costs, External costs,, Greenhouse gas emissions, and Environmental sustainability

1. Introduction

In recent times, there has been an increasing interest in corporate institutions accounting for their environmental costs and this development has made more researches to be conducted on corporate social responsibility than it is done on the responsibilities of individuals to the society. Activities of individuals namely, consumers and households even impact more on the society than those of corporate institutions. The three basic areas of consumption where the activities of individuals have impacted greatly on the environment are food, transport and housing. In most countries of the world more than 60 per cent of all environmental impacts of consumption come from household consumption (Hertwich et al, 2010) and consumers are also responsible for up to 80 per cent of the world's water use and 20 per cent all carbon impacts (Ivanova et al, 2016). In Nigeria for instance, individuals frequently engage in bad environmental habits like bush burning during farming seasons (deforestation) hunting for bushmeat, defecating in bushes, rivers and streams, dumping of refuse or wastes indiscriminately especially whenever, it rains,

use of Gamalin (poisonous chemical) for fishing activities, sinking of boreholes close to pit toilets and deliberate refusal of house owners to provide toilet facilities for their tenants who oftentimes live in overcrowded apartments. Other areas of individual activities where bad environmental habits have been noticed in Nigeria are use of water, electricity, charcoal, fire-woods, and fertilizers, headsmen activities, burning of toxic materials and littering of water packages which often leads to blockage of drainages since these cellophane materials (pure water packages as it is popularly known in Nigeria) are non-biodegradable. This will eventually lead to floods and destruction of aquatic life. The foregoing scenarios (individual consumption and household activities) have given rise to external costs like air pollution, water pollution and global warming. Why then should individuals not be involved in environmental sustainability? The only way they too can be involved is for them to account for the environmental impacts of their consumption and household activities. The researcher's position in this view-point paper is that individuals should also be involved in accounting for their environmental costs because of the enormity of the environmental impacts of their consumption and household activities.

2. What constitutes the environmental costs of individuals?

External costs are incurred both by the producers and consumers because of the negative impacts of their actions on the environments. i.e. environmental costs arising from producing product X (producers' external costs) and environmental costs arising from using product X (consumers' external costs). Sustainable production is required from the producers' side, i.e. continuing production without causing damage to the environment and sustainable consumption is also required from the consumers' side i.e. continuing consumption without causing damage to the environment. Two important questions can be asked here: firstly, can a producer produce goods and services without causing any harm to the environment (environmental costs or external costs to the society)? Secondly can a consumer use goods and services without causing harm to the environment (environmental costs or external costs to the society)? The answer to these questions is definitely no. The foregoing questions imply that producers' decision to produce gives rise to environmental costs or external costs which governments mandate them to internalize i.e pay for while consumers decision to consume gives rise to environmental costs which governments oftentimes do not mandate consumers to pay. Why then should consumers not be mandated to internalize their own external costs just the same way corporate institutions are asked to do?

It is definitely not possible for a producer to incur only private costs (amount paid for the production inputs) without incurring external costs and it is not also possible for a consumer to incur only private costs (amount paid for the fuel, maintenance, oil, depreciation and even the time spent in driving a car) without incurring external costs. Both the producers and the consumers can only minimize the negative impacts of their activities (production and consumption) on the environment. Individuals and households need food, mobility and housing at a relatively sufficient level. Ideally, as individuals, we need to use these things without causing damage to the environment. How can we increase our food, mobility and housing usages without losing our biodiversity? What should individuals and households do to account for their own environmental costs (external costs).

3. Arguments against the involvement of individual households and consumers in accounting for their environmental costs

Critics of the involvement of individuals in accounting for their impact on the environment argue that environmental sustainability is a very difficult concept for an individual to consciously achieve on his own without the involvement of government. They argue that it is not the individuals' ecological footprint (impact of their activities) that drive environmental sustainability. Their argument is based on the result of a study carried out by Sutora (2012) and Kennedy et al. (2015) as cited in Living Planet Report (2014). In that study, it was discovered that people who are highly educated underestimated their environmental sustainability. Their self-assessed environmental sustainability answers reflect mainly their concern for the environment or amount of information received about environmental problems and not the way they actually behave towards the environment. According to critics, one's feeling about the environment or receiving environmental information is not as important as actual environmental behaviour. They concluded that environmental sustainability is only achievable when government actively participate in the sustainability transition.

Critics further argue that ascribing the forward-looking responsibilities of individuals who have performed harmful actions against the environment to governments and corporations is far better than blaming them for their bad environmental behaviours. According to these critics, when government and other agencies jointly become responsible for the harmful environmental behaviours of individuals, the level of environmental sustainability increases. This assertion or claim is supported by 'n Fahlquist (2009) who in his study asserted that the aim of distributing the responsibility of individuals for harmful environmental behaviour is to achieve efficiency. According to 'n Fahlquist, there will be a better chance of having a society in which opportunities to act in environmentally friendly way will increase when responsibility is shared to government and institutional agencies.

Individuals according to critics seldom have enough resources to embark on various eco-friendly projects. These individuals will also not be financially strong to promote community involvement in environmental sustainability talk less of implementing sustainable development strategies that require enormous amount of money. Government may therefore, be ultimately responsible for conserving the environment. Bing-Yuk (2009), a SCMP reporter as well as an award winner in article writing, supported this claim by asserting that the person that should be held responsible for protecting the environment is the government or the governments in every country.

External costs according to opponents of individual involvement in accounting for environment, are costs that those responsible can escape and which must be borne by the whole society. It therefore, unavoidably becomes government responsibility to pay for these external costs. The earth's fragile eco-system must be protected by government even if it involves sacrificing some economic growth (Moffatt, 2018). If, those responsible for external costs have escaped from paying them, the responsibility now falls on government to pay in order to obtain a socially efficient rate of output. Why still ask individuals to be involved in accounting for external costs when their efforts have not decreased their carbon footprints? Critics ask. A world of difference can be made if government get involved in climate change (Folk, 2018).

Individuals according to critics only engage in pro-environmental behaviour for their personal benefits other than the benefits of the environment. They contended that altruism is not the only pathway to sustainability. Three studies which supported this claim found that when self-interested individuals' environmental behaviour personally benefits the individual, he or she will engage in pro-environmental behaviours i.e. he will consciously carry out an environment friendly action if a personal benefit is attached to that behaviour (De Dominicis, Schultz, and Bonaiuto, 2017). They therefore, argue that this kind of individual involvement in environmental accountability cannot guarantee environmental sustainability.

4. Why these arguments are false

It is not entirely correct to say that individuals cannot on their own account for the environmental impact of their actions without involving the government. De Dominicis, Schultz and Bonaiuto (2017) reported in their study that three studies proved that altruistic individuals will participate in pro-environmental behaviours when there are environmental benefits and critically when it will personally benefit them. According to National Research Council (2005), surveys carried out in the U.S. show evidence of the desire of many people to reduce the impact of their personal choices. The Council further asserted that evidence of individual support for environmental protection can be seen in the participation and support for recycling programs, widespread use of parks and nature reserves, community gardens, conservation organizations, farmers' markets, 'Smart growth' policies, environmentally sensitive products and foods and other green goods and services. In the foregoing situations, government involvement is not necessary.

Individuals do not need to be as financially buoyant as government before they can engage in green attitudes. Smith (2001) asserted that we all as individuals can contribute positively to improve the air quality we breath, by making a little attempt to reduce our vehicles' emissions. If every individual in the society makes this same little attempt, externalities like global warming, air or water pollution will be enormously minimized.

It is true that people responsible for the occurrence of external costs can escape from paying such costs. This does not automatically make government solely responsible for payment of external costs. It has been empirically established that self-interested individuals engage in pro-environmental behaviours when there are environmental benefits. From the individual standpoint, external costs arise as a result of consumption decisions and an individual consumer can reduce external costs like air pollution and global warming by reducing the level of electricity, water, fuel, oil and car driving time. It is not the amount of efforts put in by an individual that decreases carbon footprint but, the combined efforts of all the individuals in the society and their desire to achieve environmental sustainability.

Personal benefits are not the only reasons why individuals behave pro-environmentally. Empirical pieces of evidence exist to show that altruistic individuals engage in pro-environmental behaviour when there is environmental benefits i.e. they engage in behaviours that benefit the environment like recycling and using less electricity and water.

5. Arguments in favour of the involvement of individual households and consumers in accounting for their environmental costs

External costs are incurred when producers and consumers or households make decision about products and services. Producers incur external costs when they produce goods and services because of the adverse environmental impacts of their production activities while consumers or households (i.e. individuals) incur external costs when they make use of goods and services because of the adverse environmental impact of their usage activities. Individuals (consumers and households) are therefore, majorly responsible for the payment of their environmental costs i.e. individuals pollute the environment each time they fail to use foods, vehicles, housing and other services in an environment friendly manner (environmental sustainability). It therefore, does not make much sense for individuals to expect the producers or governments to pay for their wrong usage of products and services. Environmental sustainability from the individual stand-point, requires that consumers and households continue to use the producers' goods and services without causing any harm to the environment. Having identified bad users of products and services as environmental polluters just as producers are, we will attempt to put up arguments in favour of their involvements in the green revolution.

The involvement of individuals in environmental sustainability has received tremendous support from people in recent times. High rates of public support for the participation of individuals in environmental protection have been recorded in the survey research carried out since in the 1970s. People will make environmentally significant choices that conform to their values and preferences if reliable indicators of their ecological footprints (environmental impacts of their activities) are developed. Another piece of evidence that support the need for individuals to be involved in accounting for environmental costs or environmental sustainability is in the result of a survey conducted in the United States to show the perceptions U. S. citizens have about the effect of using government regulations to encourage individuals' environmental sustainability. In 1973 survey, 34 per cent against 13 per cent of total respondents said government regulations had not gone far enough while in 2001 44 per cent against 21 per cent said government regulations had not also gone far enough. The call for better regulations by the citizens underscores or emphasizes the need for individuals to be involved in environmental sustainability.

Without considering external costs as part of social costs, socially efficient rate of output for the society will not be achieved. As said earlier, social costs basically consists of private costs and external costs. When individuals decide to use products and services and in the course of doing so cause pollution or damage to the environment, they should be liable for repairing the damage. It is the polluter that should bear the costs of the pollution and not to shift responsibility to producers and governments. This is the basic reason why individuals who are altruistic engage in pro-environmental behaviours. De Dominicis, Schultz and Bonaiuto (2017) as previously cited in this paper, asserted that altruistic individuals will engage in pro-environmental behaviours when there are environmental benefits and critically also when there are personal benefits.

A second in a series of articles which emphasize the need to make individuals become more environmentally responsible is that which was written by Babcock (2009). The author quoted a source as follow: "Congress recognizes... that each person has a responsibility to contribute to the preservation and enhancement of the environment". This quotation says 'each person' and not companies alone as is usually emphasized. The article argued that some of the impediments against reformation of individual behaviour can be solved when norms are internalized as soon

as they are activated. Public education campaigns with supplemental measures like sanctions and market-based incentives can make norms to influence individual behaviour, the article concluded.

The environmental impact of individual activities is globally high and the involvement of individuals in environmental sustainability cannot therefore, be avoided. In a study conducted by Ivanova et al (2016) to assess the consumer environmental impact in 43 different countries and 5 rest-of-the-world regions, it was revealed that more than 60 per cent of the world's greenhouse gas emissions and up to 80 per cent of the world's water use were caused by consumers while 20 per cent of all carbon impact occur when consumers drive their cars and heat their homes. Ivanova et al further commented as follows: "We all like to put the blame on someone else, the government or businesses but, between 60 – 80 per cent of the impacts on the planet come from household consumption".

Government actions and policies have shown that individuals can become accountable for the negative impacts of their activities. Where green programs, market-based incentives policies, information and education fail to encourage erring individuals to imbibe green attitudes, government can compel people who engage in anti-environmental practices to change to green lifestyles through the payment of fines and other relevant fees. Folk (2018) in one of her articles, reported that British Columbia's greenhouse emissions dropped 6 per cent overall when the government enacted a carbon tax shift on 1st July, 2008 taxing \$10 for each ton of C₀₂ released into the atmosphere. Individuals become accountable when they are penalized for engaging in anti-environmental behaviours. The use of sanctions and the corresponding positive change in environmental behaviour provide enough evidence that individuals are liable for the negative impacts of their activities on the environment and should be actively involved in environmental sustainability.

6. Findings

- 6.1 Individuals incur external costs just as companies do and even more.
- 6.2 Individuals don't need to depend on government or be financially buoyant before they can account for their environmental costs.
- 6.3 Ability of individuals to escape from paying external costs does not make government solely responsible for environmental costs.
- 6.4 Individuals engage in pro-environmental behaviours for both personal and environmental benefits.
- 6.5 The involvement of individuals in accounting for environmental costs has received tremendous support from people.
- 6.6 Pro-environmental behaviours, government sanctions against bad environmental habits of individuals and green programs justify the call for individuals' involvement in accounting for environmental costs.

7. Conclusion

Individuals (consumers and households) incur external costs just as corporate institutions do. Since corporate institutions are statutorily mandated to account for the environmental impacts of their production activities, individuals should also be statutorily mandated to account for their

consumption activities or decisions. It does not make much sense for individuals who are responsible for more than 60 per cent of the globe's greenhouse gas emissions and up to 80 per cent of world's water use, not to be largely involved in environmental sustainability. Individuals (consumers and households) should therefore, be actively and majorly involved in accounting for their environmental costs (external costs). Individuals account for their environmental costs when they internalize their external costs through pro-environmental behaviours, government sanctions (fines and penalty fees) and government and other green programs.

8. Recommendations

8.1 Education: Rural and urban dwellers should be thoroughly educated on environmental protection related issues. Governments should engage in green programs and should encourage and support other green groups.

8.2 Market-based incentives: People or citizens should be shown how they can make extra money from their waste materials. This move will encourage recycling and other green attitudes.

8.3 Pro-environmental behaviour: This should be encouraged and sustained by governments through tax and other relevant incentives. Government-funded researches should be used to improve environmental sustainability.

8.4 Government sanctions: Government should ensure that polluters of our environment are severely punished and made to pay heavy fines and appropriate penalty fees.

8.5 Anti-corruption policy: Government should arrest and prosecute all corrupt environmental protection agents.

9. The Way Forward

Our consistent green habits as individuals (consumers and households) can make a huge difference. Our use of products and services can achieve sustainability when we imbibe green lifestyles in the following ways:

9.1 Use a service instead of buying a product to reduce water and energy use. This minimizes air pollution and saves energy.

9.2 Use dishwasher efficiently and don't stay too long under showers or imbibe other lifestyles that cut your use of water and save energy.

9.3 Pay a taxi cab instead of driving a car to reduce your carbon footprint to minimize air pollution.

9.4 To avoid turning up the heat, wear more clothes while at home to minimize air pollution and save energy.

9.5 Lights, computers, television sets etc. should be switched off when you are no longer using them. Unplug all appliances rarely used. Use natural lights from the sun more often than not. This also minimizes air pollution and saves energy.

9.6 Wash your clothes with cold water and air dry them too to minimize air pollution and save energy.

As a way forward, let's consider the following excerpt from an article written by Sham (2009):

"I think the people of Hong Kong should be responsible for protecting the environment. We live here so we should take care of our surroundings. There are several ways to achieve this. We should reduce the amount of waste we produce by using less paper, fewer plastic bags and less electricity, and recycling metals and other precious resources. In addition, we should use less bleach, pesticides or other chemicals that can damage the environment. We should also make our communities more eco-friendly, whether they are schools, clubs or housing complexes. We could organise tree-planting campaigns or walks to raise money for green groups. It is true that not every individual will behave responsibly. Hence, the Hong Kong government has to enact laws to stop such selfish persons or companies from polluting the environment. The government could also provide more funding for research on the most effective ways to save the planet. Yet, I think Hongkongers have the greatest responsibility. It's our turn to take action and make a change, big or small, for the sake of our environment and future generations".

The time has come for us to also extend the emphasis we lay on the environmental impacts of production activities (corporate external costs or corporate social responsibility) to the environmental impacts of household and consumption activities (individuals' external costs or individual social responsibility). That time is now.

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