

## Categorical Imperative in Defense of Strong Sustainability

### Imperatyw kategoriyczny w obronie silnej zrównoważoności

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#### Abstract

Strong sustainability defends that certain forms of natural capital (environment) are critical and therefore, non-substitutable. There is an increasing concern for conserving the natural environment due to its unique contribution for sustenance and wellbeing of all living beings. The development process which does not preserve its natural capital is bound to lead towards an unsustainable growth path. In the wake of strong sustainability, it is an imperative to preserve the natural environment as it is degrading beyond its threshold limit. The ethical aspect of strong sustainability raises the ethical question *what is right thing to do* and emphasizes on ethical relations of humans with natural environment. The paper defends strong sustainability from Kant's Categorical Imperative. Categorical Imperative motivates every human to act out of duty. Actions done for the sake of duty alone are morally worthy. A *duty* is the relationship between one's moral action and his autonomy of the *will*. Concerning the sustenance and wellbeing of the present and the future generation, it is the moral duty of the humans to preserve the natural environment.

**Key words:** strong sustainability, weak sustainability, natural capital, categorical imperatives, direct and indirect duty

#### Streszczenie

Silna zrównoważoność oznacza, że niektóre formy kapitału naturalnego (środowiska) są krytyczne i dlatego nie podlegają substytucji. Troska o ochronę naturalnego środowiska z uwagi na jego wyjątkowy udział w podtrzymaniu i pomyślności wszystkich żywych stworzeń rośnie. Proces rozwojowy, który nie ochrania naturalnego kapitału oznacza wkroczenie na ścieżkę pozbawioną zrównoważenia. Podążając za silną zrównoważonością za imperatyw należy uznać ochronę środowiska naturalnego, które obecnie podlega degradacji przekraczającej próg akceptacji. Etyczny aspekt silnej zrównoważoności odnosi się do pytania *co należy czynić* i podkreśla znaczenie etycznych relacji pomiędzy ludźmi a ich środowiskiem naturalnym. Artykuł stanowi próbę obrony silnej zrównoważoności w oparciu o imperatyw kategoriyczny Kanta. Motywuje on ludzi do podejmowania działań płynących z obowiązku. Takie działania określane są jako moralnie wartościowe. *Obowiązek* to relacja pomiędzy działaniami podejmowanymi przez jednostkę a autonomią *woli*. Biorąc pod uwagę postulat podtrzymania pomyślności obecnych i przyszłych pokoleń, moralnym obowiązkiem ludzi jest ochrona środowiska naturalnego.

**Słowa kluczowe:** silna zrównoważoność, słaba zrównoważoność, kapitał naturalny, imperatyw kategoriyczny, obowiązek bezpośredni i pośredni

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#### 1. Introduction

One of the key challenges of 21<sup>st</sup> century is sustainable development, as economic development has become one of the widely acknowledged goals for human society as well as one of the major barriers to sustainable development. As a result, the entire

world is facing the dreadful consequences of the techno-centric and over consumptive attitude of humans in different forms of environmental catastrophes like, pollution, destruction of croplands and grazing lands, urban expansion, the destruction of wilderness, the destruction of non-human habitat etc.

Development is an elusive concept; it is closely related to growth and quantitative attributes. Though we are prospering and resources are abundantly available, we are surrounded by poverty, unemployment, and other related issues. This mournful situation has not come suddenly but is an outcome of the materialistic civilization, where development is materialized in the form of economic progress. The present economic development pattern has its roots in the industrial revolution in western countries. Soon after the Second World War, the concept of economic growth came into focus by the then American president Truman; he said that a large area of the world is an *underdeveloped area* – and in order to develop them – *greater production is the key to prosperity and peace* (Trueman, 1951). Industrial revolution grounds its foundation with two basic notions; one, commodifying the nature and second, society consists of only human beings. These two concepts have brought over-dominion attitude of humans on natural environment which has brought a drastic change in the development process.

Development, whether economic or human, should not add a deteriorating environment and for environment to be protected, economic growth must insulate environmental devastation. Economic development is the only catastrophe to environmental sustainability (Stockholm Conference, 1972).

The basic objective of development is to create an enabling environment for people to enjoy long, healthy, and creative lives (Jain, 2013). Thus, in order to limit the adverse effects of economic development on natural resources, there comes the need of sustainable development.

Sustainable development implies great potential for human well-being as it holds two terms *sustainability* and *development* and; while the latter deals with different forms of human evolution and their dominion activities on social and economic levels, the former is concerned with a limit to such economic growth which adds to the degradation of environmental resources. The notion of sustainable development was introduced in Stockholm Conference (1972) to address the rational management of resources. It emphasized the adoption of an integrated and coordinated approach towards development planning to ensure its compatibility with the need to protect and improve environment for the benefit of the population.

The notion of sustainable development was propagated by the World Commission on Environment and Development (WCED, 1987). The report *Our Common Future* (The Brundtland Report) was based on the vision of humankind towards a better life on one hand and the limitations imposed by nature on the other hand. The commonly quoted phrase goes, that *sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs* (WCED, 1987). It is also believed, with the

Brundtland commission, that meeting the need of the poor is also an essential aspect of sustainability.

At Rio Summit in 1992, majority of nations and states formally signed *Agenda 21* – the strategy for sustainable development (UNCED, 1992). Again, during World Summit 2002 and Earth Summit 2012, various nations participated for sustainable development platform which is known as Rio+20 (Neumayer, 2012).

Therefore, the present situation demands a shift from economical paradigm to ethical paradigm that can lead us to a strongly sustainable world. The concept of strong sustainability has an ethical aspect and this aspect is defended in this paper from Kant's Categorical Imperative perspective. By analyzing Categorical Imperative, the paper focuses on individual duty, both direct and indirect. The paper discusses direct duty of humans to their contemporaries as well as to their future generation and indirect duty to the natural environment.

## 2. Strong Sustainability: An Overview

The initiative in the direction of sustainability requires attention on its three pillars i.e. economic, social, and environmental. Thus, for managing and providing suitable directions to an economy and its human resources, economic indicators and social indicators like GDP, life expectancy at birth, adult literacy rate, mean and expected years of schooling have been developed; but the environmental aspect of sustainability has been ignored. UNESCOSCOPE (2006) very rightly mentioned that making decisions without reliable indicators is like driving without road signs. The drive towards sustainability requires more specific and adequate indicators across all economic, social, and environmental dimensions. The term sustainability is the subject of intense debate among environmental and resource economists. The debate currently focuses on the substitutability between the economy and the environment or between *manufactured capital* and *natural capital*, a debate captured in terms of *weak* and *strong* sustainability. The weak sustainability approach assumes that natural capital and manufactured capital are essentially substitutable and there are no essential differences between the kinds of well-being they produce (Neumayer, 2012). Weak sustainability is based on the work of two notable neoclassical economists: Solow (1974) and Hartwick (1977). It is based on the belief that man-made capital is more important than natural capital. For example, water is more purposeful when it is converted into electricity, rather being simply water; natural resources like coal and its beneficial are used as raw materials to run different companies. In broader terms, *weak sustainability* requires welfare potential of the overall capital base to remain intact (Hediger, 1999).

In contrast, the conception of *strong* sustainability relies on the principle of resource management or

conservation of natural resources. The strong sustainability approach holds that, certain forms of natural capital are critical and non-substitutable. In the wake of the strong sustainability approach, it becomes imperative to preserve the natural capital. The development process which does not preserve its natural capital is bound to lead towards an unsustainable growth path. According to strong sustainability (Ekins et al., 2003; Dietz and Neumayer, 2007; Brand, 2009; Pelenc and Ballet, 2015), the ecosystem has to be sustained on the following grounds:

- It provides the essence to human sustenance and wellbeing.
- It is non-substitutable for its unique contribution for both biotic and abiotic beings.
- The risk of these services is increasing because natural capital is degrading beyond its threshold limit.

The idea behind the paradigm of *weak* sustainability implies an economic value principle which is found within the body of neoclassical capital theory, whereas conception of strong sustainability is based on biophysical principles. This is a result of different visions about how a sustainable world could and should look like, and how to manage environment and development.

2.1. Models on Weak Sustainability

Several researchers (Elkington, 1997; Medhurst & Ekins, 2006; Jickling et al., 2009; Ekins, 2011) have developed different models on weak and strong sustainability to illustrate relationships between ecology, economy and society. Some of them are as follows:

2.1.1. Triple-bottom line Model

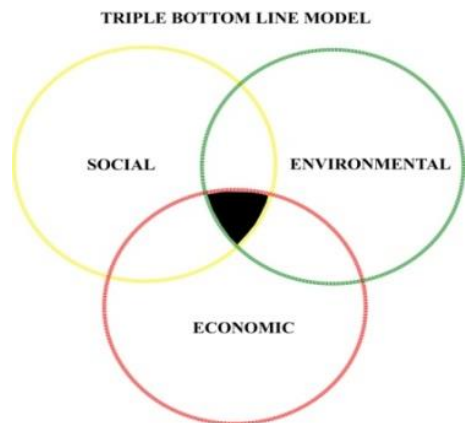


Figure 1. Triple-bottom line model (Elkington, 1997)

*Triple Bottom Line Model* (fig. 1) was proposed by Elkington (1997) as a means towards sustainable development that underpins most of the discourse and policy-making in fields such as *economic development, environmental protection* and *sustainable society*. The model asserts that there exists an appropriate balance between economic, environmental

and social outcomes. However, we find that only the (small) intersection (see fig. 1) of the three circles represents the possibility of sustainability. The ultimate limits imposed by the environment (biosphere) on economic and social activity are ignored. Hence this model ultimately leads to weak sustainability model. During the actualization of this model, economic sustainability is considered as a widely accepted goal and consequently it takes the form of Mickey Mouse model.

2.1.2. Mickey Mouse Model

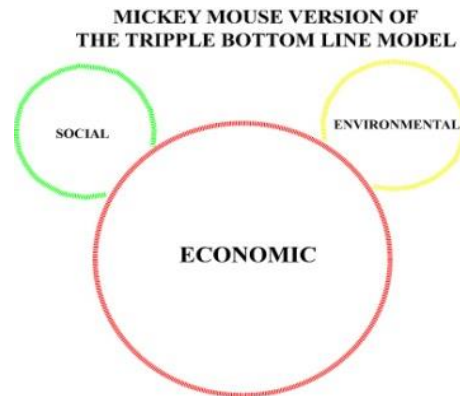


Fig. 2. Mickey Mouse Model (Peet, 2009)

Mickey Mouse model focuses on economic bottom line over the environmental and social bottom lines. The Mickey Mouse model leads to those anthropocentric behavior where, economic activities largely influence the environmental and social security, and growth. It is currently the model that underpins most global economic and political decision making (see fig. 2). The absence of intersection between the three dimensions of sustainability viz., economy, society and environment in this model leads to un-sustainability.

Both the above models are called weak sustainable models because of their shortsightedness as their main focus is economic achievement with social development at the expense of environment. Weak sustainability models extend their concern for economic achievement by considering humans apart from the biosphere. However, in reality, economy and society cannot exist outside the environment. Hence, economic and social activities should be carried out within the horizon of environment. Strong sustainability model shows the interrelatedness and dependency of humans with the biosphere as part of it.

2.2. Strong Sustainability Model

The diagram labeled *Strong Sustainability Model* (fig. 3) shows that all forms of life – including humans exist within the biosphere. Thus, human life and actions flourishing within the biosphere are a part of it. This approach recognizes that the economy exists as a subsystem of the ecosystem and hence imposes limitation on the expansion of economy and society. Strong sustainability refers to a situation,

where the natural environment is sustained and human impact remain manageable.

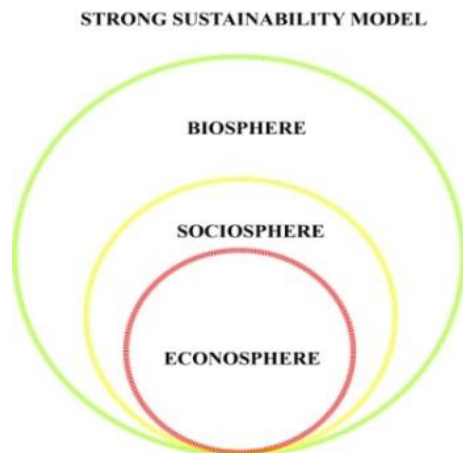


Fig. 3 (Adams, 2006)

### 3. A Context to the Research

Competitiveness and over consumerist attitude multiplied with greed have led to a massive situation where a great deal of attention is given to economic growth only and environmental aspects are highly neglected. A huge rise in economic development in recent years have resulted in better infrastructure, high life expectancy rate, high birth rate, low death rate and expansion of industries which have consequently contributed in high population growth, depletion of natural resources, pollution, global warming, climate change, species extinction etc. If these attitudes will not change, then the day is near to the failure of strong sustainability model. This failure is presented in the following figure (fig-4), where the environmental, social and economic dimensions are overlapping each other. The expansion of econosphere along with sociosphere and contraction of biosphere will ultimately create a war like situation among human-human (social, political, communal, global etc.), human-animals for the basic needs (food and shelter).

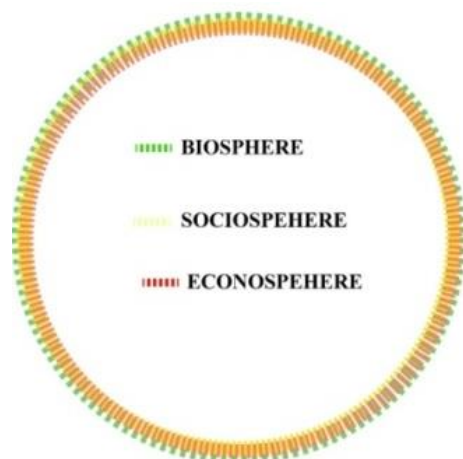


Fig. 4. Failure of Strong Sustainability

Various researchers (Beckerman, 1995; Jamieson, 1998, Daly, 2005; Vucetich & Nelson, 2010 etc.) have also doubted the effectiveness of strong sustainability as there is no end to human greed. The reason behind the failure of strong sustainability is the lack of ethical training, where human civilization is unable to understand their needs and a limit to the needs. Though, economic development is necessary for the development of countries, growth should not be achieved at the cost of polluting air and water, destroying forests, depleting natural resources and human life. Moral degradation is the cause of environmental degradation. We argue that a shift from economic development to ethical/ moral development can be the key to human willingness to adopt the path of strong sustainability. It is certain that scientific knowledge is indispensable, as much as to identify the present problems as to continue with the search for their technical and economical solutions. However, scientific knowledge is not enough; it must be connected with certain moral principles, as moral principles govern human code of conduct in a daily basis.

To support the strong sustainability model, the paper analyzes the concept of strong sustainability based on Immanuel Kant's Categorical Imperative. A presentation of strong sustainability (fig. 3) from Kant's Categorical Imperative, can serve the present need.

### 4. A Conceptual Framework: From Kant's Categorical Imperative

In the *Groundwork of the Metaphysics of Morals* (GW), Immanuel Kant established the role of reason in ethics: *A Metaphysics of Morals is therefore necessary, not merely because of a motive to speculation but for investigating the source of practical basic principles that lie a priori in our reason* (GW, 4:390). Kant said reason is *the faculty of principles* (Sullivan, 1989, p. 48). Rationality to Kant guides all humans with freedom of choice and duty to fulfill the moral law.

For Kant, human reason has adequate power to overcome illogical, inconsistent and relativistic approaches of life and can practice a moral law which can be logical, consistent, and absolute. His conviction was that non-empirical reasoning would lead to the discovery of our duty and give us an absolute moral theory based on the Categorical Imperative. Kant subscribes the multiplicity of commands and imperatives to one which is unique, unconditional, absolute and inherently moral: the Categorical Imperative. In *Groundwork*, Kant foresees the nuances of this absolute formula: *Finally there is one imperative that, without being based upon and having as its condition any other purpose to be attained by certain conduct, commands this conduct immediately. This imperative is Categorical Imperative. This imperative may be called the imperative of morality*

(GW 4:416). The objective behind Kant's Categorical Imperative is to motivate everyone (human) to act out of duty.

Kant gave three formulae of Categorical Imperative and in this section we shall investigate their implications in promoting strong sustainability.

#### 4.1. Formula I, Principle of Universal Law

The principle of universal law is a principle of rational reciprocity; this commands each individual to act which can be rationally accepted by all. The first formulation of the Categorical Imperative states, *act only in accordance with that maxim through which you can at the same time will that it become a universal law* (GW 4:421). That is, act on a maxim only if it can be universalized. If the maxim cannot be universalized then we should not act on it. The Categorical Imperative is objective and independent of personal desires and their subjective ends. This is a law of nature; it has to be followed unconditionally without any expectation under any circumstances.

The primacy of duty is affirmed in Kantian ethics. In true sense, the moral worth of a person is revealed only when he acts from duty. The person concerned has to bracket his emotions (greed) while performing his duty if that action is done for the sake of morality as a universal law. There is no place for any kind of inclinations. A person, who is righteous, will always positively respond to the call of duty as a moral standard. A duty is the relationship between one's moral action and his autonomy of the will. All actions do not qualify to be moral but actions done for the sake of duty alone are morally worthy. The moral worth of an action depends on whether one acts from duty or from inclinations. If inclination dominates, the moral worth of these actions will deteriorate and on the other hand if the role of inclination is low its moral worth be on the higher side. Kant's admiration for duty is expressed in the *Critique of Practical Reason*:

*Duty! Thou sublime and mighty name that embraces nothing charming or insinuating, but requires submission, and yet does not seek to move the will by threatening anything that would arouse natural aversion or terror in the mind but only holds forth a law which of itself finds entry into the mind and yet gains reluctant reverence (though not always obedience), a law before which all inclinations are dumb, even though they secretly work against it; what origin is there worthy of you, and where is to be found the root of your noble decent which popularly rejects all kinship with the inclinations, decent from which is the indispensable condition of that worth which human beings alone can give themselves? (CPtR 5:86)*

There is no prerogative to duty. Duty has to be done for the sake of duty. It is the duty of a human to leave pure air, pure water and fertile land to other fellow humans as well as to its future generations. It is opined that the duty of one individual is to promote the rights of other in order to exist in society by extending a fellow feelingness and responsiveness. It is argued, from categorical point of view, whether weak sustainability can be regarded as a principle of universal law or strong sustainability? According to the principle of weak sustainability, man-made capital can be used as a substitute to natural capital (Neumayer, 2012). But in practical situation this concept is vague, for example: can the ozone layer be substituted by any manufactured object? If it is practically possible then there would be no global warming, depletion of ozone layer, etc. It is against the principle of universal law that we can let people suffer, as it is about their autonomy or dignity of being a human. Hence, humans have to leave their consumerist attitude and think about their sustenance as well as future generations by adopting ethical means of life.

#### 4.2. Formula II, Principle of End-in-itself

The second formula goes as: *Act so that you use humanity, as much in your own person as in the person of every other, always at the same time as end and never merely as means* (GW 4:429). According to Kant, since humans have autonomy and reason to execute the autonomy, they have dignity and a value beyond any price. Therefore one individual should not use another individual as a means for the accomplishment of his/her own interests.

In *Groundwork*, Kant says *Morality is the condition under which alone a rational being can be an end in itself. Hence morality and humanity in so far as it is capable of morality, is that which alone has dignity* (GW 4:436). Kant in his later work, the *Metaphysics of Morals*, wants everyone to remember that our respect for a person is because of his moral character. He writes, *this is why showing respect for a human being as a moral being is also a duty that others have towards him and a right to which he cannot renounce his claim* (MM 6:464).

Second formula of the Categorical Imperative upholding the humanity in every person, invites everyone to responsibly involve towards the enhancement of everyone respecting each other's rights. According to Kant, the only species that can be moral, can assign value to anything is human (Gillroy, 1998, 148).

Wood (1998) calls the principle of *end-in-itself* as *personification principle*. Kant's division of duty to ourselves (direct duty) and duties to other (indirect duty), may be regarded as an upshot to the personification principle. According to Kant, humans are counted for only to their own species. Hence promoting strong sustainability would be a duty to others or

promoting wellbeing of humans, its contemporaries as well as future generations (Wood, 1998). Hence by, protecting natural environment we are promoting our own perfection. Strong sustainability demands a rational duty (though indirect), because certain things in natural environment cannot be substitutive. Our attitude has to reflect in our action, and our actions should be done in such a manner, where it can be followed universally. It is argued that, only humans can produce such actions which can be universally accepted. In order to protect the rights of human beings, it is argued that strong sustainability has to be treated as an end in itself, as there is no other substitute. Hence to save the humanity it is an imperative to preserve the natural environment. Humans should do an indirect duty to the natural environment as an extension of the direct duty towards their contemporaries as well as future generation. It is therefore emphasized that the Categorical Imperative should be an underlying principle of strong sustainability for the betterment of human beings.

#### 4.3. Formula III, Principle of Autonomy

The formula of autonomy states, *Act so that, the will could be regard itself as at the same time giving universal law through its maxim* (GW 4:434). Here, Kant shows the depth of Categorical Imperative by asserting that every *human will* is potentially also a law giver. The individual human will is capable of not only just to follow the law but, also can define and modify it. By doing this, the individual-self acts as a legislator, obeys it as well as communicate it to the society. While, giving the law, humans exercise their moral autonomy; it is the principle of goodwill. According to Kant, morality rests on goodwill and the will is good not for its effect produced but for its innate quality. There is nothing called absolutely good except the goodwill. Kant writes in his *Ground work of Metaphysics of Morals*:

*A good will is not good because of what it effects or accomplishes, because of its fitness to attain some proposed end, but only because of its volution, that is good in itself and regarded for itself, is to be valued incomparably higher than all that could merely be brought about by it in favor of some inclination and indeed, if you will, of the sum of all inclinations* (GW 4:394).

According to Kant, it is only good will which can be conceived without a limitation (GW 4:393). For Kant, good will has no constraints, no boundaries. Good will is good with all time through all space. Good will is absolutely and always good and does not shuttle between the dichotomy of ends and means. An autonomous person always listens to the inner will while giving any law to himself/herself or to the other.

While applying this principle of autonomy to strong sustainability, we find that every human being is a subject to moral autonomy. According to Kant, morality is meaningful only if we assume that autonomy is the property of the will of all rational beings. Autonomy is the property of the will and hence is a law in itself. Hartman observes:

*If I am an autonomous man, then I can be able to decide what kind of person I shall be, then I can decide what will be the most important to me and what shall I most want, hence what will be in my interests. And while having interests that are at odds with those of others is disadvantageous, being self-interested is not bad insofar as one's interests include others' well-being* (Hartman, 2007).

According to Kant, every rational being possesses autonomy. It is not an adventitious quality rather it is intrinsic to every rational being. Autonomy is the character of human will, which helps him in decision making. Dean argues that *Kant's strategy is that every rational agent who has choice and deliberation capacity is free being. It is in this concept of autonomy alone we can ably trace the prerequisites of human freedom. Only a free rational being can enjoy the state of self-legislative being. Deliberation implies choosing between options which is possible only for an autonomous being. It is freedom that rules one's action* (Dean, 2006). Thus autonomy is indispensable for the human beings to be called so. According to Gillroy (1998, 146), human autonomy requires the environment to sustain and perfect our agency. Yovel, said:

*Man is no longer a member among other members of the natural environment. Rather, by virtue of his rational consciousness, he now becomes the focal point of nature itself (...) reason (...) makes nature itself possible by imparting a logical structure to it. Human reason thus becomes a world-shaping power* (Yovel, 1980, 136).

It has been widely reported that humans are facing problems in forms of natural resources depletion, global warming, pollution, hunger, etc. In order to uphold the individual autonomy, we have to protect the natural world. Kant's concept of indirect duty towards natural environment in order to promote the direct duty for our own human beings is relevant in the present context. Human beings should think rationally to consider their need be treated as a universal law by considering each and every individual (of present and past) not their greed for economic development only. Actions have to be done in the moral sphere by considering its viability through the principle of Categorical Imperative. Hence it is the duty of every person to protect the rights of their fellow beings by doing their own duty.

## 5. General Discussion and Conclusion

J. M. Gillroy, (1998), proposed a term *Kant's Conservationism* in his paper *Kantian Ethics and Environmental Policy Argument: Autonomy, Ecosystem Integrity, and our Duties to Nature*. He said, it is a duty to us, to our contemporaries, to our future generation as well as to the natural environment to conserve the natural environment. The maxims of Categorical Imperative, helps the humans to recognize their duty to seek excellence in-itself and justice to their society and future generation (Gillroy, 1998). Andriy Matviychuk (2014) proposed *ecological deontology* as a new scientific discipline to address global problems of humanity in his article *Ecological Deontology in the Context of Solving the Task of Ecologization of Modern Man Thinking*. He said, a real solution to environmental issues require a deontological approach. By deontological approach, he meant greening of society. His deontological approach based on the concept of ideal world, where human will be able to fix the gap from both the environmental and humanitarian perspective. According to Matviychuk, ecodeontology provides a platform for greening the society with the help of greening human consciousness (Matviychuk, 2014).

It is argued that the solution to environmental problems requires an ethical approach that can lead a path towards strong sustainability, as Categorical Imperative distinctly defines the system of requirements for human's behavior in a particular sphere of life, as well as identifies their specific implementation. The objective behind Categorical Imperative is to deal with human nature and its relation to other humans. The econocentric person knows how nature is valued in terms of its utility in terms of economic gain i.e., nature has only instrumental value but an ethical person knows how to value the nature as an end not as a mere means. The sustainability principle is rooted in the adage that each generation holds a duty to ensure the future aspects of its offspring's that they must access the same comfort they had accessed. This axiom got wide recognition in the literature of philosophy (Howrath, 1995) and the same statement materialized in the Brundtland Commission as a central theme in the form of *sustainable development* that a development is sustainable only when it meets the need of both the present and future generation. Strong sustainability is needed for both present and future generations for their sustenance. Here, Kantian approach shows a moral duty towards each and every individual and also towards the nature (indirect value). And this can be plausible through the practice in the domain of moral awareness and then individual (group) actions can be reflected through their ethical and responsible behavior to themselves as well as to their future generations. In Kantian ethics, an action can be truly moral if and only if, it is made by an autonomous, rational being.

Placing Kant's Categorical Imperative in the context, the paper suggests that it is only humans who can save themselves from the environmental catastrophes, and protect the natural environment. Hence, it is opined that the present situation demands a shift in the thinking process and an ethical practice for a sustainable development in a strong sense. Though, we have information we are lacking in practice. Hence, it is suggested that deontological approach can be a solution to real life situation. By supporting the principle of Categorical Imperative we can possibly bring the change in human outlook in a broader perspective where humans can differentiate between their needs and greed, between what is to do and what ought to do, though humans are created by the nature but their destructive attitude can be reason of their own destruction. For a strong sustainable world, humans have to perform his duty (direct and indirect) within the periphery needs. By performing a direct duty to him/her and to its contemporaries, human is performing an indirect duty towards the natural world. Thus far, it is argued that the principles of Categorical Imperative are helpful, to fight against the weak approach of sustainability. The principles of Categorical Imperative can help us to promote strong sustainability from individual level to global concern.

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