

# Trade - off between Ecology and Economy in the Context of Gandhian Sustainable Development

## Abstract

Ecology and economy are linked to each other in numerous ways, with the ecology providing material and energy resource inputs, waste assimilative capacity, amenity and spiritual values and global life support services. This interlink ages are dynamic in that they are continually changing. In fact, for the survival of the animals on the earth, this ecological and economic equilibrium provides a global life support circle. In other words, we can say that life is impossible in the absence of this equilibrium. But After the Industrial Revolution, the whole world is now suffering with the imbalance between economy and environment. All growth theories based on capitalistic ground neglect the important issue of balance between ecological and human system. In reality the growth of heavy industrialization during the present century has accelerated the rate of natural resource exploitation to intolerable levels. Most of the theories of economic growth are based upon assumption that, industrialization, mass production, full utilization of natural resources, free trade and technological innovations are prerequisites for development. But these factors work as a catalyst to create disequilibrium in the equation of ecology and economy. On one hand these factors have created utopia for human being by wiping out poverty, ignorance disease and literacy .On the other hand, they have contributed to smoke, pollution and suffocation of the atmosphere. If our deeds interfere too radically in ecological system, then nature will no longer be capable of discharging its duties and providing the benefits. The unlimited greed of humankind is threatening the balance between ecology and economy. Man is exploiting both biological and natural resources beyond the limit and thus creating problems for future generations. In this context, one of the great thinkers of contemporary word Mahatma Gandhi's quotation comes in to the memory "Nature has the capacity to meet the human need, but not human greed". In fact Gandhi was the first modern thinker who talked about the sustainable development. His approach towards economic development was eco-friendly. In his remarkable work, Hind Swaraj, he outlined the threat to common future of humanity and civilization caused by greedy lifestyle of people. This paper attempts to look at the above aspects and is divided in to three parts. In the first part, the theoretical relationship between ecology and economic development has been discussed. The Second part deals with the Gandhian perspective on sustainable economy with special reference to the contemporary environmental problems. The third part deals with the relevance of Gandhian economic ideas with specific focus on "Non-Violent Ecological Economic Order".

**Keywords:** Gandhi an Economics , Sustainable Development , Gandhi's Political Economy , Holistic Development

## Introduction

One of the popular terms used by social scientists in the world today is sustainable development. As pointed by Pearce and Warford, "Sustainable development is a process in which natural resource base is not allowed to deteriorate .It emphasises the hitherto unappreciated role of environmental quality and environmental inputs in the process of raising real Income and quality of life"<sup>1</sup>. This definition clearly shows that sustainable development aims at maximizing the net benefits of economic development, subject to maintaining the stock of all natural and environmental resource assets (physical, human and natural) over time. The trade of between environment and economic development is also related to the concept of sustainable development. When there is a balance between ecology and economy the chances of natural resource exploitation will be less. Sustainable economic –environment interactions is an important part of Global Life Support

## Vijay Srivastava

Assistant Professor  
Deptt. of Economics  
Gandhian and Peace  
Studies, School of Social  
Science,  
IGNOU, New Delhi

## Charan Singh Verma

Associate Professor  
Deptt. of Economics  
Giri Institute of Development  
Studies  
Aliganj, Lucknow

Services (GLSS). In the Gandhian Frame work, this GLSS is closely associated with the non-violent ecological order and minimization of wants. The Gandhian theory of consumption forbids human being to from excessive utilization of resources. Gandhian demand function suggests that socio-economic environment should be made conducive to the service component of welfare function.

Environment and development are inextricably linked. The welfare of an individual depends upon those goods and services he consumes as well as many intangibles such as environmental quality.<sup>2</sup> A close connection between ecology and development is implicit in the very definitions of environment (as the conditions and influences and that interact with man) and of development (as a process to improve human welfare).<sup>3</sup>

The relationship between the environment and development has not been a very conducive one. Development has often harmed the environment, and the environmental harm has in turn adversely affected development<sup>4</sup>. The current concern with an awareness of the harm which is inflicted on the environments stems from a popular awakening beginning in the 1960s. Earlier some people warned of the approaching danger. Discussions, meetings, seminars, dialogues and conferences are educative processes to make people conscious and aware of the problem (Gangrade, 2008).

The ultimate objective of development planning is human development or increased social welfare and well-being of the people. Increased social welfare of the people requires a more equitable distribution of development benefits along with better living environment. The development process therefore needs to continuously strive for broad-based improvement in the standard of living and quality of life of the people through an inclusive development strategy that focuses on both income and non income dimensions. The challenge is to formulate inclusive plans to bridge regional, social and economic disparities. The Eleventh Five Year Plan sought to address this challenge by providing a comprehensive strategy for inclusive development, building on the growing strength of the economy<sup>5</sup>.

Depicting the Gandhian thought, nicely Satish Kumar argues that the crisis of environment comes out of a utilitarian, materialistic, non-sacred, non-spiritual world view –“The Earth is there for us to use, for comfort, for our convenience. As a consequence we have taken from nature without knowing its limits. When we have a sense of reverence, we shall take from nature only what meets our vital needs. And when we take something, we thank some gratitude – like we take milk from mother’s breast; the mother is very happy to give her milk in the same way as the Earth is happy to give its fruits as long as we take only what we need. When the baby is full, he or she stops sucking and does not go on sucking. Well unfortunately we humans go on sucking on earth”<sup>6</sup>. This is an important aspect of Gandhian thinking warns us that not to consume beyond the necessities. To him it hurts well being of people and well being of

other animals also. Gandhi argued that “We can not have ecological movement designed to prevent violence against nature, unless the principle of non-violence becomes control to ethics of human culture”<sup>7</sup>. Eminent Gandhian economist Kumarappa also insisting on these issues; the relationship between nature and human activities should be based on harmony and peace. The conflict between nature and society creates unethical living conditions for man and animals. In this connection, Gandhi said that “Man has no power to create life; therefore he has no right to destroy life. A society can be judged by the way it treats its animals”<sup>8</sup>.

In the Gandhian framework, sustainable development emphasises on maximizing environmental welfare of the people. In other words, we can say that the Gandhian theory of utility implies a balance between economic welfare and environmental welfare. Gandhi believed in the philosophy of minimization of wants. He was against the materialistic culture and luxurious lifestyle. One of the important reasons for his opposition to greed life style is related to environmental conservation. Nature Resource exploitation, which is an important part of capitalistic societies, has no place in Gandhian environmental order. Noted Gandhian Economist J.C Kumarappa called it “Economy of Permanence”, In his book he wrote, “When we use chemical fertilizers in the place of organic manures, for a time we may obtain crops, but constant application of these destroys the earthworms as they cannot feed on chemicals. With the disappearance of earthworms the soil becomes heavy and ultimately loses its fertility. Nature’s cycle is being broken by discarding farmyard manure and vegetable composts, the Economy of Permanence yields place to the man-made economy of Transience”<sup>9</sup>.

It is noticeable that Kumarappa said this when India started planned economy and was going to adopt policy of heavy industrialization and technological advancement. The negligence of Indian planners towards environment economy interactions during the initial stages of planning creates a gap between the GDP and natural resource utilization. Kumarappa propagated the concept of green GDP or Environmental resource depreciation in the National Income Accounting. Man inhabits two worlds. One is the natural world of plants and animals, of soils and airs and water which preceded him by billions of years and of which is a part. The other is the world of social institutions and artifacts he builds for himself, using his tools and engines, his science and his dreams to fashion an environment obedient to human process and direction.<sup>10</sup> The outstanding feature of last ten thousand years has been the construction of second human world.<sup>11</sup> This second human world and modern civilization sought to dominate nature and upset ecological system. Kumarappa called it “Parasitic Economy”, where harmonious relationship between ecology and economy has been affected negatively by human process.

Conventional economics does not pay heed to natural resource accounting and valuation of environmental goods. Traditional economic theories-Classical, Keynesians or Marxist, ignored the ecological impact of the productive activities. Neo economics built their theory on the assumption that it is always biophysically possible and ethico-socially desirable for the aggregate product to grow<sup>12</sup> But nature proved that such an assumption is wrong. Indeed, the natural stocks might be viewed as capital goods with a set of specific characteristics which relate, in the case of renewable resources, to biological growth and, in the case of non-renewable resources, to the existence of finite stock and the characteristics of reserves held in geological structures. This major draw back of traditional economic theories is not to look towards natural resource accounting and natural resource exploitation shifts thinkers towards the Gandhian Economics. Gandhian Economic theory is full of value judgment and ethical principles. Economics rely on the judgment that a change in economics welfare implies a change in total welfare in the same direction if not in the same degree.<sup>13</sup> Utility Maximisation theory cannot be applicable in Normative Economics of Mahatma Gandhi, so for increase in environment well being of people, minimization of wants and control over use of natural resources is a prime factor. The lesser the wants, lesser the pains caused by human beings. And lesser the physical needs lesser the man's demand on nature and fellow human beings.<sup>14</sup> Gandhian demand function for environmental goods applies this theory of minimization of wants thus the cruelty man inflicts on both nature and fellow human beings would be lessened by reducing the wants. Overall minimization of wants decreases the rate of natural resource exploitation.

In the Gandhian framework, modern civilization is primarily responsible for the ecological crisis in the world is facing today. Heavy industrialization, urbanisation mechanization and technological dependence are the root causes of disequilibrium in the Global Life Support Services in one way and decrease in quality of environment and quality of life. Ecological and development decay is another major contribution of modern civilisation. over and wasteful use of natural resources and the goods and services produced on farms and factories on the one hand and increased use of chemicals specially the petroleum and its products on the other is a major cause of ecological destruction.<sup>15</sup> One of the important studies in this area has been constructed by Ahuja and Kawadia (2006); they find that "The cross-sectional comparison of Index of Quality of life and quality of environment and socio-economic infrastructure bring out fact that many states with high quality of life do not ensure high quality of environment .At the same time States with high status of socio-economic infrastructure have failed to ensure high quality of environment. This study shows that high growth rate does not mean to ensure the better quality of environment for the people. It also neglects the trickle down theory of growth. The availability of better

environmental goods can reduce poverty and may be an important tool for the upliftment of the poor and deprived people. Environmental degradation is driving a growing number of people in to the poverty while poverty itself has become an agent of ecological destruction.<sup>16</sup> In this regard the former Prime Minister of India, Mrs. Indira Gandhi explained the relationship between environmental problems and poverty in the first UN conference (1972) on human environment. She said that "Are not poverty and need the greatest pollutants? For instance, unless we are in a position to provide employment and purchasing power for the daily necessities of tribal people and those who live in or around our forests, we cannot prevent them from despoiling the vegetation. When they feel deprived, how can we urge the preservation of animals? How can we speak to those who live in villages and in slums about keeping the oceans, the rivers and the air clean when their own lives are contaminated at the sources?"<sup>17</sup> On the issue of ecological crisis, noted scholar R.P Mishra argues that "With the current level of world development, the threat of ozone layer depletion, climate change, pollution of air, water, soil and human body is no longer a problem of future .The future is already here. It arrived back in the nineteenth century. Mishra criticizes modern civilization for decline in the environmental quality and ethical values of human beings for environment .He further argues that "The Human civilization is a subsystem of biosphere but it does not follow the rules of the game. Nor do the man-made other sub-systems. It has consistently violated the fundamental rules that govern the functioning of the biosphere and injected millions of tonnes of poisonous gases, liquid effluents, and non-degradable solid wastes thereby jeopardizing its own existence. Man and his civilization may soon because endangered species."<sup>18</sup> Mahatma ideas about the dangers of western civilization have assumed significance in the context of several issues concerning the survival of the mother earth. The issue of contemporary crisis has been framed in terms of relationship between man and man and between man and nature.<sup>19</sup>

It is clear from the words of Mrs. Gandhi that poverty and environmental conservation is interlinked. Without poverty alleviation environmental resource management and preservation is not possible and without decreasing the rate of Natural Resource exploitation, poverty alleviation is not possible.<sup>20</sup> The interrelationship between the exploitation and degradation of environment and natural resources, on the one hand, and development and poverty, on the other, is particularly relevant in the rural areas of developing countries. The linkage between poverty and environment defines a particular characteristic of environmental disruption. In rural areas, these linkages materialise through the over exploitation of resources.<sup>21</sup> Gandhi visualised this problem in the context of developing nations. He knew that if developing nations will adopt the capital intensive technique of economic growth the problem of natural resource exploitation, poverty, hunger, diseases, and unhygienic living conditions will remain. In the

World Development Report in 1990, it was pointed out that "Against the background of achievement, is all the more staggering, shameful that more than one billion people in the developing world are living in poverty. Progress in raising average incomes, however welcome, must not distract attention from this massive and continuing burden of poverty".<sup>22</sup> Many Third world Countries, particularly the countries of South and South East Asia and Africa have been caught in the vicious circle of poverty. This term explains the factor responsible for their economic backwardness. Absolute poverty leads to high fertility and environmental destruction. Poverty does not allow people to use their natural resources and they are wasted away of necessity, marginal land is farmed and forests are cleared. New industries cannot afford pollution control technology. The rapid increase in population puts an ever increasing pressure on environment.

Gandhi warned the world in the year 1909 on the issue of greedy life style and over consumption. He wrote that if India followed the western model of development she would require more than one planet to achieve the progress they had attained. The Nicholas stern Committee Report from the UK on Global Warming and Global Economy also underscored the same point through its observations that at the current rate of consumption of resources and energy of the planet, mankind would require more than one planet for survival. The Stern Committee Report therefore stressed the reduction of green house gas emissions by remodeling lifestyle and by transiting from a carbon economy to a non-carbon economy.<sup>23</sup>

Carbon economy is related to another important term related to consumerist culture. In the Gandhian context consumerist culture harms environment in a boarder way. One of the noted environment thinkers<sup>24</sup> Harsch argues that while consumption for the basic needs makes it necessary and inevitable, consumption beyond the basic needs to fulfill psychological yearnings has a negative impact on ecological resource management. Greed-based economy disturbs the ecological life support system and nature is becoming a victim of "Human greed". Indiscriminate misuse of natural resource promotes consumerist culture and consumerism further leads towards natural resource exploitation. Gandhi was of the view that as long as greed prevails and the fruits of economic development were not shared equitably among the masses, poverty and hunger would exist and till the evils of hunger, malnutrition and exploitation of the poor continued in the any part of the world, there could be no economic stability and ecological sustainability of the human society<sup>25</sup>. Inequality and indiscrimination in the use of environmental goods gives way to economic and social inequality. In the Gandhian framework distribution of environmental goods is associated with the distribution of wealth and resource in society. Consumerism not only creates pollution but also create socio-economic conflict in society. Sustainable livelihood and Simple life are solutions to

environmental decay. In Gandhian context, Globally, there has been increased focus on traditional natural resource management and conservation system in recent times. The convention on Biological Diversity (CBD), signed at the United Nations Conference on Environment and Development (UNCED) in 1992, In fact was the first International environmental convention to develop measures for the use and protection of traditional knowledge, related to the conservation and sustainable use of resources. This conference was basically propagating the Gandhian theory of nature care. In this regard noted economist Joseph Stiglitz wrote a book entitled "Making Globalisation". In his book he raised the question of consumption culture of western society that how it is producing negative impact on environment. In Gandhian theory of Nature care life style of people plays very important role. Traditional Knowledge in Gandhian ideology does not means the advocacy of obsolete technique. Traditionalism in Gandhian thinking outlined the conservation of environmental resource through community development and co-operation. Tribal and Village people have more environmental sense in comparison to urbanities, so there conventional mode of to protect the ecological system is more effective than modern technology. Not only in the area of consumption but also in the area of production is traditional knowledge vital in Gandhian thinking. It is well known that Gandhi did not accept the policy of Heavy industrialization and mechanization due to this unethical effect on environment. The rural-urban divide also creates ecological damage and further leads to socio-economic conflict. Joseph Stiglitz writes that "Western nations gave precedence material values over environmental Values."<sup>26</sup>

All nations industrialized as well as the developing, impose huge burden on earth's environmental system. Some do through wealth, some through poverty, some through large and rapidly growing population, others through high and rapidly growing consumption of environmental resource per capita.<sup>27</sup> Jim Neil's argument is propagating the Gandhian ideology of or sustainable consumption and wantlessness. Gandhi was not against industrialisation but against industrialism and dehumanised machine culture. He emphasised small scale enterprises for the production by the masses and not mass production by any individual. Gandhi's production function includes environmental costs also. Environmental valuation in Gandhian production theory construct on protection of livelihood natural resources. Small scale industries are eco-friendly and based on the principle of sustainability in labour and agro-based economy. Small-scale enterprises are also free from any developmental conflicts between man and nature and economic conflicts management and labour. They are less energy-intensive and therefore less polluting<sup>28</sup>.

Alienation of human being from nature is an important factor which Gandhi touched in his writings. One of the noted Gandhian thinkers E.F Schumacher expressed his views on man's alienation from nature

and environment in his book entitled "Small is Beautiful"; he writes "Modern man does not experience himself

As a part of nature but as an outside force destined to dominate and conquer it".<sup>29</sup> Although the increased threat to environment has drawn attention of both developmentalists and environmentalists at the local, as well as, at the global level because of gross impact of the degradation of environment on the land water, atmosphere, biodiversity and human life post industrialisation. But very little has been said about the dialectical line dealing with the economy degradation and capital accumulation process under capitalism. There seem to be positive relation between the history of capitalist development and the deterioration of environment. What matters is whether nature is to be dominated one-sidedly for narrow human ends, or whether, in a society of associated producers, the alienation of human beings from nature and from each other will no longer be the pre condition for human existence, but will be recognized for what it is? (Foster, 2001). Foster in his analysis also commented on the Marxian ecology and capitalist world order. It is important to understand Marxian concept of ecology for better understanding of Gandhian Environmentalism. The only difference between Marxian ecology and Gandhian ecology exists in the area of alienation. Gandhi was first person who gave the concept of alienation of man from nature. But on the issue of capitalist mode of production and its relationship between natural resource exploitation both Marx and Gandhi have a stronger view point in the comparison of neo-development theorist. In this regard foster says that "Most of the Development analyses treat the environment as an unimportant variable and even the environmental socialists focus simply on the capitalist economy viewing ecological problems one-sidedly from the standpoint of their effect on the capitalist economy rather than focusing on the larger problems of the "Fate of earth and" and its species."<sup>30</sup>

Gandhian ecology also focuses on self-rule or Swaraj. His principles of non-violence, truth, satyagraha make a global non-violent economic ecological order. The concept of self-rule in nature and self-sufficiency in economy advocates these issues. Gandhian ecology therefore, begins with individual and collective self-rule and swaraj, premised upon truth, non-violence and self-sacrificial actions. It insists upon respect and companion for all creatures and nature itself. It encourages economic self-sufficiency at the local (village, town or neighborhood) level. Gandhian ecology addresses the practical environmental and economic issues of our present day grounded in ultimate values and truth-seeking.<sup>31</sup>

A unique thing which we can see only in the Gandhian perspective on environmental protection is the involvement of religious teachings in the area of economics and ecology. In an egalitarian society, harmonic relationship between ecology and economy can be achieved when people of society follow their teachings of religion to protect the environment.

Livelihood and lifestyle methods as mentioned in religious books may be an important tool to solve the conflict between man and nature. Gandhi himself was follower of the teachings of the Geeta and Ramayana. The saryodaya movement's vision of development equally applicable in the case of environment protection and conservation. It requires that the total well-being (including moral and cultural as well as economic of the people must be achieved. This development also requires the rejection of capital-intensive, machine-oriented and import-based economy, because these western notions of development foster a style of living and value system that are intrinsically opposed to the ones which the sarvodaya movement, and the concept of Dharma, tries to instill within a community.<sup>32</sup>

### **Sustainable Economy in India:**

The World Commission on Environment and Development in its Report 'Our Common Future' described sustainable development as development that meets the needs of present without compromising the ability of future generations to meet their own needs".<sup>33</sup> Sustainable economy has become the new catch phrase; in fact the concept of sustainable economy has long been in use with varied connotations and meanings. When any activity is defined as sustainable, it is always in contemporary terms on the basis of what is known at the given time. Basically when we say sustainable economy, the easiest definition is that "Preservation of natural resources and environmental goods for future generations". In other words what we present generation, have inherited a certain amount of ecology and environmental surroundings in terms of the land, water and air, when we leave it to the next generation, we should leave it at least in the same condition that development, putting in the elementary terms.<sup>34</sup>

Sustainable Human development in India has emerged as an interaction of sustainability and human development. India has vast amount of natural and human resources. The main objective of sustainable economy implies here the equilibrium between human and natural resources. In India, sustainable development ought to be people centric. Apart from human development index, poverty ratio, food security, equity in health nutrition and gender, gender-wise expectancy, water availability and management are all the indicators of sustainable human development. Ecology-economy equilibrium in the Indian context can be achieved only when all these indicators show high improvement. But currently the situation is not very hopeful.

In India the development projects are being undertaken but not without inflicting certain damages on the natural resources and the environment. In India all developmental activities neglect the cost-benefit analysis, Environmental resource accounting needs attention in Indian economy. Ever since India started followed the liberalisation policy, there has been an enormous stress on natural resource of the country.

In India Economy is not sustainable in this globalisation period. The indicators of sustainability show a very poor outcome of the Indian economy to achieve the goal of inclusive growth. It is noticeable that disequilibrium between ecology and economic development in India is not new. From the first five year plan to 11<sup>th</sup> five year plan, policy makers have neglected the issue of environmental resource accounting and ecological destruction. After the initiation economic reforms problem became more dangerous. Lack of safe drinking water, fuel availability, proper housing, sanitation, vulnerable poor, unhygienic living conditions, per capita energy availability, environmental diseases are some key issues which need attention of developmentalists and environmentalists in this country. If we look at the state-wise environmental quality in country, we will find that disparities among the states. Table 1 shows the impact of degraded environment on the health of people in states.

**Indicator 1  
 Environmental Quality**

State	P.D.H S.D.W	P.D.H. T RURAL	P.D.HT URBAN	GWR (m.ha.mys)	OC
Andhra Pradesh	55.08	11.5	69.2	3.52909	15.44
Assam	45.86	75.3	98.0	2.24786	9.82
Bihar	58.76	10.6	54.7	2.69796	9.69
Gujarat	69.78	20.1	78.9	2.03767	32.14
Haryana	74.32	15.5	67.1	1.11794	20.18
Karnataka	71.68	11.1	70.0	1.61750	20.14
Kerala	18.89	76.9	94.7	0.79003	7.49
M.P	53.41	5.4	54.8	3.48186	16.3
Maharashtra	68.49	14.2	84.2	3.78677	40.14
Orissa	39.7	3.9	64.2	2.01287	10.05
Rajasthan	58.96	13.0	74.5	1.260421	12.91
Tamil Nadu	67.42	11.5	67.5	2.64069	18.34
Uttar Pradesh	62.24	9.4	71.8	8.25459	10.55
WestBengal	81.98	23.9	84.5	2.30914	24.14
Average	61.24	22.29	74.62	2.54	17.97

P.D.H.S.D.W: Percentage Distribution of Household Having Safe Drinking Water

P.D.H.T: Percentage of Distribution of Household having toilet Facilities

G.W.R: Total Replenish able Ground Water Resources

OC: Percentage of Household using Clean Fuel.

Source: Kawadia and Ahuja (2006).

### Indicator 2

#### Health Status

Poor environmental quality also produces the negative effects on the health economy of country. Infact poor environmental infrastructure is connected with socio-economic development. Medical care,

hospitality, doctor-patient ratio and social security benefits are other important factors to determine the impact of environmental pollution on the health of the people of country. The developing countries are spending between 2 and 8 Percent of their GNP on medical costs related to declining environment .Thus, in India the number of premature death in cities due to environmental pollution in 52000per year and the number of hospitalizations (due to asthma and other lung related diseases) was 25 million last year .These casualties cost India about Rs 4600 crore/year, which is equivalent to the cost of adding 1150 MW electricity to the grid every year. <sup>35</sup>

### Indicator 3

#### Food and Nutrition Security

Food and nutrition security is another important aspect of sustainable economy, but unfortunately India has more people sufferings from endemic or chronic hunger, whether measured by calorie intake or anthropometric indicators of malnutrition, than any other country. One-third of the world's malnourished children are in India. The rate of decline in the absolute number of malnourished persons has been very slow, and slower than the rate agreed upon at World Food Summit in Rome. <sup>36</sup> Concerning the issue of food and nutrition security eminent agricultural scientist Prof M.S Swami Nathan says "food is the first among the hierarchical needs of a human being .Therefore food security should have the first charge on the available financial resources. At the same time animal nutrition will also require great attention .Animals are underfed and are therefore low yielding .Animal food security is essential for human nutrition security (Swaminathan 2010).

As per as the Word Bank estimates ,34% Indian people live in on less than 1 dollar a day and 80% live on less than 2 dollars a day . According to the World Hunger Report, India is in alarming situation in the area of food availability to poor people. Despite the Government efforts in the poverty removal, hunger approximately 60% children are underweight .India ranks 66 among 88 countries according to global hunger Index 2008 released by International food policy research institute. The index has been developed on three main criteria calorie –efficiency, child malnutrition and child morality .Over 200 million people in India have been reported to unsure about accessing daily bread. (Somkumar 2011). Gandhi ji was one step a head to emphasize that hunger should be overcome without eroding human dignity .He wanted to every Indian to have an opportunity to earn his/her daily bread. However, seriously disadvantaged sections of our population like orphans, pregnant woman suffering from anemia, need to be provided free of cost. <sup>37</sup> This will be very much near to be Rawalsian frame work of justice. Food, shelter, education, and sanitation are categorized as primary goods in Rawalsian theory. Gandhi called these basic necessities. Achieving food sustainability is not possible only with the implementation of HYY and Green Revolution technology. In Gandhian framework food security can be achieved only to focus on agro-

based bio-diversity economy. Inorganic farming is an important step in this direction.

## Conclusion

After witnessing so many problems in nature and human ecology it is very important for the scientists and scientist of the world today to look at established theory with Gandhian frame. Ecological destruction can not be borne by future generation. For a sustainable and ecologically egalitarian society Gandhian Environmentalism should be propogated. The unfavorable trade-off between ecology and economy needs a holistic relationship to achieve more equitable society .Now the time is demanding to get rid of those developmental theories which guide harmful activities almost exclusively, has been traditionally concerned with the use of natural resources for commodity production and capital accumulation .Gandhian Global life Support Circle is an important step to created peace in ecological world. To make tribute to Gandhian ideology, Ranjit Choudary observed that "A Development strategy designed to imitate the life styles and consumption patterns of affluent industrial societies is clearly inconsistent with our vision of development for south .It would accentuate inequalities .For it would be impossible to secure such high consumption levels for only a small majority of the population in each country. Because it leads to high level of imports and energy use, it would also cripple the growth process and intensify economic and environmental strains. Clearly there is a need for new conceptual framework in which each country attains Swaraj. In the Gandhian system, every country stands on its own strength." <sup>38</sup> In case of India, our strength is agriculture and handloom based economy, so there is no need to focus on heavy and destructive industrilisation which creates conflict between man and nature and disturb the Global Life support Circle.

## References

1. D.W Pearce, E. Barbier and A. Markandaya, Sustainable Development, 1990, M Redcliff, Sustainable Development: Exploring the contradictions, 1987, Word Development Report 1992, D.W Pearce and A. Markandeya , The Benefits of Environmental Policy , Monetary Evaluation 1989.
2. Kumar B Das , 'Ecosystems Approach for Sustainable Development 'In Kumar B Das(Ed) Environment and Development Conundrum , Discovery Publishing House New Delhi , 1992 , P 194.
3. Peter Bartelmus , Environment and Development , Allen & Unwyn Press , Boston ,1986 p7.
4. Gangrade , K.D , Gandhian Perspective on Global Interdependence ,Peace and Role of Professional Social Work ,Author Press Publishers ,New Delhi 2008 Chapter 10 ,Gandhi on Protection of Environment , pp 145.
5. Economic Survey 2011, Chapter 12, Human Development Equity and Environment , downloaded from web link <http://indiabudget.nic.in> .
6. The author of this quotation is "Satish Kumar, his essay entitled "Five Elements of Ecology", See Mahendra ,Dilip Kumar & Mahalik Debendra , Relevance of Gandhi in 21st Century ,Kurukshetra ,Vol 55, No 12 .
7. Cited in , Khusboo ,T.N , An Apostle of Applied Human Ecology , Tata Energy Research Institute New Delhi , 1995
8. Ibid
9. Kumarappa J.C, Economy of Permanence, Sarva Seva Sangh Prakshan Varanasi ,2010 , pp 3.
10. Barbara Ward and Rene Duobs, Only One Earth; Care and Maintenance of a Small Planet, London Penguin , 1972.
11. M.W Holdgate , A Perspective of Environmental Pollution , Cambridge University Press , London , 1979 , p1.
12. H.Daly,'The Economic Growth Debate: What Some Economist Have Learned Bu Many Have Not'in Anil Markandya and Julie Richardson (Ed), An Introduction to Environmental Economics , Earth Scan Publications , London ,1992.
13. Abramovtiz, 'Economic Growth and its Discontents' in Mikhael Boksine (Ed), Economics and Human welfare, Academic Press New York 1979.
14. Mishra , R.P , Hind Swaraj , Gandhi's Challenge to Modern Civilization ,Concept Publishing House New Delhi, 2007, Ch 2 ,p 43.
15. Ibid pp 44
16. Alan .B Burning ,Poverty and The Environment Reversing the downward spiral , World watch paper 1992, Washington D.C 1989 .
17. Nayak Krupasindhu , Sustainable Development for Vulnerable Poor , Kurukshetra , Vol 56, No 5 , March 2008 ,p 9.
18. Mishra R.P ,Restraint and Discipline , The Twin Imperatives of Gandhian Model of Development , Anasakti Darshan Vol 1 ,January-June 2005,pp3-4.
19. Ali , Ashraf , Gandhian View of Sustainable Development ,Indian Journal of Public Administration ,Vol 39 , No 8 , July-September 1993 , op cit ,279 .
20. See The Rio Declaration On Environment and Development , Principle 5 ,In which it state that "All states and all People shall cooperate in the essential task of eradicating poverty as an Indispensable requirement for sustainable development ,in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world .
21. Schuak ,Kavita Y ,Development and Environment issues with special refrence to Gandhian Perspective , cited in [www.mkgandhi.org](http://www.mkgandhi.org) , visit on 11th Aug 2011.
22. World Development Report 1990 , p 10.
23. Sahu , Satya Naryana , Mahatma Gandhi and Sustainable Development in S.V Prabhath(Ed) , Gandhi Today , Serials Publications , New Delhi, 2010 .
24. This quotation has taken from the article Livelihood/Culture/Lifestyle And Environment of

- Sailaja Gullapali In IGNOU book Entitled Gandhi in 21st Century , Gandhian Studies Programme ,Indira Gandhi National Open University , 2011.For more details See Harsch Bardley ,Consumerism and Environmental Policy : Moving Past Consumer Culture , Ecology Law Quarterly, Vol 26 , 1999 pp 145-165 .
25. Sinha , Rajiv Kumar , Mahatma Gandhi : The Great Environmentalist and Human Ecologist , Gandhi Marg , Vol 23 , No2 , July-September ,1991 ,pp 208-209
  26. Sahu , Satya Naryana , Mahatma Gandhi and Sustainable Development in S.V Prabhath(Ed) , Gandhi Today , Serials Publications , New Delhi ,2010 p 123 .
  27. Jim mae , Neil , Beyond Independence .The Mashing of the World's Economy and Earth's Ecology ,Oxford University Press , New York ,1991, p 56.
  28. Sinha , Rajiv Kumar , Mahatma Gandhi : The Great Environmentalist and Human Ecologist , Gandhi Marg , Vol 23 , No2 , July-September , 1991 , pp207-209
  29. Schumacher, E .F , Small is Beautiful As If People Mattered , Hartley and Mark Publishers , New York , p 248, 44.
  30. See Foster , John Bellamy , Marx's Ecology :Materialism and Nature , Corner stone Publishers , Kharagpur 2001,.See also Yadav Hanuman Singh , Development and Environment Interface (An Antipode to Apologetic Argument) , In Kawadia & Ahuja (Ed) ,Environmental Issues of Development , Associate Publishers , Ambala Cantt , 2006.
  31. Shrama , R.C (ed) ,Gandhian Environmentalism , Global Vision Publishers , New Delhi ,2003 pp 108.
  32. Mishra , Anil Dutt , Environment Challenges and the Gandhi Solution , in Mishra Anil Dutt(ed), Gandhian Approach to Contemporary Problems , Mittal Publications , New Delhi ,1996 ,pp 195.
  33. Our Common Future , WCEDR , Oxford University Press, Oxford , 1987 , p 43.
  34. Nayak Krupasindhu , Sustainable Development for Vulnerable Poor , Kurukshetra , Vol 56, No 5 , March 2008 ,p 9
  35. Rajvanshi , A.K , Sustainable Development of India – A Gandhian Approach , Anasakti Darshan Vol 1 ,January-June 2005 ,pp 75.
  36. Swaminathan ,Madhura , Food and Nutrition Insecurity , Yojna , Vol 51, May 2007 p15 .
  37. Patel ,Amrit , Food For All: The only way Forward ,Kurukshetra , March 2011, Vol No 5 p 29.
  38. Chaudhuri , Ranjit , The Challenges of South , Oxford University Press , New Delhi ,1992,p 80.