

Integral and Differential Mapping of Human Ideas: Structural and Functional Aspects of Altruism and Agroecology in Human Decision Theory

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Abstract

In the case of agriculture and environment, the bioethical vision driven by altruistic principles includes the integral and differential domains of human ideas and its structural and functional analogies related to agro-ecology based decision making which results from the interplay among specific cultures, tradition, values and vision and being confronted with varied combinations of idea biosynthesis for survival. The integral reciprocity of idea biosynthesis probably can be postulated in a theory of "diverged convergence into divergence" and can be hypothesized as a two divergent -one convergent phenomena. Empirically we may try to derive a decision after taking into consideration many ideas (I_n) wherein 'I' is a combination of V_n values in one point of neural flux.

The chance of possible exploration of altruistic vision also throws light on to this issue about how these constants, if any, remain constant over a period of time 'n' or else their limit tends to be 'infinite' which is being propagated, inherited (?) and mutated within every 'finite limit'.

In this paper the authors are trying to hypothesize evolutionary perspectives of bioethics having its temporal and spatial variation specially in the case of agriculture and environment which is more explicitly focused. In the context of agriculture and environment the philosophical attributes might have been inherited in hand with religious practices and otherwise. And this is the crux of the agroecological decision theory per se for sustainable plant genetic resources and it is associated with the ecological domain and questions on ethics/morals/values for example bioethics by/for sustainability.

Introduction

With the end of the cold war one would have hoped for a long reign of peace, prosperity and progress for mankind in the next millennium. But the possibility of realizing that hope now lies in the capacity of human beings to stop all possible activities that lead to destruction. This capacity entails here the domain of bioethical principles derived at the individual level with its subsequent social ramifications. The war against nature that man has been waging from time immemorial got accelerated by the pursuit of the policies of *laissez-fairism*, crass commercialism, colonialism, imperialism, and modernism resulting into the reckless and mindless exploitation of natural capital. Agriculture and environment being the base natural capital is the womb of civilization. Agriculture is seen as a practice adopted not for economic reasons but for religious ones, to demonstrate or exercise human domination of nature. Ian Hodder has explored this idea; so, has Jacques Cauvin, who argues that a religious revolution preceded the shift to farming. Sustainability in terms of agriculture started existing too since the inception of civilization. Consequently, it is no more a new idea but rather a rational terminology of modern times when questions are raised on sustainability itself. If we look into the insight of the following few lines we can find ecologingual expressions abridging bioethics and sustainability. For example, in the 1930s, Leopold proposed a land ethic, to protect the land from further degradation. Leopold (1949) proposed a land ethic " as a mode of guidance for meeting ecological situations so new or intricate, or involving such deferred reactions, that the path of social expediency is not discernible to the average individual".

As human development depends on the carrying capacity of ecological systems it can take place only on the foundation of the continued maintenance of the stability, integrity, adaptability and resilience of a dynamic ecological system. The concept of sustainable development is a natural outcome here and is now pervasive in Indian agricultural policy. It is especially prominent in issues that affect India's agricultural sector where land and water degradation have become significant threats, not just to India's primary production capacity, but to the rural lifestyle and commercial survival of millions of farming families. Why, with a framework for sustainable

development firmly in place, is it so difficult for decision-makers to agree on practical policy to deal with problems like dry land salinity, genetic resources erosion within the buffer zone of two apparently symmetrical different ecological niches?

If we can look into the general agricultural situation of any country with respect to selfishness or altruism, we need to have a detailed perspective on sustainable development, economics and science. It is equally applicable to the Indian situation too. In the Brundtland Report (Our Common Future), sustainable development was defined as: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. (WCED, 1987). The concept can be defined as 'ecologically sustainable development' (ESD) as it is already existing in Australia and was described by the Commonwealth Government as: 'development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends' (Commonwealth of Australia 1994). While there are many different definitions of sustainable development, the idea clearly involves present and future economic development, maintenance or enhancement of the natural environment, the long-term productivity of living resources and ecosystems, and a measure of social justice. Pearce (1999) concluded that the main problem with sustainable development was to realise it, rather than to define it. To have a realization in its enactment, every individual in any sociobiological system (agro-environment) needs to have a realm of altruistic vision and its significant reciprocation towards his/her ambience i.e; environment and more specifically agro-environment. Developmental Bioethics can find its rudimentation in any society's educational system. The goal of environmental education is to teach the facts about the environment. It teaches people about our relationship to other parts of nature. Environmental ethics education helps us to realize how to incorporate the facts and values of different organisms into ethical decision making. Environmental ethics education teaches us how we should live, whereas environmental education is linguistically descriptive regarding how we do live. However, much of environmental education is actually also about teaching some values. But without teaching how to balance all interests, and facts and values, it can be misleading (Macer, 1998).

While they vary in detail, policies and 'mission statements' on sustainable development tend to embrace a mix of commercial development, conservation and social equity. In addition, all such documents usually claim an ethical, or altruistic, motivation that aims to enhance economic growth and the distribution of wealth, while improving the natural environment. These parallel approaches to development, equity and conservation are not new to social and environmental policy, although claims to be able to achieve all three simultaneously appear to be a recent phenomenon. For example, in the Western Australian draft State Sustainability Strategy, focus on the Future, the goal is to achieve 'simultaneous environmental, social and economic improvement', (DPC, WA, 2002). In India it is still awaited to be impregnated with the bioethical perspective.

Human interventions on the ecosystems of our planet continue to grow. Our population explosion and expanding levels of consumption mean that more people are consuming more of nature's goods and services, pushing against the limits of sustainability. Grandiosely expanding global trade is becoming a cataclysmic factor in this process of social equation. Consequently, regressive and progressive reciprocity is becoming a fundamental "behaviourome" in the evolution of altruistic vision to optimize the socioeconomic enactment for global sustenance. If we recall the theory of Ed Wilson (1984) who proposed the theory of Biophilia, saying that human beings inherently have a love for nature. He defined it as "the innate tendency to focus on life and life like processes", noting that "to the degree that we come to understand other organisms, we will place greater value on them and on ourselves". It is still a matter of debate whether it is real or not (Kellert and Wilson, 1993). Hypothesis express that the human inclination to affiliate with life is inherent (biologically based), part of our species evolutionary heritage, associated with human competitive advantage and genetic fitness, is likely to increase the possibility for achieving individual meaning and personal fulfilment, and that it has a self-interested basis for a human ethic of care and conservation of nature (Macer, 1998). It is becoming increasingly clear that many of the values held by us are totally inadequate for long term survival and sustainable development; that is why it is not surprising that we are witnessing an emergence of a wide spectrum of challenges to the traditional materialistic view and instead we find a growing interest in Hindu, Buddhist and various indigenous spiritual norms. All of these represent a desire by many to ascribe to a radically new set of values. Without a change in our current value system, there is little hope of correcting the present environmental problems we face because as "ultimately, we must realize that the new images, values, and archetypes that people carry in their neural net shape the institutions, technologies, environments in their mental framework (Taylor and Taylor, 1989).

The complementary objectives of improving commercial outcomes, environmental conditions and social equity have been proposed by scientists, social reformers, philosophers and economists since the eighteenth century. This approach has had significant impacts on society, culture and law in the years subsequent to the nineteenth century Victorian 'intellectual revolution'. However, in nineteenth century political economy there was recognition of the need for priorities and trade-offs between the goals of political economy and this placed moral duty first. There were, indeed, many intellectuals who strongly disagreed with the science of political economy. Some, like the poet William Wordsworth and the philosopher Thomas Carlyle, predicted that political economy would turn moral values into a 'cost calculus' (Hodgson, 1997).

According to Richard Bawden agriculturists have for too long confined themselves to techno-scientific issues, while many ethical issues have been ignored. Food cannot be divorced from agriculture. Agriculture is where

man meets environment. This entails ethical challenges, relating to nature as a whole and society at large." One of the aspects of nature which people seem to love is diversity of living organisms. People put high value on biological resources. The United Nations World Charter for Nature (1982) declared " Every form of life is unique, warranting respect regardless of its worth to man". This type of valuation is extrinsic. We need to address and if possible, redress, whether there is intrinsic value to nature and life as a whole? As rightly said by Macer (1988) that we could reconsider the term selfishness as the conservation of intrinsic value, but we are left with the fact that " The planet loves life and so do we" (Rolston, 1993; 1994). We may not be aware of the genesis of value of life within any one's mental framework, but it is a fact that every living being loves his / her own life and at least tries to reproduce his/her own kind (Macer, 1998).

Morality is not just some desideratum of the weak for their protection or an instrument of the strong for tethering the weak, but a factor of utmost importance for society as a whole and its welfare. In everyday language, the words morals and ethics are used to mean roughly the same thing, even though they do not. By morals we mean broadly accepted norms that govern practical behavior primarily toward our fellow humans-wherever and whenever they live. In its modern understanding, morals includes norms also with respect to nature. The discipline of ethics, on the other hand, is moral philosophy-that is, describing the subject as well as comparing and critically reflecting different moralities.

Evolution of Bioethics: Conflicts of Economy and Ideology

Before analyzing the conflict zone of economy and ideology, we should look into the idea of holism which suggests that we should treat all of life as whole system, not pulling apart the elements or individuals. Holism has been the norm through history (Macer, 1998).

Throughout time many have considered that nature has intrinsic value but usually these calls of ideology have been ignored by the mercantile forces. Alfred North Whitehead (1925) In Science and The Modern World said " The Western World is Now Suffering from the Limited Moral Outlook of the three previous generations. The two prominent mental blocks are : ignoring the true relation of each organisms with his / her ambience and the habit of diluting the intrinsic forces always being encapsulated with the environment. The intrinsic value of nature can be argued nicely keeping this idea in the backdrop of Christian and Buddhist philosophy (Schumacher, 1996). Human beings affect all the world, most directly when they exploit or use resources. Human beings are used to this usage of natural resources and we need to consider agriculture as a whole to analyze the evolutionary perspectives of bioethics, its structure and functional implications in a different era for deriving the decision mechanism related to nature conservation in different agro ecological niches. Integrative topology of these value system need to consider agro environment as an entity embedded and naturally netted with every individuals neural network being the base of every decision processes.

Let us now have a look into the evolutionary process of mercantile principles, being the obvious resultant of agricultural and industrial revolution taking over the ideological framework of every individual, although with varied degrees of influence. There was a strong reaction against 'mercantilist thought' in the middle of the eighteenth century. Around that time the Italian tradition, founded by the Neapolitan economist Ferdinando Galiani, emerged with, but diverged from, the French Physiocratic and Scottish Schools. All were loosely based upon the concept of a utility-based theory of natural value, and their areas of disagreement were focused on the role of the state as an economic entity. As Daniel Gomez-Ibanez reiterate that " a great danger in this materialistic and mechanistic view of the universe is that even when we see the problems it has wrought, we often assume that the solutions are to be found only in the same material realm, perhaps because we forget to consider any other possibility (Gomez - Ibanez, 1993). These solutions if based on technical fixes would not help us unless we change our ways about how we treat and use nature, and the way we act towards it. For this a new consciousness will have to be developed which believes in the ethic of environmental stewardship and linking it to the concept of sustainable development.

The original essence of political economy, and its support of free markets, was strongly allied to notions of truth and liberty. It was driven by the desire to improve the well being of the majority of people by finding a way to redistribute wealth according to the natural laws of production. Contrary to some current interpretations of free-market economics, one policy often proposed by early political economists was to tax wealth by taxing land ownership, and redistributing the revenue to people like landless peasants, whose labour was used to generate wealth from the land, but who owned no capital. Adam Smith wrote in the Theory of Moral Sentiments (1759).

And thus, place ... is the end of half the labours of human life; and is the cause of all the tumult and bustle, all the rapine and injustice, which avarice and ambition have introduced into this world as rightly pronounced by some researcher (Lumley, 2003).

Smith examined the reasons for the suffering of the 'greater part' of society, the ethics of human action, and the apparent paradoxes of human altruism and human self-interest in his Theory of Moral Sentiments. Smith went on to develop theories about how selfishness might be used, in a constrained manner, for the good of all members of society. An Enquiry into the Nature and Causes of the Wealth of Nations was published in 1776. Wealth of Nations examined the results of economic freedom, including the division of labour, the functioning of markets,

and the international implications of a laissez-faire economy. Smith appeared to see the lot of the poor and the dispossessed as being linked to mercantilism and the activities of the 'merchant classes' Smith famously wrote (1776). To found a great empire for the sole purpose of raising up a people of customers, may at first sight appear a project fit only for a nation of shopkeepers. It is, however, a project altogether unfit for a nation of shopkeepers; but extremely fit for a nation that is governed by shopkeepers.

The focus on moral duty, justice and ethics grew as the nineteenth century progressed. Political economists recognized the tradeoffs between wealth generation and justice (ethics). Unlike some of today's sustainability strategies and policies (eg UN, 2002), which aim at the simultaneous realization of economic efficiency, social justice and ecological conservation, the early political economists almost always put justice before wealth. The current well-intended approach of 'triple bottom line accounting' can rarely be realized because of the inherent tensions between its components. Ultimately, when tensions exist, the traditional bottom line of tangible economics tends to win through.

Many of the nineteenth century thinkers, such as Paley (1743-1803), Carlyle (1795-1881), Martineau (1802-1876), Mill (1806-1873), and Darwin (1809-1882) promoted what would now be considered as multidisciplinary approaches to scientific, social and other intellectual arguments. Even Church of England clergymen played a role in the scientific debate. Thinkers from the British Isles, like those identified above, and others, such as Karl Marx, Auguste Comte and Henry George from Europe and the Americas, made important contributions to scientific, philosophical, political and economic theory.

Historically we know that the members included in the moral community have grown over the ages. In ancient Greece, it covered male freeman. Slowly it was extended to include woman, and then all human beings. Should we further extend the moral community to animals, to mountains, to ecosystems, to nature as a whole (Kyung-sig, 2003). Some like Peter Singer advocate animal rights, some like Aldo Leopold propose a Land Ethic, some like Christopher Stone argue that even trees should have the standing. The traditional western ethics refuses to extend the moral community to animals, trees or nature. Indeed, it is so narrow to deny value to all non-human elements of nature. The sheer exploitation of nature based on insensitivity to the ecological interrelatedness of life systems is mistaken. But this does not rule out the view that other things in nature are valuable and need to be associated with the value system as W.H. Murdy states, "as instruments to man's survival or well-being". In fact, as acknowledgement of our dependent relationship with nature grows, he writes, we place instrumental value on an ever-greater variety of things (Blackstone, 1980).

Many of the nineteenth century intellectual reformers tended, without any suggestion of a paradox, to couple ethical humanist considerations with respect for nature and utilitarianism. They did this in pursuit of ideas about how to improve human 'development', social justice and man's treatment of the natural environment (Lumley, 2001). Appreciation of the importance and implications of the future seemed common to Victorians. However, intellectual reformers, like Mill, Malthus and Martineau, in addition to expressing explicit concern for the future, coupled this concern with concern for the welfare of humanity, and even of the earth itself. These interconnected concerns appear to form a basis for present ideas about sustainable development. John Stuart Mill (1849) wrote.

If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase of wealth and population would extirpate from it, for the mere purpose of enabling it to support a larger, but not a better or a happier population, I sincerely hope, for the sakes of posterity, that they will be content to be stationary, long before necessity compels them to it.

Sustainability logically depends on local action planning and popular support, initiative and will. To use resources and at the same time, not to overutilise them in the interest of the posterity has been found to be essentially "folk based". Hence soil, water, forest, crops- the natural resources have been maintained by folk societies as a matter of folk science born out of actual life experiences (Ghai, 1994).

In recent years, the other phenomenon of folk struggle against modernist encroachment has sensitised us to the issue of local capacity to conserve local resources (Colchester, 1994) likely farming concept, biodiversity, traditional ecological knowledge and its application, germplasm conservation and management etc. In another respect, 'sustainability' has been found to be dependent on local participatory management of agroecological resources. In this context, the marginalised and the poor farming community, in the Third World have proved to be the best custodian of what has been called the common pool resources or common property resources (CPR). Since most of the poor farmers survive on the use of the CPR, with proper technology on livelihood resources management, it is those farmers and the marginalised who have often turned into able managers of the CPR and there lies the absolute implicative resonance of bioethics application e.g; on participatory forest resources management as evidenced from various corners (Sarkar, 1993). There is practical wisdom in the statement that "programmes and projects concerned with conservation and sustainable development will only succeed on any scale when they address the social factors influencing the way people interact with the environment (Ghai, 1994). The UN Research Institute for Social Development, initiated a research programme in 1988 on environment, sustainable development and social change intended to investigate the social dimensions of environmental degradation and regeneration with special reference to the diverse and complex interactions between people and the environment. This complex neural matrix analysis will certainly help all of us to come out with the suitable

policy propogules which can nurture the bioethics principles all over the world for sustainable global civilization with its resilient biological resources.

The process of grassroots people's movements and involvements have opened our eyes to the rich possibilities of alternative developmental paths and multiple organisational forms. The conventional top-down paradigm has for too long been patronised by externally induced technical projects and programmes without bothering to understand their compatibility with local ethos, values and life processes at the grassroots level. Putting the last first (Chambers, 1983) or "to the hands of the poor...water and trees", in the language of Robert Chambers (Chambers, 1989) is a belated realization of the value of local knowledge and local support in aid of meaningful and sustainable development.

Structural and Functional Bioethics: A Hypothesis on Agroecology Based Decision Theory

Before looking into the structural analogies of altruistic vision behind the synthesis of any idea which is bioethics governed, we should see what ecology brings for us by us. Ecology brings out that, often acting from the best motives, however, simply from short sighted self-interest without regard for others living today or for those yet to be born (Kyung-sig, 2003). Environmental ethics is concerned with the moral relation that holds between humans and natural world, the ethical principles governing those relations determine our duties, obligations, and responsibilities with regard to the earth's natural environment and all the animals and plants inhabit it. Galileo's astronomy forced us to convert a literal to a perspective understanding of the claim that the sun is setting. His physics gave us the distinction elaborated by John Locke, between primary and secondary qualities. A secondary quality is observer dependent, manufactured out of the primary motions of matter. For example, color is an experiential conversion of photon radiation; taste and smell are molecular operations. Questions are evident about the value and which system is operating behind this decision-action. Samuel Alexander proposed that values were tertiary qualities. Value appraisals require an interpretive judgment. It is obvious that we do not have organs to taste, touch, see or smell value. It must originate at deeper mental level. These are observers' dependent gift of the spectator's mind (Rolston, 1991) which is a social outcome of every individual's decision theory. Again, actions and structure are recognized as the two main determinants of social outcomes. Their relative importance is much debated. On the one extreme side are the doctrine of structuralism and some forms of functionalism which argue that social dimensions of global agro-environmental changes are largely determined by social structure and that agro ecological actions i.e; bioethics in and for agro-environment can be explained mostly as the outcome of structure. On the other side are the doctrine of reconstructivism which reverse the emphasis, stressing instead the capacity of actors to construct and reconstruct their agro-ecological world and the necessity of bioethical explanations in the actor's terms. Most prominent in this respect is the Anthony Giddens's (1984) theory of structuration where an attempt is made to transcend the traditional division of sociology between action and structure by focusing on social practices which produce and also are produced by structures. The renaissance of action theoretic paradigms in previously structure theory determined models can be attributed to the expectations of a better understanding of social emergence phenomena that can be witnessed, in particular, in the field of environment (Mayntz, 1991). In international relations theory, for instance, this pragmatic reorientation is referred to the influence of hermeneutics and critical theory on mainstream thinking. We need to have the paradigm shift in reallocating the various disciplinary domain in understanding the structural and functional imperatives of bioethics and its implications on sustainable development. To do so we need to envisage of connecting the micro-level of social action with the macro level of structural development of society i.e; the analytical effort to use micro-variables to explain macro-phenomena. In this respect Mayntz (1991) stresses generally for an analysis of interference of processes of collective behaviour and after that reacting control efforts and strategic interactions of cooperative actors. Referring to the issue of environment, Redcliff (1991) translates this endeavour into Giddens's terminology the processes of collective behaviour represent the way human agents dominate 'nature' i.e; 'allocative resources' (Giddens, 1984) and thereupon reacting control efforts and strategic interactions stay for the domination of some human agents by others i.e; 'authoritative resources'.

Bioethics for agro-environment conservation can be axiomatized as the study of moral issues raised by the work and knowledge of farming, a practice by which we supply ourselves with food, fodder, fiber, and self-knowledge. Moral issues in agro-environment conservation can be hypothesized as following human web flow system.





V=Virtues; R=Reasoning; H=Holism; E=Ecoethics

Figure: Bioethical Behaviourome (altruistic domain) as an individual behavioural constant for any in situ conservation issues, be it an ecological system/niche or any germplasm.

The behaviourome within the thematic presentation of idea helix (hypothetical) in a given society within specific time period. Here Δ as a constant which varies on situational neural flux on the basis of preconceived ideas came out from earlier idea biosynthesis.

The chance of possible exploration of altruistic vision also throwing some light to this issue that how these constants, if any, remains to be constant over a period of time 'n' or else their limit tends to be 'infinite' which is being propagated, inherited and mutated within every 'finite limit'. For example, if idea 'a' is supposed to be the square of any number of exposures as a^2 and its possible resultant could be the following numbers with varied situational neural flux as varied degrees as its power being expressed being assumed as the degree of inheritance.

$$\begin{aligned} \text{Then } a^2 &= 4^{2/3} + 4^{1/3} + 4 \\ &= (2^{2/3})^2 + (2^{1/3})^2 + 2 \cdot 2^{2/3} \cdot 2^{1/3} \\ &= (2^{2/3} + 2^{1/3})^2 \end{aligned}$$

$$\text{Therefore } a = 2^{2/3} + 2^{1/3} \text{ or } a = -(2^{2/3} + 2^{1/3})$$

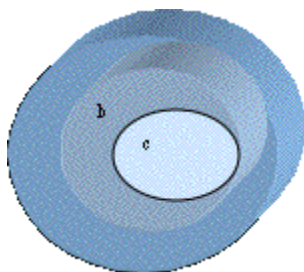
$$\begin{aligned} \text{Now, } a &= 2^{2/3} + 2^{1/3} \Rightarrow a^3 \\ &= 2^2 + 2 + 3 \cdot 2 \cdot a \Rightarrow a^3 - 6a = 6 \end{aligned}$$

$$\text{Again, } a = -(2^{2/3} + 2^{1/3}) \Rightarrow a^3 - 6a = -6$$

This hypothesis is directing towards the possibility of some inherited ideas with some may lead towards altruistic vision with higher degree or else equally it can be lead towards some degree of erosion. This is in fact moral dilemma every individuals are facing, due to their constant interactivity with the agro environment and so is affecting the values of ' Δ ' and there by the nature and / or degrees of idea 'a'.

To the Australian-American agronomist Richard Bawden "science needs to improve itself for an ethical and systemic approach to deal with complexity." As it is, he sees a danger in appealing to scientific arguments, and he sees a need for recognizing that there are other sorts of arguments.

Any holistic model of bioethics in terms of altruistic vision for sustainable development should take into account the three-fold transformations of human individual (c), human society (b) and the cosmos(a).



Transformation and regeneration of individuals is the first and foremost requirement. It stands for development of all dimensions of human personality- physical, mental, intellectual, moral and spiritual. Mere physical or intellectual development is lopsided and can never be sustainable. This requires a value-oriented scheme of education may be the " bioethics education " from the beginning of the image's development within every possible child from the beginning of the learning process to come out with a value composite imagery which can be superimposed and changed or modified in different situational neural flux and can have a thematic bioethical map for each and every situation encountered in the decision-making process. Social transformation is another foundation of sustainable development. Transformation of nature is the third pre-requisite of sustainable development.

Our present value perspective is very much narrow, lopsided and detrimental to genuine development. What is urgently needed is a change of present value system, a trans-valuation of values, so that we may cultivate new

bioethics and a change attitude towards environmental stewardship and sustainable development. The guiding principles of a desirable developments should be minimization of natural resources depletion, environmental equilibrium, and intergenerational equality and justice.

Bioethics and Environmental Stewardship for Sustainable Agroecology

Sustainable solutions are extremely complex: Food insecurity is one of the most terrible manifestations of human deprivation and is inextricably linked to every other facet of the development predicament. Poverty is one of the major causes of food insecurity, and sustainable progress in poverty alleviation is critical to improved access to food. Poverty is linked not only to poor national economic performance but also to a political structure that renders the poor people powerless. So policy matters of a general nature, and in particular good governance, are of overriding importance for food security. Poverty as well is basically a catalytic force behind the erosion of altruistic vision in the process of struggle for existence but not all. If we look into the analysis of Macer, 1998, where he proposes that the idea of a vital energy of life is still found in many people's thinking. Even if they understand the biological reductionism of genetics they may still believe that there is a special "energy " or " essence" associated with being alive. Whether or not we do, we may still want to protect life. On the other hand, we may attempt to destroy diseases, because they destroy lives that we value. As the Brundtland Commission stated: " We have in the past been concerned about the impacts of economic growth upon the environment. We are now forced to concern ourselves with the impacts of ecological stress.....upon our economic prospects" (WCED,1987). For the first time those in the field of economic development and agro environmental management appear to agree over the need to save our ecological niches and to create an environmental stewardship which can be otherwise coined very comprehensively as "ecoethics" as an embedded entity of " bioethics".

The concept of sustainable development implies a fusion of two imperatives: the right to develop and the right to have the environmental quality. Thus the concept denotes a balance " so that 'sustainable' brings environmental concepts into the development process, while equitable inserts developmental matters into the international environmental protection efforts likely that of IUCN etc. (IUCN, 1995). To reiterate, any attempt to foster an appropriate relationship with nature ought to include religious and cultural imperatives for environmental protection because the goal of humanity is to conserve and protect the ecological life support system. As a matter of fact, our concept of nature has been based on the 'reductionist' paradigm and excessive disciplinary conservatism which has dominated the clarity of the thinking process. The result being the no addition of value system towards nature including indigenous knowledge and our religious/ cultural heritage.

Each spiritual tradition on earth has helped humanity. Those who see divinity in nature (or worship nature) have increased our sense of the light of beauty, the largeness and height of our life and our aim to multidimensional perfection. Christianity has given us the vision of divine love and charity. Buddhism has shown us a noble way to be kinder, purer and nobler. Judaism as well as Islam has shown us how to be devoted to God and be religiously faithful in following His command. Hinduism has given us the profound spiritual possibilities. Would it not be nicest things in this universe to develop bioethical resonance within any one's ambience and bioethical insight within self for sustainable development?

Although disagreement exists about the proper definition of sustainable development, the concept almost always includes: the conservation of nature, commercial development, altruism and justice, inter- and intra-generational equity and concern for the future. The nineteenth century was indeed an age of utilitarianism and competition. However, the competition was not to be unfettered and utility had limited application. Ideas of altruism were intimately connected with notions of the free market, but ethics, not economics, was to be the 'bottom line'. That era was one of complex ideas, and the seeds of the modern notion of sustainable development could often be detected in scientific, economic, philosophical and literary discourses. The term " stewardship", originating in the Judeo-Christian tradition means different things to different people. In the western culture the concept has biblical roots. Almost all of the Hindu scriptures place strong emphasis on the notion that God's grace can be received by not killing his creatures or harming his creation. Most interestingly concerning flora in Hindu religion : as early as in the time of Rig veda, tree worship was quite popular and universal. The tree symbolised the various attributes of God to the Rigvedic seers. Rig veda regarded plants as having divine powers, with one entire human devoted to their praise, chiefly with reference to their healing properties (Rig Veda).

We have much to learn about the motives of the early political economists, and from the historical context in which their intellectual revolution took place. 'Market economics' is sometimes used as a pretext for perpetuating injustices in social and environmental policy. This pretext is often facilitated by a poor understanding of economic theory, and an ignorance of its moral foundations. In addition, an ideological application of the current interpretation of economics frequently drives public policy. If there were better public knowledge of the context in which economics, and parallel notions of moral justice, were developed, the application of practicable and sustainable public policy might progress further and faster. We might then be closer to a solution to the apparently intractable problems of land degradation and salinity, water and air pollution, biodiversity loss, and the

ongoing arguments about the efficiency and equity of "who should pay?" whenever a solution to such problems is proposed.

While our ability to affect the future is immense, our ability to foresee the results of our environmental interventions is not. Kyung-sig think that our moral responsibility grows with foresight. And yet paradoxically in some cases grave moral responsibility is entailed by the fact of one's ignorance. However, as many life scientists have complained, these virtues have not been apparent in these generations. Instead they point out, we have boldly marched ahead, shredding delicate ecosystems and obliterating countless species, and with them the unique genetic codes that evolved through millions of years; we have altered the climate and atmospheric chemistry as well, and as a result of all these what as Partridge reiterate?

This article sums up the classical global perspectives of sustainable development of agroecological and / or environmental system with the help of analyzing the structural and functional domain of bioethical statehoods and its relation with altruism in the process of decision-making being the ultimate end all human aspiration and accomplishment (purusartha).

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