Selva Rathinam, SJ

Linking Ethics, Economy and Environment For Global Justice and Planet Peace

Introduction

In the Old Testament the Great Commandment in Deut 6:5 states, "love your God with all your heart, with all your soul and with all your might." There is also one insignificant commandment in the Old Testament found in Lev 19:18 "love your neighbour as yourself." The creativity and the originality of Jesus Christ is that he not only expanded the meaning of the word "neighbour" through the parable of the Good Samaritan but also combined these two commandments together: Love your God "and" Love your neighbour. This conjunction 'and' which is in Greek "*kai"* could imply (not only 'additive' as in English but also) 'explanatory' meaning "that is." Therefore, the meaning of the above could be this: love 'your God'; that is, 'your neighbour!' In short, where is this God? This God is in your neighbour! Such originality and creativity I see in *Laudato Si'* when Pope Francis combined environmental crisis with economic causes. We are all aware of the fact in the age of science that the planet we live in is deteriorating. We also know that the economic greediness of the rich makes the poor poorer and the rich richer. Pope Francis links the environmental crisis to its roots in economic forces and calls for certain ethical choices in economic, social, political and psychological spheres if we are to survive in our '"common home." In fact, the word 'ecology' comes from the Greek word '*oikos*' which means 'house.' This planet is a home not only for humans but also for all that exists upon this planet. If we do not take note of these three "e"s, such as 'environmental, economic and ethical' we will be in danger of losing this common home. This paper is divided into three parts. In the first part I summarize the position paper presented by the Task Force on Environmental and Economic Justice for the delegates of the Society of Jesus, Higher Education Directorate 2018 Meeting in Bilbao, Spain. In the second part I look at it from the Indian realities and in the final part I will present the plan of action envisaged by the Higher Education run by the Indian Jesuits.

1. Integral Ecology

a. A History of the Earth, the Evolution of Biodiversity and the Late Arrival of Humans

By "integral ecology" what Pope Francis means is that everything is connected to everything else on this planet by intricate plan of nature. The five elements *(panchabhutas*) of air, water, earth, fire and ether mix and intermingle to create an atmosphere for all to exist on this planet. Thus, 4.1 billion years ago the first living organism, a prokaryotic *(pro* means before and *kary* means nucleus) unicellular bacterial life form on earth came into existence. From here eventually arose all other higher forms of life. Started out as ocean bacteria, it evolved into cyanobacteria *(kyanos* in Greek means 'blue' and therefore is also called blue-green algae.

They are photosynthetic prokaryotes which are able to produce oxygen) to capture solar energy to support their own metabolism through photosynthesis. The capacity of cyanobacteria to produce oxygen changed our atmosphere making it 20% oxygen and gave rise to the evolution of larger and more complex life forms. 360 million years ago the process of evolution gave rise to diverse forest ecosystem all over the planet. The tree of life contributed to the evolution of higher forms of life like reptiles and mammals. All species in the web support the balance of the biosphere. Some become food to others, others decompose the waste of plants and animals, some convert C02 to oxygen, and others convert oxygen to C02. Such complex web of life supports to regulate the planetary systems. 65 million years ago our ancestral group, the primates came into existence. About 2.8 million years ago modern humans of the genus Homo first appeared in Africa. Only 300,000 years ago our species, Homo sapiens, the most highly evolved species of Homo came into existence. Thus, the humans

are very late arrivals in the evolutionary timeline. Around 10,000 years ago *Homo sapiens* invented agriculture in the Fertile Crescent. During this time of primitive agriculture, the world population was 1 million people. During the Napoleonic times, around 1810 the world population reached 1 billion. By 1930 in only 120 years when we discovered coal and nitrogen fertilizer, we reached our second billion. The advent of agricultural technologies, namely the capture of atmosphere nitrogen gas and conversion to cheap ammonia fertilizer transformed agricultural production and increased crop yield significantly.

The discovery of the fossil fuel energy such as coal, oil and nitrogen gas to fuel the combustion engine multiplied the capacity of humans to do work. The above two things together transformed the existence of humans on the planet. Today we have 7.5 billion people on the planet and heading for 9-10 billion by 2050. This population explosion in just the last 100 years of the entire 2.8- million-year history of humans on earth is alarming. These technological developments with our increasing ability to use energy and other resources coupled with our unstoppable desire for material riches in the capitalist economy has driven us to exceed nature's natural checks and balances and the biosphere is greatly suffering as a result. Consumerism is flooding the planet with accumulated waste and our use of fossil fuels is changing the climate transforming the earth into an unlivable habitat for all of the species in the biosphere, including ourselves.

b. Planetary Boundaries

John Rockstrom from the Stockholm Resilience Centre with many scientists and economists from around the world developed a diagram, termed Planetary Boundaries which helps us to understand how much damage we have done to the planet Earth. There are nine major environmental threats to the planet in this schema. We can do some deforestation, emit some pollution, extract some water, fossil fuels, and minerals from the land and fish from the oceans within a limit, and the earth will recover. But what we see is we have already far exceeded the planet's ability to rebound with regard to climate change, nitrogen flow and biodiversity loss and these three perturbations have greatly destabilized the earth's major planetary systems. We cannot continue to pollute our air, water and soil and exterminate the biosphere and expect to be able to survive on this planet. We are completely dependent on the goods and services of the biological diversity on the planet. In addition to providing 100% of our food and over 80% of the world's medicines, the forests, grasslands and oceans grace us with the oxygen we breathe, consume our bodily wastes, regulate the water cycle and stabilize the climate.

c. Modern Technology, Economic Growth, and Human Growth

In 1798 Economist T. R. Malthus urged controls on population growth as he demonstrated that human populations grow exponentially while food production grows at an arithmetic rate and a time will come when the earth will not be able to support the needs of the numerous humans. Within 50 years of the Malthusian Theory of Population, technological advances in energy (energy-dense coal replacing horsepower and wood) and fertilizer (nitrogen gas from the atmosphere being converted to cheap ammonia fertilizer) allowed us to have more yield out of agricultural land which supported more humans. Subsequent technological advances in food production, health, transport, industry, etc., in turn, perpetuate the continued growth of the human population. But today with 7.5 billion and growing, the finite resources on our planet pose dire consequences not only to us, but to the rest of Creation. Entire ecosystems continue to be plowed down, species are driven to extinction to make way for our kind, and our common atmospheric, geologic and oceanic resources have become open dumping ground for our toxic industrial waste. The poor and indigenous continue to be exploited and left behind with smaller pieces of the pie. In 'Laudato Si' Pope Francis points out that we are leaving the poor to be destitute with inarable land, and water and food insecurities.

On a planet with finite resources, we have a fatally flawed unidirectional economic model of growth. Our economies are driven by extracting natural resources (mining, deforesting, fishing, harvesting) and exploiting human workers in order to make goods that are mass produced, sold, single-used and disposed to purchase again

and again as Starbucks' disposable coffee cups in developed nations. In our current economic systems nature is depleted, natural resources dwindle, and trash and toxins pile up. While our planet is dying, we insist on the relentless growth of our capitalist economies turning a blind eye to the truth that our own children will be unable to thrive. Today we are stealing the future, selling it in the present, and calling it gross domestic product. This does not affect only future generations, but also the current ones, Modern economies are becoming increasingly unequal and unfair. The rich become richer; the poor become poorer and also suffer more from
environmental problems. What the people desire is a clean, healthy, civil, peaceful and just future. Yet the people's voices are not being heard and are not what is driving the globalized economic machine. The multinational corporations have the most powerful lobbying interests in the world, and have influenced the spirit of governance away from the people. As a result, for example, in the name of development, most African governments have sold their rivers, forests and land to corporations for exploitation. The practice suggests that the economic survival of the people depends on the destruction of their environment.

d. Global Measures Needed for a Healthy Planet, Healthy People, Peace and Prosperity

Global problems require global leadership. In 2015 world leaders at the United Nations adopted 17 Sustainable Global Development Goals. Likewise, in 2016 world leaders agreed upon the Paris Climate Agreement which pledges to keep the planet within 2 degrees Celsius of warming. In addition, the European Commission is advancing a Strategy for a Circular Economy to build a fair and sustainable economic framework. However, given the lack of a true global authority achieving these goals poses an enonnous challenge. Changes that need to take place should include a decline of carbon emissions to zero, with a shift to renewable energy systems leaving the remaining oil, coal and natural gas in the ground, a sustainable use of our natural resources including a sustainable agriculture and land use, sustainable and inclusive cities where 70% of the population will live and thrive, a fairer society which takes care all people and especially the most vulnerable populations with more equitable health, education and governance systems, technological development that is ethical and intentional and meets the needs of these world challenges including information and communications technologies.

Implementation of such ambitious goals requires engagement at all levels of society, from the individual to the global community. It is the opportunity and responsibility of the Jesuit Higher Education to advance this movement to rescue the planet and humanity.

2. The Indian Context[1]

a. Early Indian Thought

The above 'integral ecology' is the insight of 'early Indian thought' too. Here the emphasis is on the theology of dependence on creation. At the opening stage of Vedic literature, the Indian Sages looked at the world in a cyclic perspective. The rain (*parjanya*) is sent from heaven or by god. The rain gives forth food (*anna*) on the earth. The result of this food is the survival of human (*purusha*). The human offers in thanksgiving sacrifice (*yajna*) which is taken up by the air to god (*brahma*) who survives on it and once god is satisfied the god sends rain *(parjanya*) and thus the cycle of the survival of the whole cosmos, human and god continues. This cycle is called *yajna chakrapravartana* (the wheel of sacrifice in motion). Here everything depends upon everything else and this cycle goes on and on and never ending. Here the human is only a part of the whole of cosmos. The human is not above but a part of cosmos. In this process human is heading towards bondage because of his work. Work leads to bondage whatever it may be, according to the Indian Vedic Thought. This is called Karma theory. Does it mean that the human has to give up the work? No. Since everything depends upon everything else the contribution of the human work for the welfare of the whole *(lokasangraha)* is necessary. According to Karma theory it is the fruit of the work that leads one to bondage. In trying to solve the

[1] See my article on "Justice, Peace and the Integrity of Creation: A Biblical Perspective," Vidyajyoti Journal of Theological Reflection 77:2 (February 2013): 136-154 where I have elaborated the Indian ecological reality under the title of Integrity of Creation.

problem of bondage the Indian Philosophy makes a subtle distinction between the work and the fruit of the work. What is necessary is not *karma thyaga* (sacrifice of the work) but *karmaphalathyaga* (sacrifice of the fruit of the work). When we selfishly hold on to the fruit of the work it leads us to bondage. That is why we need *nishkamakarma* according to *Bhagavad Gita* where Krishna suggests that we have rights only on the work or the action, and not on its results, whether it is good or bad. Our works, our desires should be "desireless" and we should not desire for any pleasing (or unpleasing) result.[2] This is the theology of dependence needed to respond to the ecological crisis today.

b. The Current Indian Reality

At one time in India we thought that the ecological crisis is nothing to do with economic, political and social justice and therefore for the poorer nations, the environmental issues were a luxury. But today we realize that the ecological problem is our urgent issue both for the rich and for the poor since it affects life, the life of the planet.

The economic, political and social issues are connected with the ecological issues. The decision of the government to turn the habitat of the poor tribals into a mining area gave rise to the famous Chipko movement spearheaded by the poor tribal women. The shrinking of the villages and forests and the expansion of the slums in our cities portray the greediness of the rich and the plight of the poor. The starting point for the integrity of creation should begin not with scientists or with fancy for growing trees around the houses but with the cry of the poor.[3] Thus, the renewal of the society and the renewal of the earth are interconnected.

It is not an exaggeration to say that quite a number of socially conscious committed scientists opened our eyes to the endangered environment caused by air, water and land pollution which threatens to wipe out the very life on earth. It is in contrast to those scientists who took delight in taming, dominating and subduing the objectified nature for the development of the human beings. The fast depletion of non-renewal resources and species, the thinning of the ozone layer that exposes to the danger of radiation, the imbalance in the building up of gases to create the greenhouse effect, the increasing erosion of the sea coupled with the population explosion, the subordination of women and children to the needs of men, the wasteful affluence leading to war, hunger and poverty[4] are well known in today's world that requires urgent attention on the integrity of creation.

Since the modem life style caused by industrial and technological growth leads to the exploitation of human beings and nature we need to put a personal and communal limit to our need or rather to our greed in our consumption in our life style. The use of power is very important for value formation. Jesus resisted power to dominate and utilized it to serve. Do we use power to dominate or to serve and build solidarity? Finally, whom are we listening to in our decision makings and whose interest do we serve? Our solidarity with the poor should make us include them in our decision making as equal partners.[5]

c. The Context of Maharashtra. India

In Maharashtra where the Jesuit Jana-Deepa (JD), Pontifical Athenaeum of Philosophy and Religion is situated, the government has banned single-use plastic items including carry bags, disposable cutlery and thermocol from June 23, 2018. The violation will attract penalty ranging from Rs 5,000 - Rs 25,000. But the good news is that there are environment-friendly alternatives for most plastic items. Here are a few:

1. Containers, plates, cups and trays made of betel leaf bamboo and wood. These are food grade with no chemicals and binding agents, and can be decomposed into the soil within eight weeks. Also, most are microwavable and can be reused. Plates and bowls made of dried leaves were used in traditional ceremonies before plastic items took over.

---

[2] See "Nishkam karma of Bhagavad Gita," accessed 20 September 2015; available from http://wwwSwamivivek-anandaquotes.org/2014/05/nishkam-karma-of-bhagavad-gita.html;Internet,1

[3] See K.C. Abraham, "Liberative Solidarity: Contemporary Perspectives on Mission," in http://www.religion-online, org/showchapter ,asp?title=]450and C=1295, accessed on 28/7/12.

[4] See K.C. Abraham, "Liberative Solidarity."

[5] See K.C. Abraham, "Liberative Solidarity."

2. Edible cutlery made of food grains are an interesting option.
3. Cloth, silk, jute, canvas, muslin, wicker bags can handle up to 3-5kg weight. Many of these bags come with bold printed lettering that reads: "I am not a plastic bag" or "100% compostable" and "does not contain plastic."
4. Steel containers can be used to buy and carry milk and other liquids, and meat.
5. Paper and compostable garbage bin liners made of potato and corn starch.

3. Plan of Action

a. Some of the Best Practices in the Jesuit Institutions

In June 16-17, 2018 when the heads of the Indian Jesuit Higher Education gathered together in Bangalore one of the issues addressed was ecology. In our group sharing the following best practices and concerns were voiced in this regard.

1. Intellectual: Awareness of the 3 E's (environmental, economic and ethical) is given through inaugural orientations, seminars, conferences, credit and foundation courses, research articles and alumni efforts.
2. Participation by Staff and Students: Whole hearted cooperation, seedlings and seed planting, vermin-bin, seed bowl *dhan*, plants, plants instead of shawls for guests, rallies and picture and poster campaigns, eco walks and trekking.
3. Media Education: Short films, documentary films, slide shows, folk songs and awareness skits, eco-topic for competitions, publishing write ups and books on eco issues.
4. Institutional Contributions: Solar power generation, plastic and flex free campus, separate bins for perishable and non-perishable waste, introducing LED lights, planting and taking care of trees, making greener campus, eco clubs, waste management, manure from waste, water management, rain water harvesting, eco celebrations, recycling waste water and installation of bio gas plant.
5. Research: publishing of papers on eco issues, getting patent rights for eco inventions as already done in Entomology, eco institutes and laboratories, green houses and the appointment of co-ordinators in all our communities to implement eco issues and practices.

b. Concerns Raised on the Continuity of the Environmental Work

1. Most of the programmes are left to particular or individual initiatives.
2. No continuity for many of the programmes,
3. Follow up is not done,
4. Individual consciousness is missing,
5. No Mass movement to oppose eco-unfriendly governmental projects and machinery.
6. Alumni are taken for granted.

Conclusion

If we allow the human consumptive and growth process to increase on the earth, more than half of the existing species will be gone by the end of this century. There is no possible way we can put the earth back together when we lose our species. Since we are killing off the species on which we completely depend for our own existence, Pope Francis urgently asks us to attend to an Integral Ecology. Only a small fraction of humanity is benefitting from the capitalist economic model, while we are all speeding headlong into crisis. We need to integrate reconciliation with Creation into our behaviour, university cultures and curricular teachings to experience a positive feedback to our own health and to that of people at the margins. The overall goal of *Laudato Si',* is to help all of us recognize the urgent need to become integral ecologists and for this we need to dare to imagine a healed Earth and must be willing to put our hands, hearts, and minds to the task and especially through our expansive social and educational directorates.

(Prof Dr Selva Rathinam, SJ, former President, Jnana Deepa, Institute of Philosophy and Theology, Pune, India, has done his Licentiate at Biblicum, Rome and Doctorate at Berkely, USA. He is a full-time professor of Biblical Studies and is also involved in pastoral and retreat works. He has numerous academic articles to his credit.)

(Ref : *Jnanadeepa*, Vol. 26/3 July – September 2022, pp.136 – 149)