

Cardinal Stefan Wyszyński University in Warsaw
Institute of Philosophy
Center for Ecology and Ecophilosophy

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Evaluation of John B. Cobb, Jr.'s Ecological Model with the Focus on Its Workability in the Context of Bangladesh

Ocena ekologicznego modelu Johna B. Cobba Jr.
pod względem jego stosowalności w warunkach Bangladeszu

Md. Abu Sayem

University of Dhaka, Bangladesh

ORCID <https://ORCID.org/0000-0002-1449-5206> • sayem@du.ac.bd

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Abstract: The "ecological model" of John B. Cobb, Jr. seems a timely and needed approach to address our present ecological crisis. Keeping Cobb's "ecological model" of life and development in hand, the present paper attempts to examine why this model seems significant especially for Bangladeshi people and how it can be applied in Bangladesh to reduce the environmental issues. In terms of methodology, it follows the methods of literature review and interpretive analysis. The required data is collected by primarily reviewing Cobb's eco-theological works and then is used in the paper after analysis. Similarly, it investigates the applicability of his proposed ecological model in the context of Bangladesh and critically analyses the model by comparing socio-religious, political, and economic perspectives of Bangladesh. The study evaluates to what extent Cobb's suggestion may be implemented and to what degree it should be modified, proved to be inconsistent or rejected. As the project connects Cobb's eco-theological understanding with the present environmental problems of Bangladesh, its prime result will be motivating Bangladeshi people from grassroots levels to maintain ecological equilibrium by diverting their attention from the mechanistical and materialistic view to an organic view of the environment. Alongside these, the study will enrich the current discussions on the role of religions in environmental sustainability from a Bangladeshi perspective.

Keywords: bioregionalism, biospheric vision, eco-theology, environmental ethics, environmental crisis

Streszczenie: „Model ekologiczny” autorstwa Johna B. Cobba Jr. wydaje się być aktualnym i potrzebnym podejściem do przewycięzania obecnego kryzysu ekologicznego. Analizując „ekologiczny model” życia i rozwoju Cobba, podjęto w niniejszym artykule próbę zbadania, na ile zastosowanie tego modelu w warunkach Bangladeszu przyczyni się do ograniczenia tamtejszych problemów środowiskowych. Niniejsze opracowanie opiera się na metodach przeglądu literatury i analizy interpretacyjnej. Przedstawione tu dane są efektem analizy ekoteologicznych publikacji Cobba. Opracowanie to bada przydatność zaproponowanego przez niego modelu ekologicznego w kontekście Bangladeszu i krytycznie analizuje ten model, porównując perspektywy społeczno-religijne, polityczne i gospodarcze Bangladeszu. Artykuł podejmuje próbę oceny, w jakim stopniu propozycje Cobba mogą być wdrożone, a w jakim powinny być zmodyfikowane, by nie okazały się niespójne. Ponieważ opracowanie łączy eko-teologiczne ujęcie Cobba z aktualnymi problemami środowiskowymi Bangladeszu, jego głównym rezultatem będzie oddolne motywowanie mieszkańców Bangladeszu do utrzymania równowagi ekologicznej poprzez odejście od mechanistycznego i materialistycznego stosunku do środowiska. Opracowanie to wskaże ponadto na rolę religii we wdrażaniu zrównoważonego rozwoju w Bangladeszu.

Słowa kluczowe: bioregionalizm, koncepcja biosferyczna, ekoteologia, etyka środowiskowa, kryzys ekologiczny

Introduction

Bangladesh is a southern Asian country which is facing a lot of environmental challenges due to degradation of land, loss of soil quality, water pollution and contamination, air pollution, unprecedented construction, industrial effluents, loss of wetlands, exhausted gases, deforestation, desertification, household and medical solid waste, noise pollution, chemical runoff to wetlands, natural calamities, unsanitary condition, unhygienic environment, overpopulation, world-wide climate change, etc., (ADB 2004; DoE 2012; Sayem 2018, 9-14). Though the government and non-governmental organizations are also working towards minimizing all these problems according to their own capacity, no satisfactory progress can be seen till now in combating environmental degradation. Primarily the environmental crisis was created by the industrial world, but now it is a global issue for all nations. All nations are now, in varying degrees, responsible for degrading their environment because of their economic affluence. So, it is both a global and local issue. No nation alone can solve this problem without a strong and combined global initiative, and similarly no global entrepreneur can work without a local response. It is quite relevant to “think globally, act locally”¹ in terms of the environmental issue (Kearns 2004). In this consideration Cobb’s understanding of environmental crises and suggestions for averting the problems seem relevant to Bangladesh. Cobb’s eco-theological understanding, as I see it, gives some general action plans to all nations, irrespective of their faiths and culture, for preventing the environment from further degradation. If Bangladesh works according to Cobb’s ecological model, there may be a good solution for the environment problems.

1 This phrase is now globally used for giving more importance on a particular issue. It is not still clear who has first used this phrase. Perhaps, David Ross Brower, pioneer of “Friends of the Earth” movement, first used it as slogan for his movement (The Telegraph 2000).

1. John B. Cobb, Jr., and his Contribution to Eco-theological Ethics

John B. Cobb, Jr. (1925-present)² is one of the most influential theologians of the twentieth century in North America. He has extensively written on many diverse issues of theology especially covering social ethics, human rights, biology, economics, and ecology. Perhaps his work, *Is It Too Late? A Theology of Ecology* (1972), is the first book in systematic eco-theological understanding from Christian faith perspective (Kearns 2004). His other works (1982 with Birch; 1989 / 1994 with Daly; 1994; 2007) view the environmental issue from various angles. Thus, for his outstanding contribution to the environmental issues from Christian theological understanding, Cobb is considered the founding father of Christian eco-theology³. Being influenced by the process philosophy of Alfred North Whitehead (1861-1947)⁴ he utilizes this process philosophy in Christian theology which ultimately helps to grow a profound interest in his mind about ecology in the light

2 For detailed biographical description, see (Cobb 2014). For a theological Biography of John B. Cobb, Jr. see (Griffin & Hough 1991); a short sketch of Cobb’s life is also available in <https://pandopopulus.com/john-b-cobb-jr/>.

3 In Douglas Todd’s report on “first Christian eco-theology books in the 1970s” Cobb’s *Is It Too Late? A Theology of Ecology* (1972) is listed as pioneering one. For details, see <http://vancouver.sun.com/news/staff-blogs/first-christian-eco-theology-books-emerged-in-the-1970s>. The main objective of eco-theology is, as we know, to respond to secular environmental ethicists, secular environmental movements, and secular environmental activists, who have attempted to state religious idea of humans as a potential cause to present environmental degradation with the argument that religions always see human supremacy over other creatures to dominate them for human interest. In addition, as an academic discourse environmental philosophy and environmental ethics emerged from 1970s (Palmer, McShane & Sandler 2014, 419); so, in this calculation, Cobb may easily be counted as founding father of Christian eco-theology.

4 See, for details, (Broad 1948, 139-145). Also see <https://plato.stanford.edu/entries/whitehead/>; <http://www.iep.utm.edu/whitehed/>.

of Christian teachings. Then, for better understanding of ecology, he studies biology and works with an Australian biologist and ecologist, Charles Birch (1918-2009). Cobb realizes that without addressing economic theories and functions, it is not possible to deal with the present environmental problems; so, he studies economics and then works with an American ecological and geologist economist, Herman Edward Daly (1938-October 28, 2022). Thus, he has a better grasp of modern science and the present economic system which he learns in order to gain an insight into the current environmental problems from root level. That is why, it is possible for him to understand present ecological crises, and then, to reinterpret Christian faith in the light of that understanding, and finally, to give some practical suggestions for averting current environmental problems.

2. Cobb's Ecological Model

Cobb realized that it was the modern worldview of nature that laid behind the present ecological crises because in this worldview nature was considered as a machine. So, Cobb attempts to replace this metaphor of machine by the metaphor of life. With modern biological science, he argues that the mechanistic worldview of nature is quite unfit to interpret the interconnectedness and interdependence of living organisms with non-living organisms of natural world. In this regard, he has written *The Liberation of Life* (1982) with a famous biologist Charles Birch where both of them endeavoured to show why an ecological model is very necessary to be developed for saving all biological lives. In this model, both Cobb and Birch argue that humans are not independent of the biological world and the ecological cycle; so, survival of human beings are completely dependent on the healthy environment of biological lives and the ecological system. In this way, the ecological model presents the idea that the natural environment rather than being dead or working

like a machine, works like a living organism (Soneson 1994, 158).

Cobb advocates for an ecology-based society where all biotic and abiotic organisms of natural world are given due importance according to their participatory role in nature. Cobb argues that this participatory role is so strong that every change occurred in any part of nature affects other parts of nature (Cobb 1972, 28). So, this society is, as Cobb proposes, based on a participatory approach to natural environment. It allows competition among organisms but never brings any organism to extinction. For this purpose, he suggests a dramatic change of the lifestyle. For him, without such a rapid reformation there will be no improvement in the environment. This reformation is possible if humans are ready to practise ecological asceticism (Cobb 1972, 58, 63). By "ecological asceticism" Cobb means a very simple lifestyle and an assurance to avoid those works that destroy the natural environment (Cobb 1972, 58). This strong commitment must be implemented from individual initiative to collective efforts and from local the level to the international level. In his view, ecological asceticism means compromise and sacrifice with respect to some bad human habits and some additional human activities which pose a threat to the environment; but it does not necessarily mean inequality of life.

Cobb lays special emphasis on the ecological model of life. It belongs to all living things. When it comes to human approach to nature, it means that humans must be very careful in their treatment of all living things. Humans are morally responsible to protect other lives and to save their habitats. In no way should humans pose any threat to other living organisms in the natural world. As rational animals, humans must recognize rights of all living things to life by protecting their growth in their own ways. If some living organisms are used as foods or need to be destroyed, based on proper justification, ethical consideration should be applied in this regard to reduce pain and

suffering (Birch & Cobb 1982, 155 cited in Trickett 1983, 92). Thus, this model of life leads to a responsible life of humans based on ethical consideration – virtues and values followed in their attitude to other lives. Thus, Cobb proposes a new ethical life based on religious moral teachings. He argues that God is the best example of the ecological model of life (Birch & Cobb 1982, 195; Soneson 1994, 159), because all lives come from the supreme Life that is God Himself Who sustains them allowing their growth and activities. For Cobb, an ecological attitude to life is essential in working on environmental sustainability (1982, 206). He argues that without basic knowledge of ecology it is not possible to become ethically conscious of the natural environment. If humans know, by the knowledge of the ecological system, that welfare of one organism means welfare of other organisms and, similarly, that the suffering of one relates to the suffering of others, it becomes easy to persuade humans to treat gently and kindly other living and non-living organisms in the environment. So, a sustainable human society depends on a sustainable environment and a sustainable environment is possible only when a sustainable ecological system is ensured. In fact, human life is deeply connected and dependent on ecology. In religious traditions, mystic people can realize this intimacy by their spiritual feeling and understanding, though it is somewhat difficult for laymen to grasp such an experience based on their usual knowledge; but they can also understand it based on modern biological knowledge. That is why, basic knowledge of biological science is necessary to properly understand ecology and its essentiality for balancing the relationship between biotic and abiotic organisms in the natural world. This knowledge undoubtedly helps in raising human awareness and in encouraging people to work for sustainability of the environment.

Cobb's proposal for ecological model of development is very relevant to environmental issues. For him, the modern

economic function has triggered the present ecological crises because the modern economic system only considers economic affluence of a nation, it does not pay attention to the sustainability of the environment. Cobb warns us saying that if the present global economic functions continue it will be enough to cause environmental catastrophe (1992, xii). So, he argues, the current economic theories and functions should be controlled and replaced by a sustainable economic system. In this regard, his works, *For the common good* (1994) co-authored with a famous economist, Daly, and *Sustaining the Common Good: A Christian Perspective on the Global Economy* (1994) seem praiseworthy. In these works, Cobb suggests reforming the current economic functions in consideration of ecological interest. He criticizes the present policy and mentality of the economic growth as jeopardizing the ecological system and the quality of human life as well. He argues that, if the environment is destructed because of uncontrolled economic growth, human life will also be insecure since human existence is completely dependent on the environment. So, preservation of the environment should be given priority to the so-called economic affluence.

Cobb criticizes the current market-based economic system where society is controlled by the market pattern. He criticizes market mechanisms of free market economy for dominating human society. He argues that in such a marketing process humans are actually not benefitted, but rather they are dominated by some multinational companies and few rich persons. Furthermore, he states that this market system not only exploits the environment but also exploits human society. Therefore, he suggests replacing it by a balancing trade and market system where basic interest of all humans is considered in relation with ecological sustainability (Daly & Cobb 1989/1994, 229). In this regard, bioregionalism, as both Daly and Cobb recommend, can work for the ecological balance (Northcott 1996, 300-301, 308).

In this approach, Daly and Cobb give more priority of local community's interest, in terms of the environment, than the interest of multinational companies; as it is seen that international giant corporate groups invest their money in some regions of the world in order to earn more gains in return through exploiting local resources and environment which is very harmful to local community than their short term economic benefits. In bioregional system, both Daly and Cobb show that small industries can provide for basic demands of local communities, jobs should be created for local people, and mostly commerce and trade should also serve local people. This will lead to the reduction of the cost of production and transportation. It will be a very small economic activity compared with modern economic activities, but it will have no major impact on ecological crises. In this approach both producers and consumers can maintain a balanced relationship with the natural environment.

Cobb states that the modern agricultural system is unfriendly to the ecological system because in this cultivation method chemical fertilizers and pesticides are used for more production and then preservation medicine is used to store the crops and foods for a long time. He argues that all these agro-chemicals are very dangerous for the soil and ecology, and preservation medicine is not good for human health. Therefore, Cobb appreciates the traditional agricultural system because it is environmentally friendly (Daly & Cobb 1989/1994, 268, 272). He suggests utilizing organic fertilizers in lieu of chemical fertilizers. He condemns pesticides because they kill even those insects, earthworms for instance, that are actually making the land fertile. Though some insects harm the crops, the rest of insects are helpful to increase the quality of soil. So, insects should not be driven out or killed by using agro-chemicals; if necessary, they should be driven out in natural ways. Cobb reminds us by saying that the land cannot be monopolized by humans but rather shared

with non-humans (Daly & Cobb 1989/1994, 252). So, when humans want to use land they should try, as much as possible, not to violate the rights of living things other than humans. In this way, he lays special emphasis on the ecology-based agricultural system.

Cobb condemns nuclear power plants for their producing huge amounts of emissions to the atmosphere. For the same cause, he also blames human dependency on fossil-based energy. Similarly, he defames hydroelectric power for artificially creating some interruption in the natural stream. Then he talks about alternative energy production through utilizing solar power, biogas, turbine, windmill, sea-wave, river current, etc. These are environmentally friendly sources through which if electricity is produced there will be no damage to the ecological system. These green technologies, as Cobb proposes, should be immediately used for ensuring an ecology-based energy system. With the view to reducing the emission of carbon dioxide, Cobb opposes using private cars; instead of it he suggests using public buses. In their work (Birch & Cobb 1982, 323-325), both Birch and Cobb show how badly motorised vehicles, run on fossil-based energy, damage the urban habitat and the natural environment. Cobb also inspires people walking and riding by-cycle for short distances, because it keeps human body healthy and does not harm the environment. Thus, he recommends an ecology-based urban life (Birch & Cobb 1982, 327) where everything must be considered in relation to the ecological interest.

Cobb is aware of population growth, and he states that the current growth rate is very challenging to the environment. He argues that more population means more pressure on the environment. So, the population growth must be, as he suggests, kept under control so that it can suit the environment. For executing this plan, he suggests compulsory sex education for adult girls and boys; and then he advocates to make contraceptive equipment cheap and accessible. He does not support having more than

two children per family. In his view, excess number of people is not suitable for environmental sustainability. So, he discourages population growth exceeding the required rate. He also proposes to impose a tax on families having more than two children by arguing that due to this the tendency of having more children will decrease dramatically. Thus, Cobb supports a strong family planning policy of not more than two children in order to sustain the environment (Cobb 1972, 66-68).

3. Relevance of Cobb's Ecological Model to Bangladesh

As told before, Bangladesh is facing a huge number of environmental problems⁵. Some problems are the result of global warming and world-wide climate change to which Bangladeshi people have very little contribution; but some other problems are of course created by Bangladeshi people themselves. Though Bangladesh is heading towards industrialization, it is mainly an agriculture-based country. Now-a-days, the agriculture has completely abandoned traditional methods for the sake of modern methods. Farmers utilize agro-chemicals in farming lands to achieve higher production (DoE 2012, xviii; Sayem 2018, 9-10). In it, soil quality is gradually degraded, and lands are becoming poisonous day by day to other living organisms residing in soil. Because of the urbanization process and unprecedented construction across the country, farming lands are quickly being reduced. Therefore, in many ways, people are cutting trees for farming and housing (Ibid.). As a result, Bangladesh is now experiencing deforestation and desertification. As a developing country, the Bangladesh government gives priority to setting up factories and industries inside the country without proper regulation and justification to the sustainability of the country's ecological system. Most of these factories have no sufficient disposal methods; as a result of which their chemical and toxic

effluents are openly thrown and then mix up with water, soil and air. On the other hand, water, soil and air are also being polluted by agro-chemicals like chemical fertilizer and pesticides, solid household and medical waste, and industrial waste (Sayem 2018, 9-10). Unfortunately, the country's poor waste management system cannot handle properly such an uncontrolled big amount of waste. Bangladesh is completely dependent on fossil-based energy sources such as natural gas, oil and coal. All these natural resources are frequently burnt to generate energy by the country's numerous motorized vehicles and industries; so, their emissions are polluting the whole environment with contribution to the global warming. Now, it is going to launch nuclear power plants to produce electricity. So, in near future, the country will experience another sort of pollution produced by nuclear power plants. Due to the world-wide climate change and global warming, the coastal area of Bangladesh, which covers the country's one-third area, is going under sea water (ADB 2004, 15; Sayem 2018, 12). In the meantime, people residing there are facing increasing salinity. Other parts of the country are facing arsenic problems in water. In addition to all these disturbing situations, regular natural calamities like floods, cyclones, tornadoes, earthquakes, storm surges, drought, heavy rainfall, hail-storm lighting, etc. add many other environmental problems.

The government of Bangladesh (GoB) is concern about all these problems (DoE 2012, 10-11) but it lacks sincerity and moderation with other relevant activities.⁶ Some Non-Governmental Organizations (NGOs) like Bangladesh Centre for Advanced Studies (BCAS), Wildlife Trust of Bangladesh (WTB), Bangladesh Environmental Lawyers Association (BELA), Proshika, Building Resources Across Communities (BRAC), and Simple Action For the Environment (SAFE) are quite active as regards

⁵ See, for details, (Sayem 2018, 9-14).

⁶ See, for details, (Sayem 2018, 14-15).

environmental issues.⁷ Out of voluntary organizations, Bangladesh Poribesh Andolon (BAPA), and Doctors for Health and Environment (DHE) are actively working for the preservation of healthy environment to all (Islam 1999, 14-15; Sayem 2018, 16-17). There are also issue based movements for saving the environment from further degradation. Through publishing and broadcasting news related to environmental issues, Media and Press also attempt to wake up people in order to be very conscious about the ongoing environmental crises.

Despite all these policies and actions done, so far, by GoB, NGOs and voluntary civic movements no satisfying progress can be noted (Islam 1999, 15; Sayem 2018, 18-19). However, it is true that there is a slight improvement in some areas which are not comparable with huge amount of environmental destruction (Ibid). The glaring gap is evident in their theoretical discourses and actions that they cannot grow any inner consciousness in human mind that there is deep intimacy between humans and natural world which cannot be separated at all. The natural world is not a matter of external observation of visible phenomena, but rather it is a matter of spirituality. But, modern humans, due to the so-called scientific and secular education, have forgotten the significance of the spiritual approach and its application to nature. That is why, the current environmental crisis is also considered as a spiritual crisis of modern humans (Nasr 2000, 18). It is equally true for Bangladeshi people; most of them are involved in faith tradition but their mental set up is based on secular or scientific understanding of nature. Needless to say, according to the modern scientific worldview, nature is devoid of any sacred character, but it is perceived rather as a machine whose only role is to serve humans. Thus, this worldview has suppressed the spiritual approach to nature and therefore modern humans are now devoid of spiritual feelings. So, without addressing

this explicit problem of modern humans environmental crises cannot be averted. When humans regain such spiritual feelings for the environment, they can decide by themselves what to do for sustainability of the environment. That is why, religious approach to the environment is essential and because of this John B. Cobb's eco-theological understanding and his proposed ecological model are relevant to Bangladesh. Now, let us see how Cobb's Christian approach to environmental ethics and his proposed ecological model can work to reduce such environmental problems specially created by Bangladeshi people.

Though Cobb's eco-theological approach is primarily based on the process theology, its application is not limited to Christian countries, but it can also be applied in non-Christian countries. In other words, Cobb also develops his own understanding and approach to the environment through criticizing the traditional anthropocentric approach in the light of modern ecology and biblical understanding of nature. So, his liberal bio-centric approach to environmental ethics can be applicable in Bangladesh. More than ninety percent of inhabitants in Bangladesh follow Islamic religious tradition (BBS 2011, xiii; Sayem 2018, 3). As members of Abrahamic faith communities, Muslims share many similarities with Christians. Therefore, Cobb's theoretical understanding of the natural environment, in many ways, carries the similar understanding of Islamic religious tradition. What is needed here is to correlate his interpretation with the Quran and the Sunnah. However, for Cobb, the natural environment is sacred, and humans should not disrespect other creatures. Humans have no monopoly over the natural world but should share the ground with all living things. Humans are only the micro part of nature; so, they should respect other parts of it. Humans are very much responsible animals; they should treat other animals or living things in a very responsible way. The natural world is not alien to humans, rather humans have

⁷ See, for details, (Sayem 2018, 15-16).

deep intimacy with nature. To harm any part of the environment means to inflict the entire natural world. If Bangladeshi people are taught such an eco-theological approach, modified by Cobb, perhaps there will be a significant change in their thought, feelings, behaviour and activities towards the natural environment. With such knowledge people may be more conscious of the essentiality of the environment's sustainability and then they can attempt to control their own activities that are harmful to the environment. So, all this theoretical understanding is crucial for Bangladeshi people to reform their perception of nature and to control their destructive activities to the natural environment.

If Cobb's ecological model is accepted in Bangladesh, people can be more conscious that it is necessary to take care of all living forms in the natural world. In this model, they can easily know that the environment is not dead or like a machine but that it is alive and sacred (Cobb 1972, 28). When people realize that all abiotic components in nature are life supporting, they will become more responsible in their behaviour towards non-living things. When people can understand that all biotic and abiotic organisms are interconnected and interdependent to each other, they will attach more value to the ecological system. Such an understanding of the natural world will drive people to creating an ecology-based society where participatory attitude will work to give space for all living forms and non-living things will not be misused and abused.

If Cobb's ecological asceticism is followed by the inhabitants of Bangladesh, there may be a quick reverse of increasingly destructive activities in the environment. It is quite essential for the country people to follow a hard practice to improve the degraded state. In this regard, Cobb's proposed ecological asceticism seems very relevant for Bangladeshi people. Ecological asceticism assumes adopting a controlled and responsible lifestyle giving priority to ecological sustainability (Cobb 1972, 58, 63). If Bangladeshi

people adopt this dedicated lifestyle, they can refrain from degrading the environment. Following this sort of ascetic life Bangladeshi people can be focusing on fulfilling their basic needs from the natural world and they will never think to take more from nature than what is necessary to satisfy their fundamental needs. In this way, people can reduce dramatically their dependency on fossil-based energy and welcome green technologies to reduce emission of carbon dioxide. People can also be convinced to compromise and sacrifice their present lifestyle for the greater cause of environmental sustainability. Thus, people will become the protector of their country's environment instead of destroyer.

Through the practice of ecological asceticism, Bangladeshi people can move to construct an ecological model of life where all living organisms of the natural world are considered as significant members (Birch & Cobb 1982, 122-123). According to this model of life, Bangladeshi people can ethically be very sensitive to using animals as their foods. They will apply virtue ethics, kindness and mercy for instance, while killing animals for food purpose. Their treatment with animals will be as gentle as possible. Animals' pain and suffering will be their concern. People will not be a threat to the habitats of other living things rather their habitats will be kept safe and secured. People will never interrupt the way living organisms naturally grow and survive. No harm will be done to any form of living things without proper cause and justification. By following this model, Bangladeshi people can become a true custodian to the biological world. In addition to it, Cobb's ecological biology will persuade Bangladeshi people to relate themselves with other creatures of the world. In it, people can easily see their intimate relationship with all animals and plants. When they see the unity and intimacy of all creatures, they cannot generate any potential cause to harm them.

As a developing country, Bangladesh is heading to the way of industrialization

(Sayem 2018, 9-10). Due to cheap labour cost and availability of some raw materials, many multinational companies are investing in Bangladesh. Though some people are getting jobs and the country is achieving some economic affluence from such industrialized initiatives, the country's natural environment is becoming worse day by day. However, with such ongoing facts it is very difficult to implement Cobb's proposed ecological model of development. If most people are really conscious about the anticipated environmental catastrophe and are convinced about the essentiality of environmental sustainability for the quality of life, they can create a strong pressure on the government to realize the consequences of the present trend of industrialization at the price of the natural environment. Only then will it be possible to act in line with the ecological model of development. According to the ecological model of development, calculation of fiscal economic growth is condemned because in it only economic interest of a particular year that is considered, but it never judges how badly the ecological system is affected behind to achieve such a target (Ferre 1993, 360). Cobb is not against basic economic development but that must not be uncontrolled and override the ecological interest. For Cobb, the present ecological crises are the result of over development not of the necessary development. He supports sustainable economic development where ecological interest is articulated in human economic functions. According to Cobb's model, Bangladeshi people should leave the modern economic practice of market-based society and construct a society-based market where free market economy is to be replaced by balancing trade and commerce (Daly & Cobb 1989/1994, 229).

Following western methods in agriculture, farmers are utilizing agro-chemicals including fertilizers and pesticides to produce more crops (ADB 2004, 9-13; DoE 2012, xviii; Sayem 2018, 9-10). In result, the country's soil quality is rapidly degrading, and the environment as a whole is being

destroyed. If Cobb's sustainable agricultural system (Daly & Cobb 1989/1994, 272) is applied, people will come back to traditional agriculture which is environment friendly. Instead of chemical fertilizers, they will use organic fertilizers. If it is necessary to eliminate dangerous insects from the land, they will apply natural methods. In the light of this model Bangladeshi people are to give space to all other living forms.

Following Cobb's suggestions, Bangladesh should give up Rampal power plant, Captai hydroelectric project and fossil-based hydro-electricity production because all these emit huge amounts of carbon dioxide to the atmosphere which is very dangerous for the environment. Then, people move to alternative energy sources like solar power, biogas, windmill, sea waves, river current, etc. through which people can produce electricity. People can reduce their dependency on motor vehicle run on fossil-based energy. Instead of private cars people will prefer to use public buses and, for short distances, they will ride bicycles and go on foot. Thus, by following Cobb's suggestions of this sort, Bangladeshi people can create an ecology-based society within the country.

As a vast, populated country, Bangladesh is facing a lot of challenges to handle big number of people. So, Cobb's specific suggestion for population control can work in this regard. For Cobb, more than two children should not be allowed. Cobb even proposes to impose a tax on those who have more than two children so that no family can dare to give birth to more than two children. For executing this tough decision, the Bangladesh government can distribute birth control equipment among married couples. There should be an opportunity of sex education for adult males and females. Bangladesh is a conservative Muslim country; so, in some ways, it will be difficult to implement Cobb's suggestion in terms of sex education, distribution of contraceptives, and strict birth control policy.

Research Findings and Concluding Remarks

John B. Cobb's eco-theological understanding covers many issues of environmental ethics. Though his theoretical discourse is primarily based on the Christian faith tradition, it also criticizes some past forms of Christianity for being supportive of radical human-centric views of nature. Through constructive criticism of the traditional anthropocentric approach Cobb has managed to develop his own liberal approach to the environment. Cobb's liberal bio-centric approach provides an intimate relationship of humans with all living forms of nature. It is explicit from the preceding discussion that as a theologian and independent scholar Cobb has attempted to address a timely needed issue like environmental ethics from faith perspective with his own understanding of biology and relevant economic functions. In this way, he tried to develop eco-theology to respond to the current environmental problems from the Christian point of view. Truly, he has successfully proved that Christianity has enough resources and heritage to address the present ecological crises. His eco-theological understanding is so rich that it goes beyond the horizon of the Christian world. His participatory and cooperative approach in environmental ethics attracts others to follow it and apply it in their own countries to deal with the unprecedented ecological problems. It suffices to say that his proposed ecological model seems to be a universal approach to environmental ethics because it urges all humans to lead a very responsible and simple lifestyle in consideration to the sustainability of the ecological system. In it his holistic mission and vision to the environment has been explicit.

It is quite clear from the preceding discussion that Bangladesh is facing numerous environmental problems created by the activities of its own inhabitants and also by global climate change. Though the Bangladesh government and some non-governmental organizations have some concerns

about it, their policies and activities will not be enough to reverse the ongoing ecological problems; rather they need more support and knowledge from outside Bangladesh to achieve satisfactory progress in their works. As Bangladesh is predominantly a Muslim country, the Bangladesh government and non-governmental organizations should refer to the Islamic faith tradition and to other faith communities living in the country to develop a sympathetic approach to nature through which they can easily motivate people to reform their present behaviours towards the environment. It is true that without the cooperation with world religions, the global ecological problem cannot be solved. Similarly, no country can solve its own environmental problems until its faith communities are cooperative. Therefore, Cobb is relevant here because his eco-theological understanding can help Bangladeshi Muslims to develop Islamic eco-theology or to follow it in order to address environmental problems.

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