

Communing with Mother Earth: Indigenous Way to Care and Manage the Ecosystem

Rogelio P. Bayod
Cor Jesu College
roger.bayod@gmail.com

Abstract

Our natural environment is in critical condition. Any effort to fight environmental crisis without the support and participation of the local people is predestined to fail. Removing the indigenous people from taking control over their cultural communities is not only detrimental to their economic and cultural survival but also to the survival of the planet. Using Vandana Shiva and Satish Kumar's Ecological Philosophy and my own experiences in living with different indigenous communities, this paper discusses the role of the indigenous peoples to manage the ecosystem by allowing them to take control over their cultural communities. It further argues that for the mother earth to continue her nurturing role, making peace with her is both an ethical and environmental imperative. This attitude of establishing a deep relationship with mother earth is shown by the indigenous peoples' values of reciprocity and reverence to nature. Thus, removing the indigenous peoples from the equation of environmental protection and preservation is one road that leads to perdition.

Keywords: reciprocity, reverence to nature, deep ecology, indigenous wisdom, environmental protection, preservation

Introduction:

In this paper, I will try to highlight the importance of establishing a deep spiritual relationship with Mother Earth characterized by reverence and respect as shown by the indigenous peoples. This kind of attitude and values run in conflict with the values of the mainstream people who are heavily influenced by consumerism so much so that they only see the earth as an object to be exploited to satisfy their greed. To be able to achieve this goal, I will explore first the conflicting views between the indigenous peoples and those living at the mainstream as regards development. The dominance of the mainstream views and practices results to the imbalance of the ecosystem and the outbreak of calamities that affect the whole of humanity. It will be argued that for Mother Earth to continue her nurturing role, we need to take care of her and to reconnect with her in a more intimate and reciprocal relationship. To be able to achieve this, we need to listen and learn from the indigenous peoples as they have exemplified this kind of spiritual partnership with Mother Earth since time immemorial.

Today there is an on-going war against our Mother Earth. For Shiva, this war has its roots in an economy which fails to respect ecological and ethical limits such as limits to inequality, limits to injustice, limits to greed and economic concentration.¹ A lot of human beings, mostly from the lowlands and the mainstream societies, do not show respect and reverence to nature that nurtures and nourishes them. These people take everything from the earth without considering that in the process, the earth bleeds and drains its capacity to give abundantly and equally to all her children. In the name of what they call “development”, these people continue to display its arrogance in using their brains and acquired technologies to exploit and destroy forestlands, mountains, oceans, rivers and even atmospheres. Shiva further said that the main agent of this war is the global corporate economy and global capitalism that advocate an insatiable accumulation of profit and ravenous consumption of the earth’s resources and so this global corporate economy engages permanent war against the planet.² How does this global corporate

¹ Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge* (Berkeley, California, 2016).

² *Ibid.*

economy play its war games? Overtly, they project that they are for community development and are promoting the “good” life for them. Covertly they employ coercive means to advance their consumerist agenda through free trade agreements, policies and also technologies of production based on violence and control, such as toxics, genetic engineering, biopiracy and others.³ The end point of this technique, Shiva says, is another form of mass destruction by destroying the environment and depriving people of the very source of their lives such as food and water through poisonous substances and other toxic chemicals, thus killing the web of life.⁴

Because of this war, our natural environment is in critical condition. From any part of the world, we can already see the effects of climate change such as extreme heat and a long period of drought in some parts of the globe while flooding in the other parts, unpredictable weather conditions and even the occurrence of natural disasters that resulted to the loss of human lives and the lives of other species. We can also see many efforts from different countries with their scientists and technocrats to come up with feasible solutions such as policy formulations that encourage flexible and contextually grounded and with the participation of scholars and technocrats to restore the beauty and bounty of mother earth.⁵ Other environmentalists, economists and policy elites call on the lawmakers in the government to pass laws on carbon consumption.⁶ However, as pointed out by some scholars, in addressing public concerns such as climate change, there is a gap between recognition and responsibility, between identifying the problem and having the conviction to solve it.⁷ They also emphasized the possible relations of uneven attention to climate change and the dispersed and sometimes unwillingness of the governments and peoples in some countries to take action to address the problem.⁸ To fight climate change problems, we do not only need

³ Vandana Shiva, *Making Peace with the Earth* (Cambridge University Press, 2012).

⁴ *Ibid.*

⁵ Hemant Ojha, Sharad Ghimire, Adam Pain, Andrea Nightingale, Dil Khatri & Hari Dhungana. “Policy without politics: technocratic control of climate change adaptation policy making in Nepal”, *Journal of Climate Policy*, Vol. 16, Issue 4, February 2015.

⁶ Columbia Center on Sustainable Investment, 2019.

⁷ Ben Orlove, Heather Lazarus, Grete Hoversrud, & Allesandra Giannini, “Recognitions and Responsibilities: On the Origins and Consequences of the Uneven Attention to Climate Change Around the World”, *Current Anthropology*, Vol. 35, 3, June 2014, 249-275, <https://www.jstor.org/stable/1086/676298>

⁸ *Ibid.* 249.

to have beautiful and sophisticated frameworks crafted by scientists and technocrats in the higher echelon of the state's bureaucracies but also people and organizations in the grounds, especially those who are directly affected by climate change. We need their participation and wisdom. Thus, any effort to fight environmental crisis without the support and participation of the local people is predestined to fail. Removing the indigenous people from taking control over their cultural communities is not only detrimental to their economic and cultural survival but also to the survival of the planet.⁹ Indigenous peoples can help provide viable alternatives in addressing environmental and climate change related problems but still they are not properly utilized by agencies and institutions working on climate change mitigation because they are banking on their scientific way of doing it.¹⁰ Can we now say that modern science is responsible for the gradual death and destruction of our ecosystem? In answering this question, I am using the philosophical frames of Vandana Shiva, an Indian physicist, philosopher and social activist who founded a research foundation for science, technology and natural resource policy, an organization for sustainable agriculture. I am using the philosophical constructs of Shiva because her arguments are grounded on her grassroots experiences, engagements and even her lived experiences as an advocate of organic farming herself.

Going back to the question whether modernity and modern science is responsible for the destruction of the ecosystem, Shiva responds by quoting Bacon who was hailed to be the father of modern science as her reference. Shiva says that according to Bacon the discipline of scientific knowledge and the mechanical inventions it leads to, are so coercive to the point of conquering and subjugating the earth instead of providing a gentle guidance and dialoguing with nature's inherent laws.¹¹ This scientific and mechanical technologies subjected the earth with violence. As a result, nature betrays its own natural laws which affects not only its own inner harmony but that of the people and communities that are heavily dependent of her for survival.¹²

⁹ Rogelio Bayod, "The Future of the Environment and the Indigenous Peoples in the Philippines under the Duterte Administration", in *Social Ethics Society Journal of Applied Philosophy*, Special Issue, December 2018.

¹⁰ *Ibid.*

¹¹ Vandana Shiva, "*Biopiracy: The Plunder of Nature and Knowledge*" (Berkeley, California, 2016).

¹² *Ibid.*

On the other hand, the indigenous peoples and societies that have been establishing spiritual partnership with nature emphasize the primary values of deep reverence, reciprocity, balance, limits and communion with the natural world.¹³ But this spiritual partnership that has been practiced and cherished by the indigenous peoples towards nature is being attacked by modern science and economy. In an economic model which is only based on exponential growth, the natural environment and its resources are being exploited and thus, rapidly depleted, because of the different means of subjugation and control that were employed by many scientists and technocrats, businessmen and state's policy makers towards the indigenous peoples and their communities throughout the world.¹⁴ These different forms of subjugation and control are the global corporate economy's persistent efforts to drive indigenous peoples from their communities and to take away from them their freedom and autonomy to manage and control their lands and the surrounding ecosystems.¹⁵

What are these different forms of war that have been happening in many indigenous communities throughout the world?

War against the Earth's Resources

Today, there is a much bigger war than what we have witnessed so far in the last centuries. For many of us, when we think of war, we might be thinking of the war in Iraq, Afghanistan, Syria, between Israel and Palestine, or even between the Philippine government against the communist insurgents. But there is a bigger war that has been happening throughout the world. This war is a much more ruthless war against the earth's natural resources.¹⁶ According to Vandana Shiva, this form of war against the earth's resources involves both the transformation of living mountains, forests and rivers that support life bountifully into dead raw materials

¹³ See Karl Gaspar, *The Lumad's Struggle in the Face of Globalization* (Alternate Forum for Research in Mindanao, Davao City, 2000). See also Karl Gaspar's *Manobo Dreams in Arakan: A People's Struggle to Keep Their Homeland*. Quezon: Ateneo de Manila University Press, 2011.

¹⁴ Vandana Shiva, "Biopiracy: The Plunder of Nature and Knowledge" (Berkeley, California, 2016).

¹⁵ *Ibid.*

¹⁶ Vandana Shiva, "Making Peace with the Earth" (Cambridge University Press, 2012).

for making metals for the industrial needs and as receptacles for the dumping of toxic wastes which pose imminent threats to the lives of people as well as to the interrelatedness of lives in the entire ecosystem.¹⁷ The mountains and rivers found in indigenous communities which they consider to be sacred and living since they uphold the laws of nature, were ravaged by corporations that know no laws and limits to what nature can give in a period of time.¹⁸

In my immersions with many indigenous peoples in Mindanao, I have witnessed this kind of war. In fact, I can say that this form of war is also a war against the indigenous peoples themselves and their aspirations for self-determination because the scale of environmental destructions in the guise of development can only take place by violating the rights of the IPs and their communities, subjugating them and even sowing violence and terror, or killing them if necessary. While the IPs have a strong identity, partnership and belongingness with nature as their "home", corporations do not have homes, identities and citizenships¹⁹, and therefore, do not have empathy and care for the environment. What they only care about is how to maximize their profit from extracting the mineral deposits in these mountains and rivers.

Companies and corporations used different kinds of techniques to entice the IPs to vacate their place and allow them to take control of their lands. For one, there had been reports of bribery and deceit or manipulation being done by these companies to the IPs so that they will be given permit to operate. Another, it has also been proven in different writings and documentary reports and even in my own interviews that when the IPs would try to resist these corporations to plunder their natural environment, they will be confronted with force and violence through militarization. Almost everywhere, the IPs are reported to be resisting any forms of ecological destruction. To quell this resistance, there has been massive militarization to secure that exploitations of the environment's resources will continue and dispossession of peoples and communities especially those that resisted will take place.²⁰ There had been voracious exploitations of the Earths' resources to spur economic growth and to cater to the gluttonous consumption of the citizens.

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

However, the limitless consumption of the earth's resources will not happen without ecological violence and human rights abuses against those who continue to advocate for ecological balance and those who resisted large scale and corporate mining and other extractive industries that operate in their sacred places.²¹

However, I have also observed that among the IPs themselves, some of them and most particularly, those that have been influenced by modernity, and those that are working in the government and corporations, are supporting corporate extractive activities arguing for the economic benefits of these activities to the communities. The corporations with the support of some members of the Philippine bureaucracy employed bribery, deceit and violence and if needed, a combination of the three not only to entice but to force some of the IPs to support them and to fight against those who are against them, thereby weakening their unity. This has been the strategy used by the corporations and some government officials – divide and conquer. Thus, the IPs have been polarized into two camps – those that openly support these companies and corporations to plunder their environment because they have been receiving favors such as money, employment and other economic benefits and those that strongly resist their presence because of the colossal damage that these companies and corporations will definitely inflict on their environment. Since the IPs have been divided, it is now easy for these companies and their cohorts to wage another form of war.

War against their mind – their original view of nature and the earth

Shiva says that this war against the Earth begins in the mind by destroying the traditional belief systems and values of the IPs in relation to their environment.²² I have witnessed how corporations and businessmen and some of the ruling elites poisoned the minds of the IPs that modernity will bring them so much happiness and comfort. Thus, they must support the exploration of their "dead" mountains and rivers to get the resources that will bring development to their communities. As a result, some of the IPs started to abandon their values of reciprocity and reverence to nature and their spiritual

²¹ Vandana Shiva, "*Making Peace with the Earth*", City of Sydney Peace Price Lecture, November 3, 2010.

²² *Ibid.*

partnership and communion. Thus, the death of Earth as a living and nurturing mother in some of the minds of the IPs facilitate the war against their environment.²³ After all, if the earth is now treated by them as a dead and lifeless object to be exploited, then, nothing is being killed.²⁴ The nurturing earth image being embraced by the IPs since time immemorial was considered as a cultural barrier on the exploitation of nature. The mastery and domination framework created by the modern science and technology removed these cultural barriers. In addition, this framework functioned as a vehicle for the exploitation of nature²⁵. Removing these cultural and even spiritual barriers, the war against the minds of these indigenous peoples waged by corporations and businessmen started with fragmenting their wholistic and systemic concept of life, separating that which is interconnected, disregarding the nature and the web of life in exchange of wealth and capital accumulation to sustain their greed disguised as the modern standard of living and conception of good life²⁶.

When the indigenous peoples' conception of a good life shifted from establishing deep relationship with mother earth and strengthening their intersubjective experience with nature into accumulation of wealth and money, they will be opted to accommodate and even facilitate the entry of corporations and companies into their territories to ensure that they will have regular job and thus, have regular income to support their newly adopted standard of what good life is all about. While nobody has the moral ascendancy to blame those allied with companies and corporations for whatever reasons, we can just assume that during those times it was the best that they could do considering their circumstances. However, this scenario provides us with some concrete data that modern science had been successful in conquering their minds and changing their worldviews. This has subsequent effects in the way some of the IPs practice their agriculture and even in curing and healing the sick members of their family.

For Satish Kumar, the arrogant worldview of the West has led to the demise of reciprocal, mutual, respectful, reverential and

²³ Vandana Shiva, "*Biopiracy: The Plunder of Nature and Knowledge*" (Berkeley, California, 2016).

²⁴ *Ibid.*

²⁵ Vandana Shiva, "*Biopiracy: The Plunder of Nature and Knowledge*" (Berkeley, California, 2016), See also, Vandana Shiva, "*Making Peace with the Earth*" (Cambridge University Press, 2012).

²⁶ *Ibid.*

spiritual relationships between humans and the rest of nature the indigenous peoples in the East had been practicing.²⁷ As a result, many people in their colonized territories have abandoned their reciprocity with nature and start to believe and consider themselves as above nature.²⁸ Kumar even said that "in the recent past, there have been philosophers and scientists who have considered it right for humans to go on a mission of conquering nature through technology, science, industry and trade".²⁹ Thus, the destruction of nature to build modern facilities and infrastructures to support the growing economic demands of the society was justified on the grounds that these are all for the "benefits" of the people in the community.

While it would also be good that these IPs can also benefit in the modern infrastructures and technologies to make their lives "comfortable", this war against their mindset, when carried to the extreme has detrimental effects against their survival as distinct people as well as the survival of the environment. In most indigenous communities that I have visited where corporations and companies are present, different forms of entertainment are also present to entice the IPs to spend their hard-earned money and give them back to the capitalists who are also the owners or friends of the owners of the companies and corporations they are working with. It's like giving them money through one side of their pocket and getting them back from the other. In the end, the IPs continue to live in poverty and they always depend on these companies for survival. Hence, they can be easily manipulated. Some capitalists and corporate owners have been doing these to the IPs here in the Philippines - a country that was colonized by the Spaniards and the Americans who subjected its people to different worldviews and conceptions of a good life and instituted some practices to make the IPs and the local people believe that the lives of the rich and lowlanders are far more superior, happy and comfortable.

Shiva said that one of the ways the global corporate economy conquered the minds of the natives is through biopiracy. This is about stealing the indigenous knowledge and practices through patents and intellectual property rights. For Shiva, these are new forms of

²⁷ Satish Kumar, "Soil. Soul. Society: A New Trinity of Our Time", Leaping Hare Press, 2013.

²⁸ *Ibid.*

²⁹ *Ibid.* 17.

colonization after Columbus and other conquistadores. She further says,

"Five hundred years after Columbus, a more secular version of the same project of colonization continues through patents and intellectual property rights (IPRs). The principle of effective occupation by Christian princes has been replaced by effective occupation by the transnational corporations supported by modern-day rulers. The vacancy of targeted lands has been replaced by the vacancy of targeted life forms and species manipulated by the new biotechnologies. The duty to incorporate savages into Christianity has been replaced by the duty to incorporate local and national economies into the global marketplace, and to incorporate non-Western systems of knowledge into the reductionism of commercialized Western science and technology".³⁰

The freedom that multi-national companies and corporations are claiming through intellectual property rights protection in the General Agreement on Tariffs and Trades (GATT) and its agreement on Trade-Related Intellectual Property Rights (TRIPS) is the freedom that European colonizers have claimed since 1492.³¹ For Shiva, Columbus set a precedence when he treated the license to conquer non-European peoples as a natural right of European men. The colonizer's freedom was built on the slavery and subjugation of the conquered people and communities. This violent takeover was rendered "natural" and "normal" by treating the colonized peoples and communities as mere objects devoid of freedom and dignity.³² Since the natives promoted the values of simplicity and communal living, they did not really "dominate" nature in order to have their needs met. They were not greedy people and they are not also voracious consumers of goods. They live a simple life by befriending nature. But when the Western colonizers came, they introduced to the natives the kind of mindset and worldview that they have to work hard and exploit whatever is there with nature to provide for their needs not

³⁰ Vandana Shiva, "*Biopiracy: The Plunder of Nature and Knowledge*" (Berkeley, California, 2016). See also, Vandana Shiva, "*Making Peace with the Earth*" (Cambridge University Press, 2012), 13

³¹ *Ibid.*

³² *Ibid.* 14.

only today but mostly, in the future. Thus, when they found out that there are many lands that have been idled, they justified their acts of grabbing these lands on the ground that the IPs are lazy because they are not doing anything on these lands. Nowadays, through patents and genetic engineering the land, the forests, the rivers, the oceans, and the atmosphere, in short, the ancestral domains of the IPs are in imminent danger of being colonized, eroded, and polluted.³³

Appropriating this to the context of the indigenous people especially here in the Philippines, it is very clear that the colonizers, lowlanders and the non-IPs' lack of recognition of the IPs unique identity and the lack of respect to their customary and indigenous ways of living has resulted not only to IPs inability to shape their own destiny and achieve self-realizations but also to their collective aspirations for self-determination over their ancestral domains.

War against their traditional farming system

Since all forms of war begin in the mind, Shiva asserts that violent thoughts produce violent categories which construct violent tools to be used for violent actions.³⁴ This is more evident now in the methods used by modern industrial agriculture. According to Shiva, factories that produced poisons and explosives to kill people during the last world wars were transformed into factories producing agrichemicals after the wars.³⁵ Through the phenomenon of the Green Revolution, the methods used by industrial agriculture consider soil as an empty container for industrial fertilizers³⁶. However, just like Shiva, I believe that replacing the natural mechanism of soil to maintain its fertility with chemical fertilizers was neither green nor revolutionary. It was introduced to the people with the overt intention of helping them have bountiful harvests, thereby increasing their income. However, the truth of the matter is that, this is a clear attempt of the owners of these chemicals to increase their profit by allowing the people to be caught in the trap of poverty and dependency. Because instead of helping the local and small-scale farmers, it was a recipe for destroying soil's regenerative capacities, threatening the concept of

³³ *Ibid.*

³⁴ Vandana Shiva, "*Making Peace with the Earth*" (Cambridge University Press, 2012).

³⁵ *Ibid.*

³⁶ *Ibid.*

food security and even increasing greenhouse gases which contribute to climate change.³⁷ Since the ones who are directly affected with climate change are the poor famers, they will be forced to apply for a loan to the suppliers of these chemicals and so the cycle of poverty and dependency continues.

Shiva found out that the green revolution has been sold in India as a kind of miracle that can help increase food production. However, Shiva said that the green revolution did not help increase the overall schemes and processes of food production because it only helped produce rice and wheat. For Shiva food includes cereals and pulses and oil seeds and vegetables, not just rice and wheat³⁸. Shiva also found out that because of the technology used to increase production of rice and wheat, the diversity of other crops was destroyed. Thus, soil's nutrition and natural fertility decreased as toxics contents in the lands increased³⁹, making it difficult to produce other crops without the support of fertilizers being sold by the capitalists. The green revolution is a myth and it hides both the food production lost, and the costs of the burden of environmental toxicity that communities have to carry in order to provide toxic food to the people, thereby, slowly killing them. Shiva also found out that the monocultures of rice and wheat are a perfect breeding ground for pests⁴⁰. For Shiva, who is also practicing organic farming, pests are not a problem in ecologically balanced agriculture but in an unstable agricultural system they pose a series of challenges and threats to agronomy.⁴¹

In almost all indigenous communities in the Philippines today, the introduction of Genetically Modified (GM) plants such as corn and rice has eroded not only their traditional varieties of corn and rice but also their traditional farming system. Many experts and technocrats enticed the IPs to adopt the GM corn and rice to have increase production with less expenses because they don't need enough laborers. They only need a handful of persons with their knapsack sprayer to clear the fields from weeds and pests. Thus, they are made to believe that they can have greater harvest and thus, greater income. Yes, for few years they were able to have good harvests. However, as I

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

have observed with many poor and indigenous farmers in Mindanao, after the harvests they remained to be poor. They even have barely enough left for their own consumption because the bulk of their harvests will be given to the “compradors” who are also the financers of fertilizers and pesticides that they need. What is worst in this scenario that I have experienced is that, these compradors are the ones dictating the price of these fertilizers and pesticides as well as the price of the agricultural harvests.

I have to clarify that I am not against the modern farming system especially those that advocate organic technologies such as the Lao Integrated Farm found in Marber, Bansalan, Davao del Sur⁴² and some other farms that advocate modern farming system through the use of organic technologies. What I am seeing as problematic is the imposition of modern farming technologies by scientists and capitalists through the use of pesticides and herbicides. One of their strongest arguments is that, the poor famers will have plenty of profit because in the production, they will not need more people, thus, less operational expenses. However, a one gallon herbicide called “round-up” will cost a famer one thousand five hundred pesos (1,500.00) plus a sprayer which is around one thousand pesos (1,000.00) with a total of two thousand five hundred pesos (2,500.00) if you will be the one to do the spraying. If you will hire someone who will do the spraying, that will cost you an additional of one thousand pesos (1,000.00) with a total of three thousand five hundred pesos (3,500.00) for one hectare.⁴³ When you asked your neighbors to help you in clearing your one -hectare farm, it will cost you around four thousand pesos (4,000.00) for salaries and food. Economically, using herbicide for clearing your farm example will give you a profit of five hundred pesos (500.00). But as IPs, you need to factor in the social and cultural aspects of such traditional practices. When people come together to clean their farms, they create a sort of bonding that deepen their relationships as members of one tribe. During the cleaning and even harvesting, they also performed rituals as a community thanking their deity and the spirits of the bounty of his creation. The friendship and the community that was strengthened as well as the long-term benefits of traditional farming system will eventually give you enough

⁴² For more information visit <https://www.lao-integratedfarms.com/about-lao-integrated-farms>

⁴³ This figure is based on my casual interview with the farmers. I also visited agricultural enterprises to check the price.

reason to advocate the traditional farming system. To be more productive socially and economically, there is a need for these IPs to also learn the modern farming system practiced by Lao Integrated Farm and their “new” technologies of organic farming.

Now I would like to compare this practice with the modern-day farming system imposed by technocrats through the use of herbicides and pesticides and other chemicals that have destroyed ecosystem not to mention the traditional farming systems and practices and culture the IPs in general. Clearly, this modern-day farming systems only cater for the needs of the capitalists but not the communities. In the long run, I would like to argue that this kind of farming practice imposed by state's scientists and technocrats is their way of controlling the IPs and forcing them to vacate their lands and move to the more fertile and “undisturbed” lands in the far-flung areas. Some of these IPs would even allow these companies to rent their lands for years and they will be forced to act as mere workers of these corporations. Their lands will be planted with commercial plants like bananas, palm oil and others. Because these plants are heavily dependent on chemicals, these corporations will put so many chemicals to their lands in order to have greater harvests but without consideration and empathy to the lands and the people who are the stewards of the lands. As a result, some of their indigenous plants which they used as traditional medicines were killed because of the pesticides and herbicides which are being used to kill the weeds and the pests along with other living organisms that are important in the preservation of the natural fertility of the soil. After the contract, these corporations will return their lands which are not already arable. Those that were not leased to corporations but still practiced the use of chemicals and pesticides will also found out that their lands are no longer arable without the support of these chemicals and pesticides.

For Shiva, pesticides, which started as war chemicals, aimed to control pests have failed to control pests.⁴⁴ On the contrary, they even led to the emergence of new pests, and emergence of resistance in old pests, requiring increased pesticide use. Thus, for Shiva, pesticides create pests through the destruction of the ecological harmony which has the natural mechanism to control pests.⁴⁵ Having destroyed nature's mechanisms for controlling pests, the green revolution did

⁴⁴ Vandana Shiva, “*Making Peace with the Earth*” (Cambridge University Press, 2012).

⁴⁵ *Ibid.*

not give miracles to the farmers but instead additional burdens.⁴⁶ In addition, the spread of herbicide resistant crops has destroyed biodiversity and is causing birth defects and have been found to lead to allergic reactions, and affect fertility.⁴⁷ In the long run, they will be forced to rely on these expensive pesticides and herbicides to be able to produce a harvest which is only enough to pay their debts because the regenerative capacity of the soil was lost. In addition, when they and their family members will suffer the side effects of using these products to their health, they will need money and most often they will end up borrowing money (through a loan) to the companies that provided them pesticides and herbicides. In the end, they become poorer and the capitalists – the suppliers of all these products become richer. Hence, they have been colonized again and again.

Kumar says that “this war against nature is driven by our conviction that the function of nature is to fuel the engine of the economy”.⁴⁸ But the truth of the matter according to Kumar is that, “the economy is a wholly owned subsidiary of ecology and If the natural capital is depleted, the natural environment is destroyed, then the economy will come to an end.”⁴⁹

Thus, when you try to analyze the scenario, development technocratic aggression is a new form of cultural annihilation by destroying their freedom and capability to perform their traditional farming systems and other cultural practices. But when they are given the freedom to manage and control their cultural communities without external manipulation, they will surely treat their land and soil like how they treat their nurturing mothers. The IPs consider their lands as sacred, as living being and so reverence and respect of their lands are one of the important values for the IPs. To be able to save the remaining flora and fauna in the Philippines, it would be good if local communities especially the IPs will be given voice to participate in the discussion and avenue to showcase their values and belief systems. In addition, it is also good that they will be given freedom as well as support to exercise their own way of managing their ecosystem. Given the inextricable spiritual partnership between the indigenous peoples and their land, any loss of natural resources threatens not only their

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Satish Kumar, “Soil. Soul. Society: A New Trinity of Our Time”, Leaping Hare Press, 2013, 17.

⁴⁹ Ibid. 17

cultural identity but also their survival. Thus, we can just assume that they will really take care of their environment. This assumption is not devoid of historical evidence and basis. In fact, for most communities that still have the “strong” control of the IPs, their biodiversity is still intact.

But what is really indigenous knowledge? Is indigenous knowledge scientific knowledge? How is this knowledge formed? According to Senanayake,

“Indigenous knowledge is the unique knowledge confined to a particular culture or society. It is also known as local knowledge, folk knowledge, people's knowledge, traditional wisdom or traditional science. This knowledge is generated and transmitted by communities, over time, in an effort to cope with their own agroecological and socio-economic environments. It is generated through a systematic process of observing local conditions, experimenting with solutions and readapting previously identified solutions to modified environmental, socio-economic and technological situations. Indigenous knowledge is passed from generation to generation, usually by word of mouth and cultural rituals, and has been the basis for agriculture, food preparation and conservation, health care, education, and the wide range of other activities that sustain a society and its environment in many parts of the world for many centuries.”⁵⁰

There had been success stories of indigenous peoples and communities in maintaining the rich biodiversity of their lands while promoting plenty of harvests through the practice of their indigenous knowledge in managing their lands. One of these success stories is the community of Tinoc in the province of Ifugao in the Cordillera Administrative Region (CAR) of Northern Philippines. According to the report published by the Tebtebba Foundation in 2017 entitled *“Indigenous Peoples’ Low Carbon and Climate Friendly Sustainable Livelihoods”*, the municipality of Tinoc has a total of 13,000 population with 37,000 hectares of land, is well managed and maximized by the indigenous peoples, who were able to partake in the allocation of the different areas of the municipality according to different land uses

⁵⁰ S.G.J.N. Senanyake, “Indigenous Knowledge as a Key to Sustainable Development”, *Journal of Agricultural Sciences*, Vol.2, (1), 2006.

through their Comprehensive Land Use Plan (CLUP).⁵¹ The sustainable livelihood project in Tinoc with its main goal to enhance their ecosystem for food sovereignty and to attain self-sufficiency was carried out by the indigenous peoples as part of their territorial management program.⁵² In order to achieve these, the project did a rigorous campaign for the revival of synchronous cropping, intercropping or 2nd cropping and it also did innovations on soil enhancement through production of indigenous microorganisms and biofertilizers to increase organic matter in soil and to increase carbon sequestration of the soil.⁵³ Another integral component of the project is strengthening customary governance for the collective control and management of forest, water, and revival of synchronized cropping.⁵⁴ Despite the low support of the government, the projects had achieved remarkable successes such as strengthening of traditional governance on their lands, territories and resources.⁵⁵ As a result, the community was able to demarcate communal lands which are reflected in the municipal land use plan. Likewise, their documentation on traditional knowledge had been maximized in various forum to exemplify the importance of revitalizing traditional knowledge on agricultural practices.⁵⁶

In Mindanao, with the Mansaka, there is also a Cacao Processing Project for their sustainable development. Despite poor support from the government, they have achieved remarkable success.⁵⁷ While it was just starting, the cocoa production has already helped generate income for the organization.⁵⁸ The Mansaka farmers were also able to add values to their produce from their own farms because of cocoa farming and the community are assured of price stability because they have direct access to buyers.⁵⁹

⁵¹ Tebtebba Foundation Report Entitled "*Indigenous Peoples' Low Carbon and Climate Friendly Sustainable Livelihoods*", www.tebtebba.org, www.indigenousclimate.org, 2017.

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ *Ibid.*

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

Towards Supporting and Advocating Indigenous Ways of Managing the Ecosystem

My argument to support the promotion of indigenous wisdom in managing the ecosystem is grounded on my experience in living with many IP communities in the far-flung areas of Mindanao, witnessing how they lived their life with reverence and reciprocity with nature as well as on the philosophies of Vandana Shiva and also Satish Kumar who are both eastern philosophers and environmentalists. For Satish Kumar, "soil is the source of all life, literally and metaphorically and that, all life comes from the mother soil and returns to her".⁶⁰ Thus, for Kumar, he loves soil as his mother and take care of her.⁶¹ Kumar even made a beautiful analogy of the interconnectedness of life when he said that "If my outer body is soil, then my inner being is the soul. As I cultivate the soil to grow food for the body, I take care of the soul and cultivate love, compassion, beauty and unity to realize the harmony within and without".⁶² He continued, "when I am at ease within, I am at ease without. I am at ease with the whole of humanity. Through caring for soil (land) I am a member of the Earth community and through caring for society I am a member of the human community".⁶³ Kumar's new trinity of "Soil, Soul, Society" is a way of saying in three words the interrelatedness, interconnectedness and interdependence of living organisms here on earth.⁶⁴ For Kumar, this is a trinity of wholeness and unity of life in its myriad forms.⁶⁵

In Shiva's "Making peace with Earth", she said that managing ecosystem must begin in our minds and it involves changing our paradigms and worldviews from those based on war with nature to those that recognize that we are all interconnected in one web of life.⁶⁶ It involves a shift from domination of nature through the science that promotes fragmentation and reductionism to rewiring ourselves with nature through a science that is systemic (not only systematic) and

⁶⁰ Satish Kumar, "Soil. Soul. Society: A New Trinity of Our Time", Leaping Hare Press, 2013, 10.

⁶¹ *Ibid.*

⁶² *Ibid.* 10.

⁶³ *Ibid.* 10.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ Vandana Shiva, "Making Peace with the Earth", Cambridge University Press, 2012.

holistic.⁶⁷ It also involves inclusion of biodiversity of knowledge systems – of women, of indigenous communities and the people living in the locality.⁶⁸

Conclusion

Reconnecting and communing with Mother Earth is an ethical and ecological imperative.⁶⁹ For Shiva, recovering and protecting the commons such as forest, rivers, mountains is vital to making peace with the earth, and maintaining peace within and between communities.⁷⁰ The IPs in the Philippines had been given rights by the government to manage and control their ancestral domains where most of these commons are present. However, many companies and corporations have encroached into these territories (with the support and blessing of some national and local politicians) without coordinating or getting consent from the local people. In some cases, consent was bought or given by the leader or representative of the IPs who are appointed and installed into office by the government. Mostly, they are not the traditional leaders of the community. But once installed into office, they have the power to negotiate, approve and deny people and corporations in doing business to their ancestral domains. In many cases, they received money and other forms of favors from corporations, businessmen and politicians in exchange of permits or licenses to get huge hectares of land for their business activities. Many of these companies have destroyed not only the culture of the IPs but also their environment. This is because most of the owners of these companies and corporations have different worldviews, values, belief systems as regards to nature and environment. They promote exploitation of nature to provide the voracious needs of human beings. To be able to save mother earth from further destruction, it is necessary that indigenous peoples and communities must have a voice in the design, deliberation, implementation and monitoring of policies and programs related to farm and environmental management. Concretely, it is an imperative that they will be given the freedom as well as the necessary support to

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

exercise their indigenous knowledge and capacities to manage their land and their ecosystem.

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