

*“Because it is the nature of the sky and the earth to be frugal
Even human beings cannot alter this nature
without suffering the consequences
When we sincerely follow the ethical path
We become one with it,
When we become one with the ethical path it embraces us.”* (Sincerity, #23)¹

Chapter Six: The Climate Crisis and Global Development

Development as a form of advancement and progress, has been a contributing factor to the climate situation in which we find ourselves. An incessant push to expand production, infrastructure, and services has often been done without explicit consideration for the environment, and an erroneous assumption that we live on an earth with infinite resources. Any discussion on global development today would be remiss without an analysis of the relationship between the climate crisis and development. This is the intention of this chapter. It is important to begin with the environment and what that means; it also has something to do with the dominant view of anthropocentrism which has plagued our general understanding for centuries. And while many development projects have considered the environmental impact of their actions, but also addressed the needs of the entire ecosystem, and not just the environment of humans, this is not enough. I begin with thinking about sustainability, and in particular the Sustainable Development Goals and the current discourse that sets the development agenda for many multilateral and bilateral actors. The need for a paradigm shift from an anthropocentric one to a more bio/eco-centric one will be discussed, as well as the importance of thinking about the climate crisis and global development from a deep green ethical theory put forward by Richard Sylvan. The greening of ethics will be stressed, as well as the ethics of greening. Particular challenges of the climate crisis that intersect with global development will be identified and analysed; and finally, some thoughts on the implication of practice will be offered. This then concludes with how deep green theory becomes another component of a strong ethical approach.

The Environment and Our Place in It

How we think about the environment and our place in it very much depends on how we conceptualize that relationship. Of course, each of us has a relationship with the environment – some more than others. And by this, I just don't mean those of us who engage in outdoor activities; I think it goes beyond our physical activity within the environment and concerns our subjective experience in relation to the environment. If I consider myself as one component of the environment, this relationship will differ from the one produced if I was to consider myself as one of a species that dominates the environment. Seeing myself as one part of the environment will help in recognizing that I need to think about the possible consequences of my actions on my existence, and the existence of others —not just human others. As well as ethical implications there are also metaphysical ones.

Anthropocentrism, a human-centered notion, has dominated western thinking for centuries. Many religious texts, such as the bible, have only reinforced this notion. The Dominion thesis: humans have dominion over non-humans is still entrenched within the social fabric of much of our world. And this has given humans licence to do what they want with the environment. However, other religious or if you like ethical doctrines such as the Dao de Jing (an excerpt of which is an epigraph to this chapter), have pre-empted the negative effects of the impact of humans on the environment. A text written circa the 4th century B.C.E. distinctly denotes the danger of anthropocentric thought. The human race has clearly not been frugal with the sky and the earth, and is now suffering the consequences. To embrace the ethical path may be a bit late, but it is our only hope if we want to at least mitigate further destruction. The only way forward is a paradigm shift in the way we perceive our existence in this world.

Sustainability in the Sustainability Development Goals

The concept of sustainability is a complex one and has different meanings and interpretations dependent on the context in which it is used. The concept suffers from the absence of a level of critical scrutiny. This is the topic of this section. In 1983, the Brundtland Commission was the first UN group to use the term “sustainable development”. It was defined as a form of development, “to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.”² A form of sustainability understood as meeting the needs of the present without compromising future generations is unachievable in the current context, because we have been unable to meet the needs of the present population. So, before we can begin to think about future generations, there is some urgency to fulfill the needs of current generations. This is a significant tension, because satisfying the needs of current generations may compromise those of future generations. Alas, there is a need for a cognizance that the natural resources derived from the earth are in fact finite. A disheartening truth is that the current needs of some will be unfulfilled without drastic structural changes to the global economic order. This requires confronting some very difficult and uncomfortable issues about the accountability and responsibility of individuals and institutions—which is very much connected to the overall argument of this book.

In Chapter One I mentioned the Sustainable Development Goals (SDG), the 17 goals put forward by the United Nations in 2015 to be met by 2030. Unfortunately, the COVID-19 pandemic will greatly impact the possibility of meeting these goals, although some of them were unmeetable to begin with, such as Goal 1: to end poverty, in all its forms everywhere; and Goal 2: to end hunger, achieve food security and improve nutrition and promote sustainable agriculture. Apart from setting lofty goals which in reality are impossible to meet, there are two other things absent from the SDGs that will ultimately contribute to their unattainability. These are the absence of a conceptual understanding of sustainability which extends the concept to a non-anthropocentric one, and the absence of an ethical

dimension that analyses the level and extent of responsibility that individuals, countries and institutions have. While this definition of sustainability was introduced to explain sustainable development, it has also been used ubiquitously to define sustainability. To be able to reach or even attempt to reach the targets set out by the SDG by 2030, there needs to be some understanding of the actual situation, to understand the factors that contribute to such disparate conditions. In Chapter Two I offered the analogy of the five horse-riders of the apocalypse claiming that the five horse riders represented human caused atrocities. It is not difficult to see that our current world is unsustainable.

Moving Beyond the Anthropocentric Paradigm: Understanding Sustainability Differently

Another definition of sustainability worthwhile considering is the following by Tim Delaney, “sustainability refers to the ability of an ecosystem to hold, endure or bear the weight of a wide variety of social and natural forces which could compromise its healthy operation.”³ The value of this definition comes from its non-anthropocentric standpoint, since it considers the entire ecosystem, and not just humans. It considers social forces, in other words, human generated ones which compromise the ecosystem, today and in the future, without ignoring the impact of natural forces. However, even the ability of an ecosystem to hold, endure or bear weight now and in the future is also not possible without a sense and practice of an ethical dimension. Unfortunately, the concept of sustainability is used in so many different contexts, and understood or misunderstood in other ways. However we understand sustainability should include some level of ethical analysis and reflection which leads to the next section.

The Greening of Ethics

Traditional ethical thinking has been confined to our relationships with other humans only. In

the field of environmental ethics, primarily due to the urgent need to do so, there is now awareness that we must also consider non-human beings, the biotic community in its totality. The shift from anthropocentrism to a more holistic, biotic paradigm is crucial not only for environmental ethics, but for ethics in general. A genuine form of ethics generates a critical reflection on our actions as individuals but also includes social actions, and must extend to consider non-human and other living beings too. For too long, humans have abused and exploited non-human and living beings on this earth to the extent that we are now witnessing the harm and irreparable damage that has been inflicted.

Richard Sylvan, the late Australian philosopher and David Bennett discuss the way humans, although completely dependent on the environment for their existence and continuity, have exploited the environment for their own benefit with little consideration for the ecosystem as a whole.⁴ They say, "Human creatures, like others, depend on a satisfactory environment for their well-being and their very survival. But in their dealings with it, so-called developed societies have learned hubris, not wisdom."⁵ Sylvan and Bennett discuss human chauvinism, translated into control and domination by humans of non-human species as well as forests, rivers, and the treatment of the environment as something available to our disposal, to be manipulated and exploited without repercussion. The human race has for centuries, used and abused the natural resources (living and non-living) which we live beside, with little thought about the consequences this persistent abuse has had and continue to have. This is like saying that someone who has been repeatedly tortured or even witnessed gross violations against human dignity will weather no damaging or long-term physical or psychological effects. A constant, repeated harm to a subject, whether human or non-human, which includes, land, river, forests and so on, can only result in harm to the subject's existence.

There is an urgent need for realizing that as a species, we are only one among many, that our existence is interdependent and inter-related with other species, just as much as other nonhuman species are with us. "Once again humans need to remember that they need other species more than other species need them. Humans are more likely to miss rainforests than rainforests are likely to miss

humans.”⁶ There is a pressing need to refrain from treating other non-human species and the environment as mere objects.

In philosophy, for centuries, moral concern has been limited primarily to humans. “The non-human world did not qualify in and of itself as an object of moral concern or even as the sort of thing that could be considered for inclusion.”⁷ However, this notion has become increasingly contentious with the rise of environmental philosophy and ethics. It has also given rise to different levels of environmental ethics. Sylvan and Bennett describe them as shallow, intermediate, and deep. This will be discussed in the next section.⁸

The Ethics of Greening

The type of ethics needed to combat the current climate crisis is of a deep type. To enable some understanding of what a deep green ethics might look like it is helpful to understand the other types of ethics that have preceded it, and provide some reasons as to why these other types have not gone far enough in responding to the crisis. A shallow form of environmental ethics, is anthropocentric. In a shallow form of ethics, non-human species and the environment hold instrumental value only. Their value, lies in the interests and utility of humans only. Sylvan and Bennett consider two arguments: prudential and instrumental that uphold a shallow environmental ethic. The prudential argument pleads for the prudent treatment of the environment but only as a way to benefit humans. “Prudential arguments are arguments encouraging humans to exercise wisdom, but mainly the wisdom of protecting human interests.”⁹ Instrumental arguments about nature and the environment provide justification for the instrumental use of the environment for the benefits of humans.

An intermediate form of environmental ethics will acknowledge the value of non-human species and other elements of the environment such as rivers, trees, and mountains, however only second to human concerns. Sylvan and Bennett named this type of argument relevant here as extension

arguments. They offer two examples: Aldo Leopold's land ethic and Peter Singer's Argument from Marginal Cases (explained below). These arguments are important for two reasons. First, they reject the 'sole value assumption' that only humans have value, and second, they extend the ethical framework already established to non-human beings. In the discussion about Leopold, Sylvan and Bennett say the following, "He recognized that items in the natural environment, such as a biotic community, have value-in-themselves as well as or despite any value they may have for humans."¹⁰ A second extension principle of Leopold's land ethic extends the ethical community to include the entire ecosystem. In Leopold's words, "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively the land."¹¹ Leopold's stance has been criticized by noting that since some entities included in Leopold's biotic community cannot reciprocate moral obligations, then they cannot be deemed part of the ethical community. Callicott and other defenders of Leopold have stated that reciprocity of moral obligations is not a necessary condition for being considered a part of an ethical community. This should not lessen the moral obligation we have towards them.¹²

The Argument from Marginal Cases comes from Peter Singer, a staunch advocate of animal liberation. His argument based on utilitarian principles claims that non-human beings as sentient beings suffer, as humans do. Therefore, we should treat them as we do humans. This argument arose in response to the appalling treatment and abuse of animals in medical and scientific research, but also for the ways in which animals are treated and abused, and therefore suffer, in the entire food production process. Singer also argues against speciesism claiming that we must also give equal consideration to non-human beings. Singer does recognize that there are differences between humans and non-human beings. However these differences do not justify the abuse and treatment of non-human beings by humans. He says, "There are important differences between humans and other animals, and these differences must give rise to some differences in the rights that each have. Recognizing this obvious fact, however, is no barrier to the case for extending the basic principles of equality to non-human animals."¹³ While Singer does argue for the equal consideration of all beings who suffer, this does not

mean identical treatment. For Singer, “Equal consideration for different beings may lead to different treatment and different rights.”¹⁴

Although these extension arguments are important for provoking a change in attitudes, for Sylvan and Bennett they do not go far enough. Although, Leopold's land ethic extends the boundaries of the ethical community, it is still within an ethical framework embedded in humanism. The ethical framework that gives rise to its application needs to be further extended to include non-sentient beings as well, such as the rivers, forests, mountains, and so on. In other words, other entities within our ecosystem also have intrinsic value, not just humans. The departure of the ethical framework is non-anthropocentric. This will be further discussed in the next sections on deep environmental ethics and Sylvan's deep-green theory.

Two distinct features set a deep environmental ethic apart from shallow and intermediate ones. First, the rejection that only humans have value,¹⁵ and second, rejecting the notion that it is only humans that have greater value; that humans will always outweigh the value of other nonhuman entities. One of the most salient features of this ethic is that it demands a level of accountability on the part of humans, for the way we treat and exploit our surrounds. This notion is not limited only to what we as individuals do, but also to what institutions, corporations, governments, and others do. As Sylvan and Bennett say, “In light of the short-term exploitative position, this means that humans are accountable for their treatment of the environment and things in it, but also, that they can no longer justify by a spurious sense of moral superiority their environmentally destructive conveniences and whims.”¹⁶ Many people may find this unsettling, and thus, may consider that this places too great an ethical burden on them. However, as Sylvan and Bennett pointed out 27 years ago now, and is even more urgent today, “An environmental ethic or philosophy must be viable as well as consistent with environmental and ecological principles. This is exactly what the environmental crisis is forcing Western societies to face – the current treatment of the environment is not viable. Furthermore, for humans to promote their own survival by the destruction of the environment and other species is no

more than an imperious delusion.”¹⁷ For an environmental ethic to be viable, its principles must be able to be translated into action. It is very much a practical ethic.

A deep environmental ethic is the Deep Ecology theory put forward by Norwegian philosopher Arne Naess. While this theory has acquired many followers over the years, it also has its critics. At the core of the deep ecology movement is *ecosophy*, an attempt to create an awareness, an attitude, a way of life that brings wisdom to the 'eco' understood to be one's home, environment, place. The fundamental idea of *ecosophy* is the ability to live in harmony in nature, hence requires prudence and wisdom. Other important principles include biospheric egalitarianism, and self-realization.¹⁸

Biospheric egalitarianism gives value to all forms of life. To deep ecologists, all life has intrinsic value. An interesting component of deep ecology is that 'life' is not confined to human and non-human beings. Life is what rivers, mountains, and entire ecosystems have. This maxim has been a constant criticism of the deep ecology movement. Sylvan argues that the term 'biosphere' is a misnomer since it gives life to non-living entities too. It is also unrealistic to assume that all living and non-living beings can and should be treated equally. Naess recognized this and qualified the idea by stating that the notion of equality was good in principle only. However, for Sylvan this is inadequate. Any theory needs to be applicable too. As such, it becomes an empty maxim.¹⁹

Another aspect of Naess's *ecosophy* is self-realization; for deep ecologists this is not only the realization of self, but also an understanding of self as part of the ecosphere. Who we are, and what we do, cannot be thought of as separate from our connection and interdependency with the environment. Self-realization in this context does not promote selfishness, but rather a more collective notion of self. For Sylvan, deep ecology theory is analytically weak and not well articulated. The absence of an adequate theorization of self gives rise to a weak understanding of self-realization. Around the same time that deep ecology was introduced Sylvan and Bennett put forward their deep-green theory. This is the topic for the next section.

Deep-Green Theory

Deep-green theory is now recognised as a deep environmental theory offering a different paradigm from the prevailing philosophical one that is restricted to a shallow or intermediate environmental ethic. While deep-green theory can be deemed similar to deep ecology, there are also many contrasts. The main principle that both share is the complete rejection of human chauvinism. Both theories discuss the intrinsic value of all living beings, and non-living beings such as rivers, forests, mountains, and so forth. But while deep ecology espouses the principle of biospheric egalitarianism, deep-green theory does not. As well as espousing the intrinsic value of all living beings, Sylvan claims that something can be of value independent of a valuer. This is further discussed below.

A principal difference between deep-green theory and deep ecology is that the former's theoretical underpinnings are completely philosophical, whereas in deep ecology, they are philosophical and religious. This difference is significant because what Sylvan and Bennett offer is a well-articulated and analytical framework, based on logical arguments and reasoning, separate from the relativist positions that some religions defend.

Deep-green theory attempts to alter the ethical paradigm from which shallow and intermediate ethics cannot escape. This ethical paradigm is still human-centered, so regardless of whether you consider a non-anthropocentric position, because this is still enshrined within a human-centered ethical paradigm it only perpetuates a form of anthropocentrism. An ethical paradigm in deep-green theory does not essentially appeal to the sole importance of humans, or other groups based on features such as sentience. It demands a complete shift in perspective. The new focus should be categorical distinctions that are morally relevant.²⁰ As a response to deep ecology's unsatisfactory biospheric egalitarianism, Sylvan and Bennett offer the *principle of eco-impartiality*. This principle is based on the notion that there would be no significant differential treatment of anything human/non-human. This allows for the fact that although all living and non-living things do have intrinsic value, this does not demand that

they are all treated equally. As Sylvan says, “impartial treatment does not entail equal treatment, or equal consideration, and does not require equal intrinsic value or other value.”²¹

Deep-green theory is broader in its perspective for as well as considering ethics and axiology, it also includes the need for a more radical socio-political theory. Sylvan argues for pluralist anarchism which is anarchism based on social forms of organization. While I believe that one of the biggest problems today is capitalism, and that a pluralist anarchism may be a viable solution, I will not endeavor to analyze this further here.²² Sylvan’s deep-green theory is not only concerned with strictly environmental issues but also with those that are environmentally relevant, such as peace and war, nuclear energy, poverty and hunger, non-human beings and their habitats and so forth. With this, comes the need to transform political structures otherwise we go nowhere. And this is one of the reasons why it is important to consider the climate crisis and global development.

Problems with a Deep-Green Theory

While I advocate for a deep-green theory and consider it as component of my strong ethical approach, like any theory, some aspects require further scrutiny. One of the things that I find favourable is the way that Sylvan describes his deep-green theory not as a type of applied ethics that can be found in medical ethics, business ethics, and others. An applied ethics, the application of principles and values to a subject does not go far enough. The idea of a deeper green ethic is not limited to application, it is theoretical in nature, but of course is concerned with practice. Not only this, but other areas of philosophy play a part in its development such as metaphysics and epistemology. This is consistent with my own understanding of what development ethics should be. Development ethics cannot be limited only to the application of principles and values to development practice.

Sylvan’s view on values being independent of a valuer has received some criticism.²³ A forest is valuable for its intrinsic value. It does not require a valuer to give it value. William Grey considers that

there is some vagueness to this claim, particularly when Sylvan also claims some cultural variability to values. As Grey says, “ The strong thesis that values can exist in worlds without (actual) valuers is a difficult position to defend, and is moreover a position which becomes unstable when combined with the claim that values are subject to cultural variability.”²⁴ What might be more plausible to say is that, cultural variability alone does not justify a shift in values resultant of a certain valuer within a particular culture. Just because a culture claims a certain value to be good, does not mean it is good.

Sylvan does reject the notion of self-realization as a goal for deep ecology. He says, “Ecology, deep or shallow or systematic, is not an ego-tripping or a personal thing. Granted those who do have and share certain attitudes and feelings to natural environments are much more likely to become active supporters or followers of deep ecology or to adopt a deeper ecological stance, even so such states as self-realisation or ecological consciousness are neither necessary nor sufficient for this.”²⁵ If Sylvan was alive today, I would suggest to him to rethink this notion. I think that one of the contributing factors of the climate crisis is the absence of an awareness of our relationship with the environment. As I discussed earlier in this chapter: how we think about the environment and our place in it very much depends on our relationship with the environment. I can’t help but think that some enhanced awareness and understanding of self (or non-self in Buddhist terms) is a necessary condition for ecological consciousness. Notwithstanding, there are enough aspects of Sylvan’s deep-green theory to warrant its value: rejection of human chauvinism, extending intrinsic value to all living beings and some non-living beings; the principle of eco-impartiality and radical political and social changes. In the next section, I offer some discussion of the current state of the environment from a political standpoint particularly in Australia and the United States.

Political Apathy

One of the first things President Joe Biden did in starting his term in January 2021 was rejoin

the Paris Climate Accord—a political milestone, but also a symbolic gesture to reflect a turnaround of the lodestar guiding the United States. And since then, a lot of the draconian and backward policies Trump implemented against the environment have been overturned. Unfortunately, Australia has not seen the same progress. The current Morrison government has unashamedly pushed forward non-environmentally conscious policies and programs with Australia looking to being left behind when it comes to becoming a green country. In 2019 the federal government and state government of Queensland approved the construction of the Adani coalmine.²⁶ In a period where scientists caution against the continued exploitation of fossil fuels, and encourage research and investment in renewable energies, the Australian government decided to ignore the science and invest in energy sources that are guaranteed to deepen the environmental crisis and destroy already fragile environments such as the Great Barrier Reef to defend so-called national economic interests. Sylvan talks about the Great Barrier Reef as one of the many environmental riches of Australia. What would he say today, as we witness the coral bleaching and irreversible damage of the Reef. He cautioned against environmental complacency, arguing that all was not well. It seems that this environmental complacency is one major cause of the environmental damage we see today.

Australia, once recognized as a vanguard in the environmental movement for its investment in renewable energy back in the 70s, has now, become environmentally stagnant.²⁷ Sylvan & Bennett described Australia as a bellwether territory, “It is estimated that Australia has more members of environmental groups in relative terms than almost any comparable country.”²⁸ Despite this, according to The Climate Institute, Australia is the worst polluter per head among developed countries. Since 1971, carbon dioxide emissions have nearly tripled and we have seen a decline in the use of renewable energy. This is in a country with much potential for wind and solar energy. On the heels of the U.S., there is the promotion of a lifestyle that is unsustainable. Unfortunately, Australia's economy has been built on the exploitation of natural resources, and resource-intensive agriculture. A carbon tax implemented in 2012, was quickly overturned in 2014 with the change of government. So, rather than

environmental policy gaining momentum, environmental protection has been minimized.²⁹ One can plainly see that the paradigm from which climate and other environmental policies emerge are strictly within a shallow environmental ethic, if an ethic at all. The focus is essentially anthropocentric with little concern for the well-being or sustainability of the entire ecosphere, except in the interests and benefits of humans, and often a few rich ones.

An environmental impact analysis of the proposed Adani coal mine concluded that possible impacts include: negatively affecting the water table of the Great Artesian Basin; reducing the habitat for wildlife and endangering species such as the ornamental snake, squatter pigeons and the black throated finch; increasing the possibility of coral disease and ultimately, significantly increasing greenhouse emissions. These can all be considered unintended consequences. However, we have reached a stage, that as a result of unintended consequences over the last couple of centuries, we are now witnessing a desperate global environmental crisis. We can no longer devise any project that will impact the environment in any way, without attempting to anticipate some likely negative consequences and make responsible decisions. Otherwise, it is irresponsible and morally wrong. There is a desperate need for a paradigm shift from a shallow environmental ethic to one consistent with deep-green theory. Before I enter into a discussion of what that paradigm may look like, I offer some thoughts on why we are still stuck in this weak one.

Environmental Ethics and Development Ethics Still on the Margins and the Need for Helpful Philosophy

In the preface of the book, *The Greening of Ethics*, Sylvan and Bennett say the following, “the biosphere, as a system capable of supporting versatile and diverse life forms satisfactorily, will not tolerate indefinitely present patterns of energy and resource use, waste production and life-support-systems degradation, by concentrated human communities. Conditions for satisfactory lives for many

species, including humankind, will deteriorate further in the next century [i.e. this one], perhaps disastrously, unless some fundamental changes are made, and made soon, to these patterns. Ideas and motivation for such fundamental changes, for an environmental transvaluation of widespread basic values, are accordingly needed, desperately needed.”³⁰ The authors go on to say in the book and in other sources,³¹ that these ideas and motivation should come from environmental ethics, and philosophy in general. Sylvan argues that philosophy is to blame for the way it has promoted certain ideologies embedded within enlightenment ideas of rationality that are completely anthropocentric. I think we can say that it is not totally the fault of philosophy; I also believe many political leaders now and in the past, are also at fault and to a certain degree, all of us.

Problems arising in thinking about the environment are directly related to the practice of global development. The principal obstacles for global development are not based on scientific fact or evidence. They are attributable to a gross abandonment and ignorance of other factors such as: national interests, power and domination, skewed values, attitudes, among other things. And since these occur at the structural level as much as the individual level, it will be very difficult to budge—or if you like transform—these structures. The same can be said for obstacles concerning the current climate crisis. Thinking that we can address these obstacles in both global development and environmental degradation purely by individual behaviour change is delusional. That is a necessary but insufficient condition. What is required is both individual and structural change.

In Chapter Four I discussed the importance of doing helpful philosophy; this is also necessary when thinking about the environment. It is not enough that philosophical thinking be instilled into environmental issues; philosophers need to become engaged in the theory and practice of environmentalism. At the time Sylvan was writing *The Greening of Ethics*, he also noted that “environmental ethics and environmental philosophy have been unable to gain more than occasional marginal status in philosophy curricula.”³² I think the situation is better now: there are more courses on environmental philosophy offered in universities, and other fields such as environmental ethics,

health care ethics and development ethics are gaining more ground, but there is still much more we can do. There is something to be said about doing helpful philosophy. One of the most crucial ways is to challenge those ideologies which keep us in a mindset that breeds complacency. A counter-theory needs to be deep-green.

Deep-Green Theory in Practice

A strong development ethic, I have argued in this book, includes deep-green theory as a component. Too often, we think of alternative paradigms as purely ideal theories, and practically impossible to achieve. I would like to think that what I am proposing does not come across as an insurmountable task. If it is true that many people are now aware of the risks that lie ahead in regard to the environment, such as depleted land mass for humans and non-humans alike; the further extinction of endangered species; water scarcity; food insecurity; the displacement of people; severe weather conditions and resultant storms/disasters, to mention a few; then it is time to seriously consider our role as a part of the ecosphere. Let's face it, a shallow or an intermediate environmental ethic is insufficient to achieve the level of change required. It will require a deep-green theory with a paradigm shift at the level of individuals, but also at the level of institutions and social structures that uphold them. According to Sylvan and Bennett, "It is deeper environmental ethics that should be developed and promoted. It is a substantial change that is wanted. It is not just the stopping of impending environmental disasters to humans that is required, but an appreciation of the intrinsic value of other things that share the environment with humans that is needed."³³ Some of the ways Sylvan and Bennett propose that could encourage a cultural paradigmatic shift include:

1. teaching environmental ethics to children, making them aware of their existence as part of a larger whole and the importance of caring for the earth;

2. a stronger emphasis on ethics and ethical practice;
3. change individual behavior: responsible consumption, simple living, recycling, activism;
4. responsible citizenship: boycotting industries that exploit and abuse environmental parts and the whole; voting for elected officials who promote sound environmental awareness, protection and policies;
5. promoting and educating the general public on a deeper environmental ethic, thus increasing awareness but also concern and a lobbying force to place pressure on governments;
6. control of the human population;³⁴
7. government policies that encourage environmental protection and place harder regulations on the corporate sector;³⁵
8. governments that provide incentives for the promotion of deep-green environmental practice to corporations;
9. deep-green environmental ethics should be part of any environmental impact study;

If you think that all these strategies will be difficult to implement, it might be worth remembering how people once thought about slavery, or homosexuality, or even the status of women, and how far some societies have come in changing those attitudes and values. Although we still have a long way to go before we can say that we have achieved gender and racial equality, we can say that the situation for women in western countries is much improved than what it was one hundred years ago. The same could be said for people of color, and those of the LGBTQ community.³⁶ I think it's worthwhile quoting what Sylvan and Bennett say about this, "Changing to respectful approaches to the environment and supplanting the place of humans in the world and their ethical systems may seem excessive and extreme. Yet what is now seen as unthinkable, as the voice of extremism, will in a decade or two be seen as necessity: what was extreme 10 years ago is now a balanced view."³⁷

Take sexual harassment. No-one can be completely surprised that sexual harassment is

pervasive in western society, and many others. However, what is interesting is that it is now being publicly exposed. This, in time, will lead to a change in attitudes and behavior, but not so much because men will realize they should not do it, but more for the reason that they can no longer get away with it. Zero tolerance policies of sexual harassment in workplaces and other environments are essential, but what is more urgent are mechanisms to allow women to report sexual misconduct where they are listened to, and not silenced— where they are not threatened or offered compensation for remaining silent, and where action is taken, and prosecution if necessary, against perpetrators. One of the reasons why corruption is so rife in poorer countries is not so much that people have the wrong values, but more that as humans we are all fallible (and men are at risk, particularly since our cultural paradigm is embedded in patriarchy and condones certain behavior).³⁸ People perform in corrupt ways in these countries due to an absence of mechanisms and sanctions that regulate these activities.

From the above analysis it can be said that moral progress (not yet enough) has happened in the case of racism and sexism primarily from persistent outcry from those most affected. My experience as a single mother today, has been made easier by women before me. I think that as a society there is potential for continued moral progress. Kant argues that moral progress over time has been evident, and that this constitutes a part of human nature. As he says, “I may be allowed to assume, therefore, that our species, progressing steadily in civilization as is its natural end, is also making strides for the better in regard to the moral end of its existence, and that this progress will be interrupted now and then, but never broken off...I have the innate duty (though in respect of moral character required I am not so good as I should and hence could be) so to affect posterity through each member in the sequence of generations in which I live, simply as a human being, that future generations will become continually better (which also must be assumed to be possible), and that this duty may thus rightfully be passed from one generation to the other.”³⁹ The hope for a betterment of the society is what motivates many people to work for such actions.

I would like to add two more things to Sylvan's list that have emerged over the last few years

and that may help promote an agenda within a paradigm of deep-green environmental ethics. These are responsible innovation and a steady-state economy. There is a thought to the effect that we can fix the current climate crisis with technology. I think we have to tread with caution here, since technology is a double-edged sword. While technology has contributed greatly to improved living conditions; it has also contributed to environmental degradation. So, rather than pushing full steam ahead with technology, there needs to be a layer of caution that encourages some thought, dialogue and analysis, into trying to anticipate unintended consequences. Responsible research and innovation is an interdisciplinary initiative currently centered in Europe and North America that provides a process and framework to promote research and technology that attempts to anticipate outcomes, ensures inclusion of representation, provides critical reflection and responsiveness.⁴⁰ This process is consistent with a deep-green environmental ethic and should be promoted as such. It encourages us to think about technology and innovation in a more responsible way.

The second one is a steady-state economy. Mainstream economics has made us believe that our economies need to consistently grow. The only way nation-states can prosper is by ensuring annual economic growth. Steady-state economics is an attempt to debunk this myth, particularly if we are talking about a world with finite resources. Steady-state economics also requires a paradigm shift from an “empty-world” economics to a “full-world” economics. Herman Daly in his work on ecological economics uses these terms to describe where we are at now. Our current world is full of us, and stuff.⁴¹ The definition of a steady-state economy is, “an economy that aims to maintain a stable level of resource consumption and a stable population. It's an economy in which material and energy use are kept within ecological limits, and in which the goal of increasing GDP is replaced by the goal of improving quality of life.”⁴² A steady-state economy is also consistent with deep-green theory.

The main impetus behind a steady-state economy is the evidence that our current economic system and consistent pursuit of growth is unsustainable. We live in a world of finite resources. This means that we cannot think of incessant growth – there will come a time when we run out of natural

resources. A steady-state economy is not concerned only with limiting economic growth, the four key features include: sustainable scale, the limited use of materials and energy; fair distribution, giving people equal opportunities to gain livable incomes but also limiting inequality; efficient allocation of resources and a better quality of life. Greater wealth does not correlate with greater happiness; the way to happiness is not economic. The focus then for a steady-state economy is sustainability, equity and well-being.⁴³ Bringing together initiatives such as responsible innovation and steady-state economics can be seen as practical strategies that will allow for the theory of a deep-green approach to become practice. But there is also something to be said for an interdisciplinary approach, as well as a synergy between responsible innovation and steady-state economics with deep-green theory. Something that should be taken advantage of. For many, deep-green theory will seem too ethically demanding and unrealistic, especially for those of us comfortable with our current lifestyles. Others might ask what impact they could have as an individual. Others will say that simple living is not possible in our materialist and consumerist society. And others, will say that the rich are so set in their ways that they would not surrender any of their luxuries and privileges.

Though some may consider deep-green theory as too demanding and unrealistic, I think we are left with no other choice. It is demanding in the sense that it will require a degree of change in our attitudes and behavior, but if we are serious about trying to reduce our human footprint, then there is no other way. For those who believe that their individual impact will have no impact, consider the following: if 100 people decided to recycle all their recyclable items, as well as reduce their use of them, this would have minimal impact. If 100,000 people decided to do this, it would have more impact, but probably nothing significantly measurable. However, if 1 billion people all decided to recycle all recyclable items, as well as reduce the use of these items, then this would have measurable impact. We are all in this together, the sooner we become aware of this the better.

Living simply does not necessarily mean that we have to lower our living standards. What it means is a re-thinking of our priorities and a change of focus from being materialist and consumerist to

one that is more concerned with the quality of our lives, and one which takes into consideration future generations too. The focus is on being, rather than having.⁴⁴ As for the rich being set in their ways and not being able to surrender their luxurious lifestyles and privileges, one can argue that we are all set in our ways. This does not preclude the opportunity to change, particularly if we have a better understanding about something, and particularly if done so within an ethical paradigm akin to deep-green theory. And this is where the importance of thinking about our existence within an ethical paradigm akin to deep-green theory begins. Our current situation affects all of us. Therefore, we each have a responsibility to act, particularly those of us living in rich countries, and living comfortably on the positive side of the inequality spectrum. The current climate crisis is inextricably linked to global development, and will be discussed in the next section.

The Nexus Between the Climate Crisis and Global Development

One of the first and foremost connections between the climate crisis and global development is that both share an anthropocentric cause; this has limited the understanding of the environment but also influenced the practice. Both sectors not only limit their thinking to humans, but also blatantly ignore how the climate crisis involves the entire ecosystem and how development actions have (negatively) impacted the ecosystem. As mentioned at the beginning of this chapter, global development has been a driver of the climate crisis, but it has also been justified as a means to address the climate crisis. Thinking about the nexus between the climate crisis and global development demands a more critical analysis of the role and purpose of development in the 21st century. Deep-green theory advocated by Sylvan requires a scaling down of actions: reducing our carbon footprint. This, in a way, is antagonistic to development; particularly for those societies in the global south that aspire to a western way of life with all its mod-cons, technology, etc. Countries in the global south are also particularly vulnerable to effects of the climate crisis in many ways: land desertification, water stress, submerging lands, extreme

weather conditions, and so forth.

In an article on global development and climate change Schipper *et al* write that the debate about climate change and development is fairly recent, just over two decades. In this same article the authors discuss whether global development is adapting to climate change—adaptation being one of the principal ways to address the climate crisis which is about “risk reduction, the pursuit of opportunity and rethinking investments, planning and behaviour.”⁴⁵ Really, not so different from what some forms of development set out to do. The authors of the article do state that some development actions can be seen to increase the vulnerability of some populations to climate change. It is also not surprising to know that the poorest countries are the ones in most need of adaptation. The authors put forward a position that global development is not adapting to climate change. And one of the reasons for this, as stated, is the “*development deficit*, the distance still left to ensure equality and wellbeing for all.”⁴⁶ This deficit contributes to an *adaptation deficit*, which likewise fails to respond adequately to climate action strategies. The authors give further reasons for why global development is not adapting to climate change and these include: the fact that a capitalist economic system perpetuates risk and vulnerability rather than adaptation; not taking into account the fact that the development context heightens the risk of maladaptation, which is the result of adaptation efforts creating increased vulnerability; adaptation policies created separately from development policies— although some synergies between differing institutions have begun to surface; institutional contexts as a barrier, where the mutual pursuit of adaptation and development is still carried out separately; and finally the fact that global development is a huge industry that thrives on the market, and so battles with all the implications of market forces, such as the propagation of inequalities and the competition for resources.

A second position arguing that global development is adapting to climate change does provide more hopeful and optimistic insights into the synergy of adaptation and development actions. In the same article, the authors claim that in global development policy, adaptation is now (within the last decade) regarded with importance; that since many countries have signed up to the Paris Agreement,

this arguably results in these countries including adaptation into national development plans.

Community-based organizations have driven the adaptation agendas of their country and development agencies are now realizing the urgent need to include adaptation as a development strategy.

International financing for adaptation is increasing, hence provide nations with incentives to include adaptation policies into their development programs; and finally, knowledge in the field of adaptation has increased favourably in the past decade, establishing itself as a growing field of study and practice.

I think that what this article shows, is that there is an increasing awareness of the need to think about global development and the climate crisis, whether it be through adaptation or mitigation. This is not debatable. But what I think it also shows is that there is still a long way to go before institutions and governments understand what this means, its urgency, but also how to move forward.

In other writings on adaptation, Marcus Taylor argues that much of the literature on adaptation is based primarily on technocratic and managerial thinking; that the response to climate threats require only technological solutions. This, of course, has serious implications for those sectors where social inequalities abound, since such solutions often cause significant unintended consequences, particularly if they are top-down solutions with little understanding of the idiosyncrasies of particular unequal societies. Taylor describes these as, “‘maladaptation’ wherein, for marginalized groups, the ‘cure’ of adaptation may well prove to be worse than the curse of climate change exposure.”⁴⁷ There are other issues lurking here that need to be addressed such as power dynamics, levels of responsibility, epistemic challenges and others.

In a book by Tanner and Horn-Phathanothai that explores and analyzes climate and development, the authors mention its ethical dimension. They say, “Indeed, any serious action on climate change confronts serious ethical issues of fairness and responsibility between people, nations, and generations.”⁴⁸ For them, there are two injustices: developing countries are now forced to cut their emissions, even though their contribution to global emissions is only one-fifth of the total global emissions; and poor people (who contributed the least) will experience the brunt of the impacts of the

climate crisis more than anyone else.⁴⁹ These two injustices, as part of an ethical dimension, should form an integral part of global development and climate crisis policies today. In their concluding chapter the authors say, “Ours is the first generation in history to hold within its grasp the prospect of a world rid of the scourge of extreme poverty and in which everyone can go to bed on a full stomach.”⁵⁰ While this may be true, what is also evident is that despite this possibility, the current global economic order, and lack of political will and responsibility among other reasons, will only perpetuate the fact that too many people go to bed on an empty stomach. Unfortunately, the SDG alone, without a critical analysis and reflection of the injustices that plague our world, will not be met in 2030, 2050—or even 2100.

Literature in critical development studies offers a more critical, perspicacious view of the nexus between climate change and development. Scholars in this sector are aware of the need to broaden the narrow technological focus on climate change debates to encompass ethical questions,, such as how the responsibility of reducing emissions will be distributed among the rich and poor countries; or the need to prioritize climate policies for those countries most vulnerable to the impacts of the climate crisis. Scientists claim that to reduce global warming by 2 degrees will require keeping fossil fuels in the ground. This, according to Marcus Taylor, “raises pivotal questions regarding the future of development: they provide the primary means of electricity generation for both industrial and consumption purposes. Equally, oil underscores contemporary transportation for both people and goods on local and global scales. As such, a sharp contradiction emerges between mitigation goals – that is, the reduction of greenhouse gas emissions – and existing development strategies that are carbon intensive.”⁵¹ Unfortunately, this is all too evident in rich countries such as Australia, and not only limited to poorer countries.

Taylor also discusses the importance of historical responsibility, and how some countries such as India have argued that since most rich countries have developed in ways that have been carbon-intensive, this places more responsibility on these countries to reduce their carbon emission compared

to those countries that have contributed less to global emissions. Not surprisingly, the United States has rejected including any wording that may imply greater liability on past emissions. But as Taylor, poignantly says, “Given that per capita emissions are still heavily uneven between developed and developing countries – those in the US are around 12 to 13 times higher than those in India, for example – the issue of responsibility for reducing emissions and providing financing for this transition remains intensely politicized and will remain a central point of conflict moving forward.”⁵² These types of conflicts—whether social, political and economic—are what have slowed the global response to the climate crisis, and will continue to do so without some form of radical change in how the global political and economic system is arranged.

Another dimension of the nexus between climate change and development not often discussed is the thought that development is inimical to the climate crisis. Any form of development only adds further strain to an already fragile earth. For Taylor, “Climate change...opens the possibility that the very idea of development – whether capitalist or socialist – may be increasingly untenable. The rapid advances in our ability to produce ever-greener quantities of consumption goods appear to choke on the polluting emissions their creation requires.”⁵³ Taylor goes on to say that maybe this means the end of development or promotes the notion of anti-development. Two things to note: while it is evident that development practice has done harm, and continues to do harm, to our environment, the type and form development (within a capitalist economic system) has taken has been conducive to this. Development within a capitalist system has also contributed to persistent inequalities within and between countries. As discussed in this book, much of development is geared to satisfying national self-interests rather than benefitting poorer countries. Many rich countries have contributed to the ongoing social and economic inequalities witnessed in many countries of the world. So, maybe we should refrain from using the term ‘development’; but I can’t help but think that putting an end to development shirks the responsibility of some countries towards their past, current and future acts, in the name of development. Additionally, the UN Resolution in 1970 stated that most countries had to give 0.7% of their national

income annually for overseas development assistance (ODA).⁵⁴ I'm not concerned here about the number of countries who actually give this much to ODA, but the fact that they are obliged to. It seems reasonable to think that rich countries should give at least 0.7% of their national income for overseas development assistance. But how that money is then channeled is just as important. What, I think, is more necessary is changing the face of development, particularly the why and how. There is an increasing amount of literature on the 'degrowth' of societies, or even no growth such as a steady state economy as discussed earlier in the chapter.⁵⁵ This, years ago, was anathema to development, but today, is something to consider. Also, there are endless examples of bottom-up initiatives that have appeared all over the globe in response to the climate crisis, but also to failing global development programs and policies. This will be discussed further in the next section.

Some Reason for Hope

When poverty is discussed in the literature it is very often understood from a western perspective, and is very much focused on material well-being. Although, much advancement has taken place in extending human development to human well-being, the emphasis on measuring poverty is still heavily reliant on material criteria. Of course, the importance of understanding the difference between extreme poverty and poverty cannot be underestimated; it's hard to imagine that a person living in extreme poverty where their basic needs are unfulfilled can be deemed to be living a flourishing life. But this could be an erroneous assumption. That's not to say that fulfilling basic needs such as shelter, protection, water and sanitation systems is not important but that sometimes this can ignore the fact that many people living in poverty (whether extreme or not) are not necessarily unhappy. Too often, the discourse assumes that people living in poverty are unhappy, powerless, and passive. David Barkin, a Mexican economist who now writes on a post-capitalist society argues, "that what appears as poverty in many rural societies is the result of deliberate choices made by their

members to shape or reshape their communities on the basis of different values.....”⁵⁶ Barkin claims that what is now happening around the globe is the formation of community-based initiatives by *campesinos* and indigenous folk aimed at taking control of their own livelihoods, and the livelihood of their communities. Many of these initiatives resonate with an ethos of moderation, reciprocity, and solidarity with the land and people. An example of such initiatives is the *Via Campesina* movement, the international movement that brings together peasant farmers, landless people, migrants from all over the world. As it says on their website, “Altogether it represents about 200 million farmers. It is an autonomous, pluralist, multicultural movement, political in its demand for social justice while being independent from any political party, economic or other type of affiliation.”⁵⁷ Barkin also states, that while there are many of these types of initiatives in progress around the world, much of this literature is absent (and ignored) in mainstream development thinking. This issue is very much connected to the epistemic challenges I discuss in chapter four of this book.

The control and management of water sources has played as an impetus for an increasingly local management and sovereignty over this precious resource. Barkin describes his work accompanying community-led efforts to control the management of water threatened by national and state authorities who want to divert the water to benefit large scale development projects such as dams. This work has involved the melding of traditional local knowledge with ecological thinking to address climate crisis threats. The Water War in Cochabamba, Bolivia in 2000 is yet another example of a mass of local people uprising and creating resistance to the whims of a transnational water company supported by the state.⁵⁸

The majority of these community-led initiatives may not result in material wealth for their members; but what they do achieve is an enhancement of the quality of life – once again, the emphasis is on being, rather than having. The underlying principles that according to Barkin, “help avoid the ‘syndrome’ of poverty: autonomy and communality; solidarity; self-sufficiency; productive and commercial diversification; and sustainable management of regional resources.”⁵⁹ What all of the

above means for the practice of development will be discussed in the next section.

Implications for Practice

The practice of global development can no longer ignore the climate crisis. It also can no longer ignore the gross inequalities between and within countries. Global development is complex, complicated, and challenging. I suggest that a good place to start with rethinking the practice is with the five horse-riders of the 21st century introduced in chapter two: the red horse: violence, conflict and war; the black horse: poverty, inequality and famine; the white horse: reproductive health and disease; the green horse: the climate crisis; and the brown horse: the 'isms.' Getting a better understanding of where we are now, and how we got here, will help in thinking about where to go, and how.

More effort needs to be made by both development practitioners and development theorists to work with the dialectical relationship which theory and practice demands. While the theory may guide the practice; the practice also guides the theory. More critical spaces where dialogue of this type can take place need to be created. I give an example of such an initiative in the final chapter of this book. Ultimately, the implications for practice rest upon the strong ethical path discussed in this book— a path which brings together a number of theoretical perspectives, but also greater knowledge and understanding that should lead to better practice.

Conclusion

This chapter is an attempt to analyze the climate crisis and global development, and the importance of thinking of each in relation to the other. Thinking about climate change or the current climate crisis as an isolated entity is no longer viable. Without a good understanding of our current context, it is nearly impossible to consider a path forward that is not thwarted by false assumptions,

erroneous falsehoods and empty pipedreams. There is also a need to broaden our understanding of sustainability, but also its limitations, since, as we stand, we are unable to meet the needs of many people in this world today. The need to move beyond anthropocentrism cannot be emphasized enough. I also introduced Richard Sylvan's deep-green theory as an essential component to our thinking in regard to both the climate crisis and global development. Finally, I discussed more specifically the nexus between climate change and development and finished with what this may mean for the practice.

In the final chapter of this book, I offer an example of a philosophically based initiative that can generate critical structured dialogue among professionals working in the sector to better understand some of the complex and convoluted underpinnings of global development.

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- 1 Lao Tzu, *Tao Te Ching* (London:Watkins Media Limited, 2016), 47.
 - 2 WCED, 1987.
 - 3 Delaney, 2012, 4.
 - 4 Sylvan & Bennett. 1994.
 - 5 Sylvan & Bennett. 1994, 6.
 - 6 Sylvan & Bennett, 1994, 115.
 - 7 Sylvan & Bennett, 1994, 7.
 - 8 Sylvan & Bennett, 1994.
 - 9 Sylvan & Bennett, 1994, 64.
 - 10 Sylvan & Bennett, 1994, 76.
 - 11 Sylvan & Bennett, 1994, 77.
 - 12 Sylvan & Bennett, 1994.
 - 13 Sylvan & Bennett, 1994, 86.
 - 14 Singer, *All Animals are Equal*, 144.
 - 15 This is only applicable in a shallow ethic, an intermediate ethic does extend the value to nonhuman beings
 - 16 Sylvan & Bennett, 1994, 91.
 - 17 Ibid, 91.
 - 18 Sylvan & Bennett, 1994.
 - 19 Sylvan, 1985.
 - 20 Sylvan & Bennett, 1994.
 - 21 Sylvan & Bennett, 1994, 142.
 - 22 For a discussion on anarchism as a replacement to capitalism see Priest (2021).
 - 23 William L. Grey, "A Critique of Deep Green Theory" in *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* ed. by Eric Katz, Andrew Light and David Rothenberg (Cambridge, Mass: MIT Press. 2000), 43-58.
 - 24 Grey, "A Critique of Deep Green Theory," 6.
 - 25 Grey, "A Critique of Deep Green Theory," 9.
 - 26 <https://www.bbc.com/news/world-australia-48618774>
 - 27 I grew up in Australia and once I began traveling to other countries during the 80s, I realized how advanced Australia was in regard to environmental policy particularly in the case of green energy/housing, recycling, etc. As the years have progressed (and not living in Australia) I have become increasingly disappointed to see the lack of progress Australia has made in environmental policy and is no longer a global leader in green energy, etc. (when it has the resources to do so).
 - 28 Sylvan & Bennett, 1994, 54.
 - 29 The Climate Institute, 2017.
 - 30 Sylvan & Bennett, 1994, 5.
 - 31 See Sylvan (2010).
 - 32 Sylvan & Bennett 1994, 11.
 - 33 Sylvan & Bennett 1994, 179.
 - 34 This may seem quite impossible without imposing some law as China did with their one child policy. In fact, this is not the case, many studies have proven that the education of women correlates with lower fertility rates. Therefore, an excellent strategy that would have multiple effects is aiming for the education of all girls and women globally. This may seem to be a lofty goal, but is not really. It does not require sophisticated technology or know how, just political will.
 - 35 I would add that Governments should declare moratoriums on any projects that involve oil, gas & coal exploration and extraction, but endeavor to encourage research on renewable and alternative energy sources.
 - 36 Granted, the situation for women in other countries is still deplorable, as well as for some people of color, different sexual orientation, and so forth. However, one of the reasons why attitudes have changed in western countries has been due to social movements, and people from these groups, such as women, speaking out and making oppression visible.
 - 37 Sylvan & Bennett, 184.
 - 38 For an interesting piece on sexual harassment and patriarchy, see Crosssthaite & Priest (1996). Although written a number of years ago it is still relevant today.
 - 39 Kant, 77.
 - 40 For more information about responsible innovation see the following: P. McNaughton et al, 2014.
 - 41 Daly, 2007.
 - 42 Dietz & O'Neill, 45.
 - 43 Dietz & O'Neill.
 - 44 For an article on living simply, see Gambrel, J.C. & Cafaro, P. J The Virtue of Simplicity, *Agric Environ Ethics* (2010)

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- 23: 85. <https://doi.org/10.1007/s10806-009-9187-0>
- 45 Schipper et al, 1.
- 46 Schipper et al, 2.
- 47 Taylor, M. Climate change and development, 355.
- 48 Tanner, T. & Horn-Phathanothai, L, 51.
- 49 Tanner, T. & Horn-Phathanothai
- 50 Tanner, T. & Horn-Phathanothai, L, 307.
- 51 Taylor, M. Climate change and development, 352.
- 52 Taylor, M. Climate change and development, 352.
- 53 Taylor, M. Climate change and development, 357.
- 54 <https://www.oecd.org/development/stats/the07odagnitarget-ahistory.htm>
- 55 Taylor; Dietz & O'Neill.
- 56 Barkin, 373
- 57 <https://viacampesina.org/en/international-peasants-voice/>
- 58 I was living in Cochabamba during the Water War in 2000, and vividly remember the protests, people in the streets and sense of *lucha* to push out the American based water corporation Bechtel.
- 59 Barkin, 378.