# INTERGENERATIONAL JUSTICE IN THE CONTEXT OF DEVELOPING COUNTRIES

Adrian-Paul Iliescu, Ileana Dascălu, Thierry Ngosso and Naomi van Steenbergen

## 1 Introduction

As we have seen, environmental degradation, global warming and overuse of natural resources have long-term adverse effects whose prevention or mitigation require imposing costs in the very near future. While many of these problems are global in scope, though, they do not affect all countries with equal severity. Developing countries, especially those engaged in subsistence agriculture, are generally more vulnerable to climate change and environmental degradation, and less able to cope with the economic and societal costs brought about by the destruction of productive croplands, extreme weather events, and natural disasters. In many cases, they face particular problems and dilemmas – such as institutional failure and economic and social traps – that do not apply in equal measure to the industrialised world. The situation of less developed countries and the corresponding economic, political and moral challenges therefore requires a dedicated discussion. The main question that will be addressed in this chapter, correspondingly, is: how do the particular situations and difficulties of developing countries bear upon their responsibility for future generations?

This question has both practical and normative aspects. On the practical side, it is important to ask to what extent policies designed with an eye on developed countries can be fruitfully employed by developing countries. What kinds of future-oriented policies are practicable for developing countries, and how do these differ from those that apply to developed countries? On the normative side, it is clear that we cannot require developing countries to apply themselves to the care for future generations with the same intensity as we can expect of developed countries. Nevertheless, there are important questions about the boundaries of what we can expect of them, both in the light of historical circumstances and given their current situation. The question, then, is: under which conditions and

constraints, and in which ways, can people in developing countries be expected to be responsible towards future generations? Roughly, ways to deal with the situation of developing countries fall in between two extremes. The one extreme is the belief that developing countries always can and should replicate the policies of developed countries. The other extreme is the conviction that due to immediate pressures, poor countries simply should not be expected to care for future generations at all. We reject both extremes, and shall in this chapter present some considerations that should allow the reader to reflect on these challenges with greater subtlety and insight.

## 2 The situation of developing countries

Importantly, there is no single criterion according to which we can neatly split the world into 'developed' and 'developing' countries. Indeed, what lies between relatively clear cases of highly developed countries such as Norway and underdeveloped countries such as the Central African Republic is a continuum. Moreover, what is often referred to as 'development' consists of several aspects - not only income, but also institutional stability, education, life expectancy, etc. - and some countries may appear highly developed when judged by one measure while severely lacking according to another. When we speak of developing countries in this book, then, we do not mean to speak of a certain well-defined group of particular countries. Rather, we shall identify certain circumstances, problems and vulnerabilities that place a strain on the capacity of nations to meet intergenerational duties. Developing countries, in this book, are merely loosely defined as those that are particularly affected by these issues.

In this chapter, we shall proceed as follows. First, we shall introduce some important circumstances, problems and vulnerabilities at the national level that are relevant in the context of sustainability and intergenerational justice. We shall, in turn, discuss economic circumstances, institutional failure, and entrapment (though as will quickly become evident, these factors are tightly intertwined). For clarity, we separate identifying these factually relevant circumstances from a consideration of their moral and political implications. That is, the issues identified should initially be understood merely as factors that ought to be taken into account, not as arguments against duties for developing countries. Only after having identified relevant circumstances shall we consider the implications of such issues for the duties of developing countries with respect to future generations.

## 2.1 Economic circumstances

The first factor, which rather suggests itself, is economic circumstances. The most basic issue is that countries with very low gross national incomes have obvious problems in their ability to meet duties of intergenerational justice, given that addressing the needs of future generations comes at a direct cost for the current

generation. Very poor countries will have trouble sparing anything for future generations without jeopardising the basic needs of the current generation.

Countries with low GDPs will, moreover, often have substantial foreign debt. In addition to curtailing expenditure on services that would benefit the current generation (healthcare, nutrition, education), the accumulation of debt transfers a financial burden to future generations, who will not only have responsibility for the debt, but also for an ever-increasing amount of interest. In a negative scenario, this places a cap on future consumption and development, because of the additional duty to restore depleted resources (economic or environmental) to a state required to sustain growth (Clark 2008). This means that their prospects for welfare are jeopardised from the outset. Therefore, a debt crisis generates a vicious circle for developing countries, which find themselves unable to fulfil their moral duties simultaneously towards the present generation and towards future generations.

Often, the lack of financial resources with which many developing countries find themselves confronted acts as an amplifier of other deficiencies, and perhaps the most striking effect is that of financial debt compounding ecological debt. When developing countries need to rely on loans to finance current consumption and investment - which primarily benefit the present people - ecological debt is often simultaneously accumulated, either as an effect of rapid industrialisation without environmental protection measures or as a result of the trading of natural resources to finance the debt contracted. The impact on the welfare of future generations may be significant, as they are likely to inherit reduced biodiversity, damaged terrestrial and aquatic ecosystems, low-quality land for agriculture and reduced forested areas. In other words, if the loans obtained by the present generation are not used to accomplish considerable improvements in living conditions that extend into the future, future generations of developing countries may well find themselves deprived of the very conditions that would have allowed them to sustain the financial debt contracted by their predecessors. Both financial and ecological debt may be forms of uncompensated disadvantages generating poverty for future generations.

However, from the viewpoint of sustainability and future generations, just as important as the state of the economy at a given time is the question of what fuels it. Many of the countries generally considered to be characterised by a lack of development have economies with an incipient industrial base and still depend heavily on (subsistence) agriculture. In comparison to industrialised countries, weakly developed countries are consequently far more vulnerable to environmental changes, which are likely to have a direct impact on agricultural productivity. Frequent and prolonged draughts, changing temperature and rainfall patterns as well as catastrophic natural events disproportionately threaten the economies of societies that depend on agriculture. Unfortunately, for many countries this is not merely a bleak future prospect. Climate-related events such as these have already triggered pandemics and famines in the poorest countries of the world. The populations of these countries, already deprived of basic nutrition and healthcare, are among those hardest hit by changes in the climate.

Besides the issue of agriculture, special attention is due to the role of natural resources. Some very weakly developed countries have great abundances of natural resources. Curiously, precisely some of the countries richest in natural resources are those who are the poorest and least competitive in economic terms, and politically the most unstable and authoritarian. This paradoxical situation is known in the literature as the 'resource curse' (Auty 1993; Sachs and Warner 2001; Ross 2013). This term denotes a situation in which an abundance of natural resources, inadequately managed and vulnerable to fluctuations of international markets, generates low economic growth rates and economic instability. To make things worse, natural resources are often used by those in power to gather excessive wealth and to stay in power, at the expense of the great majority of the population (Wantchekon 2002; Wenar 2008; Ross 2013). Furthermore, not only does the resource curse translate into civil conflicts over resources; it is also likely to increase dependence on foreign aid, leading, in some cases, to a debt crisis.

While a global transition to sustainable resources, and particularly away from fossil fuels, might at first sound like a doom scenario for countries whose economies are supported by little more than oil or mining, in light of the resource curse it could actually turn out to be a blessing. Given that near-exclusive dependence on natural resources and thus on a highly volatile market makes an economy unstable, being forced to transition to a more diversified set of sources of income could actually turn out to be economically beneficial. Furthermore, a loss of income from natural resources is likely to lead to the need for governments to start raising taxes. While this may not seem initially beneficial for citizens, taxes can encourage more transparency and democracy: since the state will depend on its citizens for revenue, it will be forced to demonstrate accountability about the way money is spent. Moreover, authoritarian leaders will lose the funds on which they relied to maintain power and repress dissidents, which, in a positive scenario, may further democracy. All will depend, however, on how the transition takes place - whether it will carry with it changes in power structures, or whether those currently abusive of their resource-dependent power will once more be the ones benefiting.

### 2.2 Institutional failure

As the issue of the resource curse already indicates, a very important practical factor in the context of weakly developed countries is institutional failure. There is a broad consensus in the development literature that institutional dysfunction, which often leads to massive economic inefficiency, generates particular obstacles for developing countries. Conversely, the effect of the quality of institutional performance on growth and prosperity has been emphasised as one of the prime drivers of development, trumping other factors such as geography and market integration in international trade (Rodrik et al. 2004). Some of the general criteria used to define 'good institutions' are genuine property rights, enforceable contracts, a broadly equal distribution of power (Olson 2000), community participation in policymaking and insurance options for the poor, both coupled with anti-fraud mechanisms (Banerjee and Duflo 2011), and inclusive, as opposed to extractive, political institutions (Acemoğlu and Robinson 2012).

It should be noted that the task of demonstrating causal connections between such deficiencies on the one hand and economic growth and productivity on the other is usually carried out by relying on a mix of quantitative data and perception-based indicators, which help outline a general picture of the differences between developed and developing countries. However, most often the focus is on political institutions, which in developing countries generally fail to act as impartial enforcers of contracts aligned with the public interest, thus blocking the economic changes necessary to reduce the political power of corrupt elites.

Institutional weakness in developing countries affects the distribution of resources, which are often being channelled into obscure avenues, resulting in difficulties for many citizens to secure their basic needs. Where political institutions are taken over by a corrupt minority and fail to take responsibility for the public interest, intense conflicts over the distribution of resources may result, and the preferences of various powerful groups stand to be served to the detriment of social justice. And while some authors express confidence in the incremental institutional progress across a generation by changes in the margin that would eventually prompt a virtuous circle of development (Banerjee and Duflo 2011), others insist that institutions are quite difficult to reform and that, consequently, there is a strong tendency for bad institutions to maintain themselves:

There are two sources of persistence in the behaviour of the system: first, political institutions are durable, and typically, a sufficiently large change in the distribution of political power is necessary to cause a change in political institutions, such as a transition from dictatorship to democracy. Second, when a particular group is rich relative to others, this will increase its de facto political power and enable it to push for economic and political institutions favourable to its interests. This will tend to reproduce the initial relative wealth disparity in the future.

(Acemoğlu and Robinson 2006: 677)

Again, there is a potential difference between the role and strength of this tendency in developed versus developing countries. Countries without consolidated democracies are far more likely to face this issue, and their institutional weakness means that targeted intervention is far less likely to yield good results. For example, while corruption affects both developed and developing countries, in the case of the latter the problem is often part of a system of vulnerabilities which would require wholesale reforms. Since, as is often highlighted, institutions are to large extent formed by those in power, so that the concentration of political power determines the structure of political and economic institutions, it would not suffice to address various deficiencies in isolation, as their interrelations – stronger and deeper in developing countries than in developed ones – require measures that can address the cumulative negative effects they have on each other (Uslaner 2008). Therefore,

efforts directed at institutional improvement are more costly (and initially likely to be less efficient) for countries that are underdeveloped in political terms.

Without drawing any normative conclusions at this point, these considerations make clear that institutional failure is a very important factor to take into account when considering the prospects for future generations of weakly developed countries, since there is a serious chance that efforts to diminish the negative environmental legacy for those generations are undermined by deficient institutions.

## 2.3 Entrapment

A less immediately apparent, but nonetheless very important factor influencing the situation of the poorest countries is that this situation tends to be characterised by a mechanism known as 'entrapment'. In general, traps are defined as self-reinforcing mechanisms leading to bad (inefficient) equilibria, or as vicious circles that maintain negative states of affairs. Entrapment, then, is the result of a tendency of certain bad things to perpetuate themselves: poverty generates more poverty, conflicts generate other conflicts, bad governance stimulates bad governance (partly because incompetent or dishonest politicians promote other incompetent or dishonest politicians), illness causes other illnesses (directly or via treatment) and so on. The most widely discussed traps, poverty traps, are mechanisms that transfer and prolong poverty. However, developing countries may face not only poverty traps, but also geographical traps (characteristic of 'hot, dry, land-locked countries' (Azariadis and Stachurski 2005: 33)), social traps (Rothstein 2005), backwardness traps, institutional traps, bad governance traps, conflict traps, unemployment traps, inactivity traps, bad health traps and even rigidity traps. Azariadis and Stachurski elaborate:

inefficient equilibria have a bad habit of reinforcing themselves. Corrupt institutions can generate incentives which reward more corruption. Workers with imperfectly observed skills in an unskilled population may be treated as low skilled by firms, and hence have little incentive to invest large sums in education. Low demand discourages investment in increasing returns technology, which reduces productivity and reinforces low demand. That these inefficient outcomes are self-reinforcing is important - were they not, then presumably agents would soon make their way to a better equilibrium.

(2005: 4)

The point of such observations is the following: it is not the case that there is no conceivable way out of a difficult economic and social situation, but for someone who is entrapped in such a situation it will, precisely for that reason, be very difficult to use those ways to get out. For instance: high-level education is a potential way out of poverty, but someone who is poor will, precisely for that reason, be unlikely to have access to high-level education. Loans can be means to escape from poverty and helplessness, but someone who is poor will, precisely for that reason, have no collateral and thus be unable to get a loan (when banks ask

for collateral (Dercon 2003: 3–4)). Illnesses can be treated, but treatment can be expensive and someone who is ill is not in a position to earn money to pay for treatment

Much the same mechanism is operative on the level of nations. The richer a country is and consequently the richer the country that is inherited by future generations, the less need there is to provide for them in specific ways. Wealth and development make it more likely (although, of course, not absolutely certain) that future generations will be able to deal with any problems they may encounter. In contrast, the poorer a country is and consequently the poorer the country the next generation inherits, the more likely it is that this generation will have a reduced capacity for solving the problems it faces. At the same time, affluent and developed nations can afford to take care of future generations: the richer a country, the greater its ability to take all sorts of measures (saving, investment, technological modernisation, avoiding resource exhaustion, etc.) to facilitate the prosperity and safety of future generations. In contrast, a poor nation often cannot afford to save and to take measures to protect future generations, and thus has difficulties to care for them effectively. This is a well-known but still disturbing situation: precisely those nations that have less reason to worry about future generations on account of being prosperous can afford to take measures to protect their future citizens; whereas nations whose future generations will likely be in the worst position cannot afford to protect them.

Moreover, in the case of developing countries, entrapment is often exacerbated by the fact that the problematic situation does not consist of a series of separate hard-to-escape problems, but rather of a set of difficulties that are interrelated and mutually reinforcing. These burdens may include poverty, lack of resources, institutional dysfunction, endemic corruption, low social capital, inequality (Uslaner 2008: 42–50), acute conflicts, counterproductive traditions, bad governance, powerful prey groups, high levels of criminality and global institutional factors (Pogge 2008: 147). Poverty, then, leads to illness and illness leads to poverty, poverty attracts corruption and corruption increases poverty, corruption brings backwardness, etc. So, while all countries face a diversity of problems, in the case of developing countries the scope and gravity of the individual problems paired with the mutually reinforcing relation in which they stand makes for a very particular and extremely difficult predicament.

# 2.4 Vulnerable international position, vulnerable groups

Finally, countries with weak economies and weak institutions are often vulnerable in contexts in which they deal with more developed countries or internationally operating companies. This again can expose them to environmentally damaging practices. For example, companies looking for sites to dump toxic waste tend to seek out underdeveloped countries. This is what happened in the *Probo Koala* case, when toxic chemicals were dumped in poor neighbourhoods of Abidjan, Ivory Coast in 2006 by the Dutch company Trafigura Beheer BV (Denoiseux

2010). Exporting hazardous goods to poor countries has been part of the Western multinational agenda for a long time (Shue 1981).

Similar mechanisms may mean that vulnerable groups within developing countries are disproportionately burdened, not only by environmental degradation, but indeed by measures to combat it. A recent example can be found in Kenya where in order to combat abusive and uncontrolled logging in the Mau forest, government authorities decided to forcibly deport all inhabitants of the forest, including the Ogiek communities who had been living there for centuries (Calas 2009). Thus, environmental protection can create what Mark Dowie (2009) has termed 'conservation refugees': poor and vulnerable people, often indigenous, forcibly displaced by their own governments, without any financial compensation, in order to create areas of conservation, biodiversity reserves or national parks. Their number is now estimated to exceed 14 million in Africa alone. While such projects to protect nature may have the appearance of being environmentally virtuous, it is clear that their consequences are harmful and unjust to poor indigenous populations.

Finally, less developed countries often have weaker standing on the global political stage, and may have difficulty making their voices heard (again, there is a very significant difference here between the poorest, least developed countries, and those whose economies have steep growth curves). Whenever this is the case, chances are that the results of any negotiations will be unfavourable to them. This comprises another barrier to their ability to adequately provide for their future generations.

#### 3 Normative considerations

Having outlined a number of relevant circumstances and vulnerabilities of developing countries, we are now in a position to consider some normative implications. Concerted attempts to mitigate climate change and to stop negative developments such as resource exhaustion or environmental degradation have given rise to the identification of a number of desirable changes. Implementing these changes is burdensome, and a great deal of theoretical and political attention has been devoted to the question how such burdens should be divided between strongly developed and less developed countries. There are several reasons to think that less developed countries should be allocated proportionately fewer burdensome changes than more developed ones.

# 3.1 The urgency of existing problems

One rather obvious reason why developing countries cannot be expected to apply themselves to care for future generations with the same intensity as can be expected from strongly developed countries has to do with the urgency of existing problems and needs. Because developing countries face such severe problems, many people living in these countries typically have basic needs that go unsatisfied. If we assume (following authors such as Shue 1980, Pogge 2008, Löfquist 2011 or indeed the Universal Declaration of Human Rights, arts 25 and 28), that every person has a fundamental right to have his or her basic needs fulfilled, this entails that the fundamental rights of many citizens of developing countries are not met.<sup>2</sup>

The urgency of care for the present generation means that in the case of developing countries, the question of future generations has two important characteristics that are absent in the case of developed countries. First, since funds dedicated to the future could be used to satisfy basic needs and to protect basic rights, care for future generations comes at an extremely high opportunity cost. In this respect, developing countries differ from developed countries, for which the opportunity costs of investing in future generations take the form not of absolute needs, but of 'self-cancelling relative wants' (Daly 2002: 4). When authors who plead for prevention of harm to future generations claim that 'the costs of prevention are moderate, although far from insignificant' (Shue 2014: 269), they obviously have the case of developed countries in mind, not that of desperately poor countries.<sup>3</sup>

The second, corresponding characteristic is that the existence of needs that should be met immediately and of neglected rights that warrant immediate redress, results in a very high discount rate of investments in the future. That is, the perceived relative value of future goods (in this case, properly taken-care-of future generations) is low in light of the urgency of present needs. The following example is illustrative:

Haitians were able to cut down the last tree because the individuals taking the specific actions had high personal discount rates. On any given day the value of a tree cut down was worth significantly more than one standing one year later, just as the starving man dismissed the future value of \$10,000 in the face of a sandwich in hand immediately. The tree today meant fuel for cooking and money to buy food for hungry mouths. The forests of Haiti and the sardines of Namibia and the blue fin tuna in the Atlantic were depleted by people acting rationally, even if with very different motivations.

(Schweitzer 2010)

The high opportunity costs of prioritising future needs and rights and the reality of a high discount rate make it rational for developing countries to allocate resources to the present rather than to the future. As Shue points out:

It may ultimately be in the interest of the poor states to see ozone depletion and global warming stopped, but in the medium term the citizens of the poor states have far more urgent and serious problems – such as lack of food, lack of clean drinking water, and lack of jobs to provide minimal support for themselves and their families.

(2014: 193)

Moreover, the aim of satisfying basic needs and fulfilling basic rights is not only perfectly rational or economically sound – there are moral reasons in its favour, too. Many authors argue that the fact that many of the present needs of very poor

people in developing countries are survival needs gives rise to direct moral obligations and preclusions. Some hold that basic needs may never be neglected for the sake of prevention, however great the threat (Shue 1993). On this basis, theorists such as Shue argue that, for instance, considerable amounts of greenhouse gas emissions are excusable, because they are 'subsistence emissions', the elimination of which would jeopardise survival in the most deprived societies. Moreover, when survival is at stake, devoting resources to protect future generations at the expense of the present (desperately) poor seems unacceptable:

Right now, on the order of eighteen million people are dying each year of readily remediable chronic poverty for want of relatively small sums of money and related institutional changes. One could not sanely claim that unlimited sums should be devoted to blocking the possibility of future severe climate change if that entailed that one would, in consequence, refuse to spend what it would take to eliminate severe poverty.

(Shue 2014: 275)

The right of people in developing countries to dedicate resources to satisfying their own basic needs at the cost of future burdens on their descendants has been compared to the right of self-defence:

In these cases, we may with good reason speak of having so strong or so rationally compelling a reason to emit that, in spite of the harm these emissions will cause to (future) others, we are excused for our maleficence. Much like self-defense may excuse the commission of an injury and even a murder, so their necessity for our subsistence may excuse our indispensable current emissions and the resulting future infliction of harm they cause. Subsistence emissions are emissions we cannot reasonably be expected not to make, because they are rationally compelling emissions, and we are excused for making them.

(Traxler 2002: 106)

From this perspective, requiring very poor countries to save for the future or invest in technologies meant to avoid imposing costs on future generations is morally problematic in situations where the basic needs and rights of present generations are not met. Correspondingly, developing countries in this sense seem to have a restricted duty to spend their resources on protecting future generations, and that in some cases it seems indeed morally impermissible for them to do so.

However, it is very important to recognise the limits to this type of argument. First of all, future generations of poor countries not only stand to be severely harmed by the consequences of environmental degradation and climate change, they are in fact likely to be worse off than their current generations even in the absence of catastrophic environmental changes. The fact of entrapment and the mutually reinforcing nature of many of the problems confronting developing countries mean that the low levels of welfare, economic development,

productivity, and technological innovation typical of developing countries are not only unlikely to improve, but indeed stand to worsen over time. Future generations of underdeveloped countries, then, are likely both to face more severe problems and to be less equipped to deal with them. So even though poor countries' current generations do not have much to spare, there is even more reason to be concerned for their future generations. As Shue points out:

failing to deal with climate change constitutes not only failing to protect future generations but inflicting adversity on them by making their circumstances more difficult and dangerous than they would have been without as much climate change, and much more difficult and dangerous than circumstances are now for us 4

(2014: 269)

According to this type of argument, the fact that future generations are likely to face worse circumstances than exist today means that any duties towards them cannot be annulled by current poor circumstances. Even current poor circumstances, after all, are likely still better than those of future generations that are not provided for. The fact that future generations are likely to be worse off than current ones constitutes a reason to prioritise their rights over the rights of current generations, even those that are already suffering.

In this vein, it could furthermore be argued that even high opportunity costs cannot be invoked as an argument against developing countries spending resources on future generations. While opportunity costs are indeed high, the magnitude of expected problems for future generations in the absence of protective measures far outweighs them.

In this respect, though, it is important to distinguish between deeply underdeveloped countries and relatively underdeveloped countries that are on a very steep development curve. The latter countries may, for instance, currently be relatively poor, but likely to see great economic and technological advances in the coming decade or so, which will impact favourably on their future generations. Still, it remains a valid question whether the future generations of these countries will truly be better off if all resources are poured into development, rather than some being simultaneously spent on, say, measures to protect the environment.

Second, it is crucial to heed the fact that the argument concerning poor and problematic circumstances in the present only constitutes an argument against certain developing countries imposing such costs on their present generations themselves. There is no reason to think that the rights of those future generations to be protected from harm are at all restricted, and it may well be that it falls upon other parties to provide such protection or to assist developing countries in offering it. As we shall see below, there are plenty of reasons to think that such duties must fall on (certain) richer or more strongly developed countries. Furthermore, we shall see that the dilemma sketched here - to help either current generations or future

ones - will not always apply. Indeed, as we shall see below, in many cases what benefits present generations and what benefits future ones will coincide.

### 3.2 Moral limits to sacrifice

A similar angle from which prioritising present needs over the needs of future generations might appear justified is grounded in the idea that there are moral limits to sacrifice.

Unchained consumerism, generational selfishness and irresponsible polluting behaviour have created global natural disaster that threatens future generations. Many benefits that present people enjoy will sooner or later require sacrifice from future generations. Conversely, it is obvious that some arrangements which would improve the situation of future generations will be detrimental to currently living people. Trying to stop the existing harmful activities and to repair the damage already created almost inevitably implies the disruption of what has come to be perceived as 'normal' economic activity (stimulating growth), 'reasonable' aims (economic development or higher economic competitiveness) or 'modern' lifestyles, and consequently some sacrifice from all of us who now reap the benefits of this peculiar 'normality'. Of course, even if they feel normal, many of these entrenched habits could be justifiably classified as luxuries. However, some benefits that we might have to give up might be understood as rights: the right to development, the right to welfare, the freedom to choose one's lifestyle or one's aims, etc. (though it should be noted that all of these are controversial). If extreme measures are deemed necessary to ensure minimal provisions for future generations, the more basic rights of current generations may come under threat. In this case, appropriate provisions for future generations are likely to lead to conflicts of rights. Avoiding both unacceptable conflicts and the neglect of important rights requires balancing the relevant indispensable rights. Thus, one of the relevant problems is the task of securing both the legitimate rights of future generations and those of the present ones. As Henry Shue remarks:

The most that can be demanded of us is a level of sacrifice that does not compromise our secure enjoyment of the same rights that, we are acknowledging, belong as well to persons in the future. To deprive ourselves of basic rights in order to guarantee those same basic rights to people in the future would be in effect to treat our generation as inferior - as somehow entitled to less than equal minimum rights.

(2014: 174)

In other words, it is acceptable for the protection of rights for future generations to come at a cost for current generations, but no measure should cause current generations to fall below the level we attempt to secure for future generations. Of course, in many circumstances this still leaves room for drastic changes. Yet given the scarcity of immediately available financial resources that characterises most developing countries, it may well be the case that in those countries, policies aimed at protecting the rights and interests of future generations require reductions or cancellations of public policies that secure some fundamental interests or basic rights of present people. Some authors insist that this would be an injustice, and that no matter how generous our intentions towards future people might be, we must first of all make sure that our efforts in this respect do not harm present generations in essential ways.

In his contribution to the Oxford Handbook of Climate Change and Society, Jon Barnett defends this perspective by introducing the idea of human security, which comprises at least three fundamental elements: basic needs fulfilment, human rights protection and respect for one's core values. Public policies, he argues, should guarantee human security for any person, no matter whether she belongs to a future generation or to a present one. Even if our policies are deliberately designed to protect future generations from the negative effects of climate change, resource exhaustion or environment degradation, the fundamental security of present people should not be affected either:

Policies that increase human insecurity by undermining people's access to enjoyment of basic needs, human rights and core values should be considered maladaptive, and all potential policies for both climate change mitigation and adaptation should be screened for these effects.

(Barnett 2011: 273)

From this point of view, the protection of basic rights of future generations is limited by the fundamental rights of persons currently alive. However, in the case of developing countries, the same reservations as those elaborated above apply. In other words: the rights of future generations are not affected by this argument, and the argument has no force against the stipulation that other parties, such as developed countries, ought to spend the resources necessary to protect these generations, as long as such spending is balanced against the fundamental rights of those who presently depend on the resources in question.

# 3.3 The relationship between the duties of developing countries and those of developed countries

It is often taken for granted that each state ought to take care of its own citizens, whether current or future ones. This would entail that there is no relationship between the duties of developing countries and those of developed countries. The assumption, however, is highly problematic.

As many theorists have argued in detail, compared to now highly developed countries, developing countries played a far smaller role in causing the global problems that affect the future generations of the world (Shue 1999; Neumayer 2000; see also Pogge 2008). This means that requiring developing countries to share the burden of mitigating the effects of resource exhaustion or environmental degradation entails making them pay for problems that they had only a marginal role in causing. From this perspective, it seems at least plausible that developing countries ought to take up a smaller part of the burden of mitigating harmful effects of environmental change, regardless of who will benefit from such mitigation. This may be interpreted in terms of historical responsibilities for those countries, now relatively developed, that used environmentally unfriendly paths to promote their immediate development interests. This idea is often referred to as the 'polluter pays principle'. A similar conclusion would result from the 'beneficiary pays principle', which does not allocate the mitigation burdens according to historical responsibility, but on the basis of the question who has benefited from the industries that have caused environmental degradation (see Caney 2005; Shue 2010; Singer 2010). Practically, the main difference is that most of the current citizens of developed countries cannot be said to have been responsible for their state's substantial emissions in, say, the 1950s, but they certainly do benefit from them. The assumption that each state is responsible for its own, then, mostly favours developed countries, and the grounds for it are questionable. There are also authors who argue that the expected environmental crises and their impacts are so significant that we should not merely consider the question who is responsible or who benefits, but also simply allocate duties according to which countries are able to contribute to a solution (see Caney 2005; Shue 2010).

The problem of responsibility and differentiation is in fact a dual one. One question is how the fact that certain parties bear more responsibility for current problems should influence the distribution of burdens in counteracting the effects of previous harmful actions. Yet the use of exhaustible resources, pollution and the like are not problems of the past, but ongoing practices; and indeed - as is pointed out in Chapter 8 on economics - to a certain extent this seems justifiable. This raises a second question: if developed countries owe their development in part to their past engagement in harmful practices, don't developing countries have a right to engage in those practices at least relatively more than the countries that have already reaped substantial benefits from them? If this is indeed the case, this would have a great impact on the moral status of the current global emissions patterns. At the very least, it would mean that the current distribution of ongoing emissions (which per capita are still many times higher in the developed countries than in the developing ones) is deeply morally problematic.<sup>5</sup> Moreover, present practices of people in wealthy nations disproportionately threaten the current and future generations of poor countries, and this fact ought to bear upon their duties towards those whom they expose to harm (see, e.g., Zhang et al. 2017).

Regardless of one's answer to the question whether there is such a thing as a right to development, then, it is quite clear that given both historical developments and the current situation, the assumption that each state simply is responsible for its own citizens cannot stand. Instead, the developed countries have a duty to aid the underdeveloped ones, at least when it comes to mitigating the harmful effects of the (past and present) practices of the former.

## 4 Where the interests of present and future generations coincide

The preceding discussion may have raised the impression that the interests of present and future generations are always at odds, and that they may at best be balanced against each other. However, this is certainly not always the case. First of all, it must be kept in mind that substantial environmental crises are already ongoing, and these stand to worsen drastically within the next centuries. The future, unfortunately in this respect, is not far off at all. On the positive side, there are situations in which provisions that are beneficial to the present poor have a positive impact on future generations. Diminishing air pollution in China, say, is an urgent task beneficial to both present and future Chinese citizens. There are strong indications that the best way to reduce population growth is to encourage education for women. This obviously directly benefits the women who will be educated and the next generations of the family, but it also is likely to have a beneficial effect on the economic health of the country as a whole, including its future generations (see Dilli 2017). Here, the interests of the present and future generations can be made to coincide. Indeed, in the context of developing countries some of the most promising avenues for change involve measures that benefit both the current and future generations. And while current generations may selfishly favour economic development over care for future generations, such development may ultimately favour future generations, too. As Gardiner remarks, 'not all of the rewards accrue to the present generation. Some are passed on in the form of technological advances and increases in the capital stock' (2001: 403).

At the same time, policies aimed at protecting the environment and the rights of future generations can contribute to the well-being of the current generation, both when they involve investments and the creation of jobs, and when current generations already suffer from the problems such measures are targeted at mitigating. An example of the first is the Green Belt Movement founded by the Kenyan environmental activist Wangari Maathaï, a movement that is strongly involved in reforestation in Kenya while at the same time employing local women. It was thanks to this initiative that Wangari Maathaï won the Nobel Peace Prize. The fact that current generations are already burdened by the environmental problems that threaten future generations is obvious in the case of some emerging economies, where industrial development endangers the health of present generations at a large scale. The adoption of industrial strategies aimed at a green future would dramatically improve not only the prospects of future generations, but also the quality of life of present people.

An important caveat, though, is that even if measures to protect the environment are beneficial for the present generation, they may still be associated with costs so high that overall they appear, from the perspective of the very poor, as an unaffordable luxury. As Jan Narveson remarks:

Environmental standards are expensive, and it is perfectly possible that a given standard in a given country is too expensive. Applying it in that country will, again, make many people there unemployable, given the costs of meeting those standards. And the chances of dying earlier if you are unemployed may well be higher than if you are employed in an area with lower environmental standards. That is perfectly possible, and the enthusiast for environmentalism, if he has his way, is likely to occasion the deaths as well as the continued impoverishment of many people in the country that is the victim of politically powerful people who succumb to his arguments. In short, the wealthy can afford squeaky-clean environments, perhaps, but for most others, they are not worth having. A pollution that will cause your death when you get to be 80 is not worth paying to reduce at the cost of the money that will only enable you to live to 60 anyway.

(2004: 342)

Of course, as many of the arguments above, Narveson's argument only has any force against the idea that developing countries should spend their own resources on their future generations. As we have argued, though, it is morally quite implausible that this burden should fall on developing countries alone.

In a somewhat similar vein, several authors have stressed that even if economic development threatens to exhaust natural resources, pollute and produce dangerous climate change, it also has positive consequences for future generations, who stand to benefit from technological progress, enhanced industrial capacity, greater productivity, etc. This undeniable fact has led some authors to conclude that the exhaustion of natural resources should not be considered very dramatic. Paul Collier, for instance, has advocated the view that we could deal fairly with both natural resources and future generations even if we use natural resources intensively, because we are not curators of natural treasures, but custodians of their value. This means that we can freely use existing resources as long as we pass on to future generations all sorts of other benefits: advanced technologies, higher industrial capacity, higher economic productivity, higher levels of welfare, etc. (Collier 2010). But as Gardiner notes, a view according to which development should be seen as not being fundamentally problematic because it is bound to bring compensation does not appear satisfactory:

future generations might be compensated for the damage they inherit through having better resources with which to deal with them. Such arguments are no doubt warranted in some cases: for example, some developing countries are probably right to think that they do best to improve their economic infrastructure rather than abate emissions at the moment, especially since the planet is already committed to some warming. However, in general, the point is limited by such factors as (a) that much of the benefit of emissions is not passed on but simply consumed; (b) that technology and capital are far from perfect substitutes for environmental quality; and (c) that the precise physical effects of global warming are likely to be unpredictable, severe, and possibly catastrophic (so that effective deployment of the inherited benefits to mitigate them may be extremely difficult).

Many authors, most notably Shue and Gardiner, insist that we should not surrender to the disjunction 'development or intergenerational justice', because intermediate solutions and trade-offs can reconcile the two opposite sets of moral preferences or pressures. An adequate way of establishing an intergenerational community of rights does not have to imply sacrificing one party in order to provide for another. The optimism implied in the idea that in most cases we do not have to choose between doing the right thing for present people and doing the right thing for future people is encouraging, but not completely reassuring just by itself. It remains to be seen if and when trade-offs are feasible and reconciliation is possible, and this will require rigorous and detailed studies. This is one important area on which it would be productive to focus research efforts in the coming years.

## 5 The necessity of an integrated approach

Given the particular circumstances of developing countries, it is not enough to simply pump money into environmental conservation programmes or sustainable industries. The tasks of preventing anthropogenic natural disaster and of prioritising the needs of future generations require institutional arrangements, without which no policy aimed at protecting future people can be successful. Unfortunately, though, many developing countries are institutionally weak, and thus deficient in this respect. Indeed, many authors insist that it is the very fact of institutional underdevelopment and inefficiency that is responsible for most of the poverty of such countries (Rodrik 2007; Acemoğlu and Robinson 2012). Institutional failure and entrapment severely hinder the adequate protection of future generations. Here is a telling example:

Norway, about the richest country in the world, parks some of its oil revenue in a 'future-generations fund', and several countries of the bottom billion have sought to imitate it. This may be a good idea for Norway, which has capital coming out of its ears, but it is a pretty doubtful one for the bottom-billion societies, since they are extremely short of capital . . . Future-generations funds are even politically risky in low-income countries: as they accumulate they are a mounting temptation for populism. Consequently, future-generations funds are unlikely to make it through to some future generation and more likely to be a transfer from the prudent governments that establish them to the imprudent governments that dismantle them. Sadly, that is what the record to date bears out.

(Collier 2007: 142)

Of course, such findings ought not to be taken to imply that the duty to care for future generations is reduced under these circumstances. But they do mean that we have to think very carefully about the best ways to do this – ways that are capable of dealing with the particular vulnerabilities developing countries face. This means that in the case of developing countries, we cannot simply pour money into

programmes for environmental improvement while disregarding political, economic and institutional weaknesses. Rather, securing a safe environment for the future generations of developing countries requires an integrated approach.

### 6 Conclusion

As we have seen, in the context of intergenerational justice and long-term responsibility, the situation of developing countries is, for several reasons, relevantly different from that of highly developed countries. Moreover, it has emerged that the issue is a complex one. We have introduced a number of reasons to think that it is particularly important to protect the future generations of developing countries. At the same time, the first part of the chapter has shown that there are complex vulnerabilities that in some extreme cases seem to justify that developing countries reserve their resources for meeting short-term responsibilities. Moreover, there are strong reasons to think that developed countries bear significant responsibility for the situation threatening present and future generations of developing countries, and that they have corresponding duties to mitigate the ill effects of their practices and bear a significant part of the burden for tackling environmental problems. In any case, what it is absolutely clear and quite unanimously accepted is that developed countries and developing countries cannot solve these problems in isolation from one another. Resource exhaustion, environmental degradation and related issues are global problems, which require a cooperative solution.

#### Notes

- 1 Remarkably, not only shortages and deficiencies, but also otherwise positive events such as sudden enrichment can generate traps. Such traps are known as 'huge resources traps'. Perhaps the most famous of these was the 'Dutch disease', a situation in the 1970s where a newly discovered wealth of natural gas and corresponding soaring exports ultimately ended up having a detrimental effect on the Dutch economy.
- 2 Rights to the fulfilment of basic needs is sometimes interpreted as a kind of positive right. The very idea of positive rights is, however, not universally accepted. There are authors who argue that genuine rights are always negative (e.g. the right not to be harmed) and who, correspondingly, do not accept the idea of a right to have one's needs fulfilled. Against such a standpoint it could be argued that the right to have one's basic needs fulfilled is in fact identical to a right not to be harmed, since the very definition of a basic need is that its absence entails harm. See Chapter 2 for more on this issue.
- 3 The idea that opportunity costs for developed countries are modest is not uncontroversial either, however. Adequate measures to prevent climate change, for instance, would lead to disruption of economic activity, entrenched lifestyles, competitiveness, etc.
- 4 On the ethical dimensions of exposing people to danger, see Chapter 3.
- 5 See World Bank (2017). Just to give an indication: the figures from 2014 show that the USA, Canada and Australia were each responsible for about 16 metric tonnes per capita and the average for EU countries was 6.4, while a country such as India remained below 2 and the least developed countries averaged 0.3 metric tonnes per capita. As can be expected, China was one of the outliers, its emissions having risen from 1.2 in 1960 to 7.5 in 2014, though it certainly is not the 'emissions world leader' it is made out to be by those relying on absolute numbers.

## **Bibliography**

- Acemoğlu, Daron and James Robinson. 2006. 'Paths of economic and political development'. In Barry R. Weingast and Donald A. Wittman (eds), The Oxford Handbook of Political Economy. Oxford: Oxford University Press, 673-692.
- Acemoğlu, Daron and James Robinson. 2012. Why Nations Fail. New York: Crown Publishers.
- Auty, Richard. 1993. Sustaining Development in Mineral Economies: The Resource Curse Thesis. London: Routledge.
- Azariadis, Costas and John Stachurski. 2005. 'Poverty traps'. In Philippe Aghion and Steven N. Durlauf (eds), Handbook of Economic Growth, Volume 1A. Amsterdam: Elsevier, 295–384.
- Banerjee, Abhijit and Esther Duflo. 2011. Poor Economics. A Radical Rethinking of the Way to Fight Global Poverty. New York: Public Affairs.
- Barnett, J. 2011. 'Human security'. In John S. Dryzek, Richard B. Norgaard and Davis Schlosberg (eds), The Oxford Handbook of Climate Change and Society. Oxford: Oxford University Press, 267-277.
- Calas, Bernard. 2009. 'La crise kenyane de 2008: les leçons du Kuresoi'. Transcontinentales 7:
- Caney, Simon. 2005. 'Cosmopolitan justice, responsibility and global climate change'. Originally printed in Leiden Journal of International Law. Reprinted 2010 in Stephen M. Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), Climate Ethics: Essential Readings. New York: Oxford University Press, 122-145.
- Caney, Simon. 2010. 'Climate change, human rights and moral thresholds'. Originally printed in Stephen Humphreys (ed.), Human Rights and Climate Change. Cambridge: Cambridge University Press. Reprinted 2010 in Stephen M. Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), Climate Ethics: Essential Readings. New York: Oxford University Press, 163-180.
- Collier, Paul. 2007. The Bottom Billion. Oxford: Oxford University Press.
- Collier, Paul. 2010. The Plundered Planet: Why We Must and How We Can Manage Nature for Global Prosperity. Oxford: Oxford University Press.
- Daly, Herman E. 2002. 'Sustainable development: definitions, principles, policies'. Invited address, Washington, D.C., MD: World Bank.
- Denoiseux, Delphine. 2010. 'L'exportation de déchets dangereux vers l'Afrique: le cas du Probo Koala'. Courrier hebdomadaire du CRISP 26(2071).
- Dercon, Stefan. 2003. 'Poverty traps and development: the equity-efficiency trade-off revisited'. Paper prepared for the Conference on Growth, Inequality and Poverty organized by the Agence française de développement and the European Development Research Network.
- Dilli, Selin. 2017. 'The deep causes of economic development: family systems and female agency'. In Jan Luiten van Zanden, Auke Rijpma and Jan Kok (eds), Agency, Gender and Economic Development in the World Economy 1850-2000: Testing the Sen Hypothesis. Abingdon: Routledge.
- Donnelly, Jack. 1985. 'In search of the unicorn: the jurisprudence and politics of the right to development'. California Western International Law Journal 15: 473-510.
- Dowie, Marc. 2009. Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples. Boston, MA: MIT Press.
- Gardiner, Stephen M. 2001. 'The real tragedy of the commons'. Philosophy and Public Affairs 30(4): 387-416.
- Harris, Paul (ed.). 2011. China's Responsibility for Climate Change: Ethics, Fairness, and Environmental Policy. University of Bristol: Policy Press.

- Löfquist, Lars. 2011. 'Climate change, justice and the right to development'. Journal of Global Ethics 7(3): 251-260.
- Luterbacher, Ulf and Detlef Sprinz (eds). 2001. International Relations and Global Climate Change. Cambridge, MA: MIT Press.
- Narveson, Jan. 2004. 'Welfare and wealth, poverty and justice in today's world'. Journal of Ethics 8(4): 305-348.
- Neumayer, Eric. 2000. 'In defense of historical accountability for greenhouse gas emissions'. Ecological Economics 33(2): 185–192.
- Olson, Mancur. 2000. Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships. New York: Basic Books.
- Pogge, Thomas. 2008. World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms, 2nd edn. Cambridge: Polity Press.
- Posner, Eric and David Weisbach. 2010. Climate Change Justice. Princeton, NJ: Princeton University Press.
- Rodrik, Dani. 2007. One Economics, Many Recipes. Princeton, NJ and Oxford: Princeton University Press.
- Rodrik, Dani, Arvind Subramanian and Francesco Trebbi. 2004. 'Institutions rule: the primacy of institutions over geography and integration in economic development'. Journal of Economic Growth 9(2): 131-165.
- Ross, Michael L. 2013. The Oil Curse: How Petroleum Wealth Shapes the Development of Nations. Princeton, NJ and Oxford: Princeton University Press.
- Rothstein, Bo. 2005. Social Traps and the Problem of Trust. Cambridge: Cambridge University
- Sachs, Jeffrey and Andrew Warner. 2001. 'The curse of natural resources'. European Economic Review 45: 827-838.
- Schweitzer, Jeff. 2010. 'Seed corn, discount rate and our endangered future'. Huffington Post, 27 July. Available at: www.huffingtonpost.com/jeff-schweitzer/seed-corn-discount-ratea\_b\_660559.html (last accessed 9 April 2018)
- Shue, Henry. 1980. Basic Rights. Princeton, NJ: Princeton University Press.
- Shue, Henry. 1981. 'Exporting hazard'. Ethics 91(4): 579-606.
- Shue, Henry. 1992. 'The unavoidability of justice'. Originally printed in Andrew Hurrell and Benedict Kingsbury (eds), The International Politics of the Environment. Oxford: Oxford University Press, 1992. Reprinted 2014 in Henry Shue, Climate Justice: Vulnerability and Protection. Oxford: Oxford University Press, 27-44.
- Shue, Henry. 1993. 'Subsistence emissions and luxury emissions'. Originally printed in Law & Policy 15(1). Reprinted 2010 in Stephen Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), Climate Ethics: Essential Readings. New York: Oxford University Press, 200–214.
- Shue, Henry. 1999. 'Global environment and international inequality'. International Affairs 75(3): 531-545.
- Shue, Henry. 2010. 'Global environment and international equality'. In Stephen Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), Climate Ethics: Essential Readings. New York: Oxford University Press, 102-111.
- Shue, Henry. 2013. 'Climate hope: implementing the exit strategy'. Originally printed in Chicago Journal of International Law 13(2). Reprinted 2014 in Henry Shue, Climate Justice: Vulnerability and Protection. Oxford: Oxford University Press, 319-339.
- Shue, Henry. 2014. Climate Justice: Vulnerability and Protection. Oxford: Oxford University
- Singer, Peter. 2010. 'One atmosphere'. In Stephen Gardiner, Simon Caney, Dale Jamieson and Henry Shue (eds), Climate Ethics: Essential Readings. New York: Oxford University Press, 181-199.

- Traxler, Martino. 2002. 'Fair chore division for climate change'. Social Theory and Practice 28(1): 101–134.
- Uslaner, Eric. 2008. Corruption, Inequality and the Rule of Law. Cambridge: Cambridge University Press.
- Wantchekon, Leonard. 2002. 'Why do resource dependent countries have authoritarian governments?'. *Journal of African Finance and Economic Development* 5(2): 57–77.
- Wenar, Leif. 2008. 'Property rights and the resource curse'. *Philosophy and Public Affairs* 38(1): 2–32.
- Wolf, Clark. 2008. 'Justice and intergenerational debt'. Intergenerational Justice Review 8(1): 13–17
- World Bank. 2017. 'CO<sub>2</sub> emissions (metric tons per capita)'. Collected by the Carbon Dioxide Information Analysis Center, Environmental Sciences Division, Oak Ridge National Laboratory, USA. Available at: data.worldbank.org/indicator/EN.ATM.CO2E.PC
- Zhang, Qianget al. 2017. 'Transboundary health impacts of transported global air pollution and international trade'. *Nature* 543: 705–709.