Chapter 12 Capabilities, Ethics and Disasters



Andrew Crabtree

The memory of the Bengal famine of 1943, in which between two and three million people had died, and which I had watched from Santiniketan, was still quite fresh in my mind. I had been struck by its thoroughly class-dependent character. (I knew of no one in my school or among my friends and relations whose family had experienced the slightest problem during the entire famine; it was not a famine that afflicted even the lower middle classes – only people much further down the economic ladder, such as landless rural labourers.) Calcutta itself, despite its immensely rich intellectual and cultural life, provided many constant reminders of the proximity of unbearable economic misery, and not even an elite college could ignore its continuous and close presence.

Amartya Sen, Nobel Prize Biographical (1998)

Abstract The work of Amartya Sen proved breakthrough in our understanding of disasters by shifting the emphasis from the hazard to societal causes of vulnerability. This chapter begins with an outline of Sen's work on famines and its relation to the Disaster Risk Reduction literature. It then goes on to outline the capability approach the development of which Sen played a central role. The approach is contrasted with the view of income as development, utilitarianism and Rawls. Thereafter, taking the case of climate change, the chapter criticises Sen for his inattention to sustainability issues. It is argued that instead of seeing development as increasing people's freedoms to live the lives they value, as Sen does, we should think of sustainable development as increasing legitimate freedoms. Legitimate freedoms are demarcated by drawing on Thomas Scanlon's version of contractualism and the

A. Crabtree (⊠)

Department of Management, Society and Communication, Copenhagen Business School,

Copenhagen, Denmark e-mail: ac.msc@cbs.dk

notion of reasonable rejection. As climate change is with us, it is argued that we are already living in an unsustainable world.

Keywords Disasters \cdot Ethics \cdot Contractualism \cdot Sen \cdot Capabilities \cdot Climate change \cdot Unsustainability \cdot Legitimate freedoms

12.1 Introduction

Amartya Sen won the Nobel prize for Economics in 1998 for his contribution to welfare economics which includes his work on social choice theory, poverty and famines, and measurers of human development. As he described in his Nobel biography, cited above, his experiencing of the 1943 Bengali famine has had a profound influence on his life's work, the scope of which is unique. Sen completed his PhD in Economics at Cambridge after just 1 year but, because of regulations, had to wait a further 2 years before the PhD could be awarded. During that period, Sen gained a Prize Fellowship at Trinity College which allowed him to study philosophy which, in turn, has played a central role in his development of the capability approach. This chapter begins with an overview of Sen's path-breaking work on famine disasters and thereafter introduces the capability approach. The chapter then moves onto issues of ethics, justice and climate change related disasters.

12.1.1 Sen's Work on Famine Disasters

As the quote above makes clear, there is a strong social dimension to famines. Sen's experience contrasted strongly with the belief that famine is the result of food availability decline (FAD). Together with other authors such as Hewitt (1983) and Wisner et al. (2004), Sen played a decisive role within disaster research in shifting the emphasis on the understanding of disasters from the hazard (drought, flood, earthquake etc.) to the social context in which the hazard occurs (Wisner et al. 2004; Pelling 2011). This shift in the understanding of famines and disasters more generally points to a host of ethical issues which are ignored if one only concentrates on the hazard. As I will argue later in relation to climate change, the philosophical and public debate has not kept up with the disaster literature.

As Sen (2009) argues, famines are relatively easy to prevent, and usually not more than five to ten per cent of a population in any one country are affected. Indeed, there is usually enough food within a country to feed everyone. Even at the time of the Irish potato famine from 1845 to 1852 when approximately one million people died, Ireland was exporting potatoes to England (Sen 1999). More theoretically, in his major work on famines, *Poverty and Famines*, Sen (1981) argued that starvation was not due to a lack of food *per se* but to a lack of entitlements to food. Starving people do not *have* food, rather than there not *being* food. That is, starvation is thus related to ownership and having command over commodities. Consequently, the

lack of entitlements, of which Sen distinguishes four being of greatest importance in relation to famines, is paramount:

- 1. *Trade-based entitlement*: one is entitled to own what one obtains by trading something one owns with a willing party (or, multilaterally, with a willing set of parties);
- Production-based entitlement: one is entitled to own what one gets by arranging production using one's owned resources, or resources hired from willing parties meeting the agreed conditions of trade:
- 3. *Own-labour entitlement*: one is entitled to one's own labour power, and thus to the trade-based and production-based entitlements related to one's labour power;
- 4. *Inheritance and transfer entitlement*: one is entitled to own what is willingly given to one by another who legitimately owns it, possibly to take affect after the latter's death (if so specified by him). (Sen 1981, 2).

In the absence of non-entitlement transfers, such as aid or food for work programmes, a person will starve if that person's entitlements cannot be exchanged for sufficient food. A person's entitlements are relative to others. Thus, for example, food decline might lead to increased prices with the consequence that a person's entitlements might decline relative to others or if others become richer, a person's exchange entitlements may decrease because of inflation (Sen 1981).

Whilst Sen's entitlement theory pointed to the importance of different types of ownership and entitlements in different economic systems, a major criticism of Sen's earliest work is that his theory failed to take a much broader range of sociopolitical and cultural factors into account. Entitlement theory is primarily an economic explanation of famines. It goes some way to explaining why the rich have no problems in famines whilst the poor do, but for the inclusion of other factors, we have to turn to his later work or that of others (Wisner et al. 2004).

Sen has also advanced the thesis that famines never occur in democratic countries (Sen 1999). There has, according to Sen, never been a famine in India since the British left. The logic is quite straightforward: in a democratic country candidates need to secure votes in order to be re-elected. If candidates do nothing to ensure that a famine is avoided, they will not be re-elected and therefore they have an incentive to act. Conversely, the Great Famine in China of 1959–1961, which resulted in the deaths of some 29.5 million people, continued for 3 years without a significant change in policy. As Sen points out, there was an absence of a free press and opposition parties which could place pressures on the government. Whilst, the empirical validity of Sen's claim that there has not been a famine in a democratic country has been questioned in relation to the famines in Bihar (1966), Malawi (2002) and Niger (2005), these criticisms have pointed to other important political factors such as the roles of the International Monetary Fund (IMF) and World Bank in forcing the sale of grain reserves (Rubin 2009). Thus, Sen's arguments have been criticised for not taking other socio-cultural factors into account or not providing a deeper analysis of other socio-cultural factors that affect famines (Wisner et al. 2004). However, while such criticisms call for a more profound understanding of societal relationships, they do not invalidate the underlying thesis that societies rather than hazards are the major causes of disasters. If poverty and vulnerability are part of the causes of disasters, it is important to understand what poverty and vulnerability are and who is responsible for those states.

12.2 Sen, the Capability Approach and Development as Freedom

Although Sen had already begun work on the capability approach in relation to justice in 1979 (Sen 1979), the term 'capability' does not appear in *Poverty and Famines* (1981). For Sen (1999), poverty is conceived as capability deprivation, and development can be seen as a process of increasing the real freedoms (capabilities) people have to live the lives they value and have reason to value. Within the development field, this view contrasts with the view of development seen as an increase in income, which is the approach that had been endorsed by the IMF and World Bank for many years (however, the institutions' approach has now, to some extent, changed partly as a result of Sen's work). The capability approach to development also distinguishes itself from those approaches which concentrate on resources as do the industrialization or modernization approaches or some versions of the basic needs approach. In the present context, it is important to make clear that whilst Sen's work on famines is *explanatory* the capability approach in Sen's version is *primarily* an analysis of the *evaluative space* for well-being. Nonetheless, there are interconnections (Sen 1989) as will be discussed below.

It is important to state that although the capability approach is normative, it does not entail one specific theory of ethics or justice. The leading proponents of the approach, Sen and Martha Nussbaum hold different views about ethics and justice and indeed have different aims. Nussbaum's principle question is "When is a society just?" It is in answering this question that she puts forward and defends a list of ten central capabilities that individuals should have, as near as possible, in order for societies to be just. These capabilities provide a threshold of justice for underwriting constitutional guarantees (Nussbaum 2001). Although Nussbaum's work is of considerable importance and highly innovative, it does not claim to go beyond basic social justice. In terms of disasters it only tells us that basic injustices are done and that it is the government's responsibility to change the situation. It does not provide an intricate analysis of the responsibilities involved in disasters. Sen (2009) rejects Nussbaum's basic question which he sees as neither being a good starting point or ending point for a theory of justice. Whilst this chapter concentrates on Sen's version of the capabilities approach rather than Nussbaum's, it should not be read as meaning that Nussbaum's work is of lesser importance.

The basic framework of the capabilities approach is shown schematically in Fig. 12.1 below.

Sen argues for taking capabilities (highlighted in red) as the evaluative space for development by showing the weaknesses of resource-based approaches and end-state approaches, such as utilitarianism, which concentrate on our actual doings and beings (technically called functionings). The resource-based views include the income approach to development and poverty analysis, the basic needs approach and Rawls' theory of justice. According to Sen, resource-based views are problematic as different people need different resources to be able to do the same things. An oft-used example is that someone in a wheelchair needs many more resources to get



Fig. 12.1 The basic framework of the capabilities approach

about (a wheelchair, lifts, etc.) than does an able-bodied person. If we just rely on income or the provision of basic needs as an evaluation of well-being, we miss out on the individual conversion factors (in this example wheelchairs, ramps, etc.) that are needed for people to have the same freedoms. The supporters of the resource-based view might retort that this is not a "knock out argument", it just makes the picture more complicated. A resource-based view could simply factor in the increased number of resources by adding the costs of wheelchairs and so forth. A poverty line of \$1.90 a day may be too simplistic if we are to include wheelchairs in the analysis, but in principle one can factor in the relevant costs.

The argument becomes more problematic for resource-based views when we consider conversion factors which relate to human behaviour. For example, in an apartheid regime or the USA prior to the enfranchisement of blacks, certain people were not allowed to vote. Unlike the wheelchair case, blacks would not be able to do the same thing (vote) as whites irrespective of how much more money blacks had. Other forms of discrimination also require changes in behaviour rather than the provision of a more complex set of resources.

The capability approach's criticisms of Rawls are much more complex, and concern Rawls' entire project (Sen 2009; Nussbaum 2006). Essentially, Sen has argued that Rawls tried to provide a transcendental theory of justice which would in principle provide a full, perfect, view of justice. Sen in contrast offers a comparative view of justice in which he claims that we can identify certain manifest injustices without having a perfect theory of justice. For Sen, many questions concerning justice can be decided "and agreed upon reasoned arguments" (Sen 2009, ix). This involves public debate and an appeal to what Adam Smith called the 'impartial spectator'; the idea is that we should not simply think of our own vested interests, but step back and reflect on the situation from the outside (Sen 2009). Surprisingly, Sen never gives us a clear idea of how this reasoning process or public discussion should take place. Nor does he establish when we will know if a particular outcome is correct. It would be strange to deny public discussion any role (and Rawls does not). However, Sen's dependence on public discussion jars with Sen and Jean Drèze's recent book on India An Uncertain Glory and their attack on the limits to public debate that result from present day media control in India. Inequalities in voice are sharply criticized by Drèze and Sen (2013). Hence public scrutiny, though vital, is in practice often weak for establishing what is just and unjust.

When one turns to the examples Sen gives (see above), the agreement involved tends to reflect generally accepted criteria (Sen 2009). But these criteria are time-bound and reflect the humanist agenda. It is one thing to reach agreement on fairly obvious injustices of the 'if slavery is not wrong, nothing is wrong' type, but there are many issues relating to justice where the injustices are less clear. There are no

'generally accepted criteria' to answer questions such as 'What do equal opportunities look like?' Or, 'Who should 'pay' for climate change loss and damage resulting from disasters?' Indeed if there were, there would be little need for perusing the debate further. In such cases, one might have expected Sen to offer a method of moving forward, such as a discussion of Rawls' idea of reflective equilibrium; however, Sen does not supply a method beyond public discussion and the impartial spectator. As Shapiro (2011) points out, Sen simply does not show us how his comparative method works in more complex matters.

However, in terms of resources, the argument against Rawls has been aimed at the difference principle which is central to his theory of justice. The guiding insights behind Rawls' theory of justice are that humans are social animals who have to live and work together to have a decent life, and that people place importance on the distribution of goods within a society. For Rawls, co-operation "should be fair to all citizens regarded as free and as equals" (Wenar 2017). These insights lead to two principles:

First Principle: Each person has the same indefeasible claim to a fully adequate scheme of equal basic liberties, which scheme is compatible with the same scheme of liberties for all; Second Principle: Social and economic inequalities are to satisfy two conditions:

- (a). They are to be attached to offices and positions open to all under conditions of *fair* equality of opportunity;
- (b). They are to be to the greatest benefit of the least-advantaged members of society (the *difference principle*). (Rawls 2001, 42–43)

The first of these takes precedence over the second and (a) takes precedence over (b). Talk of equal opportunity above might be understood in the same sense as capability freedoms, but this would be mistaken. For Rawls, opportunity here is limited to education and income. The problem of resources arises once again because of conversion factors.

Sen is obviously not saying that resources are unimportant. Rather, they only have instrumental value in respect to capabilities which have both intrinsic value and can have instrumental value in achieving other capabilities. Thus, the capability to swim may have intrinsic value but it can also have the instrumental value of being able to survive in a flood. Not being allowed to learn how to swim may be seen as a capability deprivation and it is one that some women suffer and hence drown in floods. Conversion factors in Fig. 12.1 refer to those different factors which translate resources into capabilities. Examples include norms, social institutions, other people's behaviour, and environmental factors.

If we turn to our actual doings and beings, such as calorie intake or being happy, we again run into evaluative problems. Sen offers the comparison of someone in a famine and Mahatma Gandhi on a hunger strike. The two people may have the same calorie intake but are clearly in different positions. Gandhi made a choice whereas a person in a famine does not. Historically, it is arguable that Gautama Buddha has been the person with the greatest well-being, however on any measure of poverty such as lack of income, shelter, and food Buddha was chronically poor. The capability approach captures the fact that Buddha chose to live the way he did, he exercised

his free agency. If we concentrate on functionings alone, we miss out on agency and the real choices people have. Clearly, there may be practical reasons why one would measure actual functionings rather than capabilities, as in a famine.

Similarly, with utilitarianism, whilst Sen is appreciative of the point that the consequences of people's actions are important, utility is the ultimate measure of well-being. In classical utilitarianism, utility is conceived in terms of happiness or pleasure. There is then a sum ranking to calculate the greatest happiness of the greatest number. Conversely, pain should be avoided. This does not entail that all utilitarians follow James Mill's argument that those suffering from the famine during the "summer that never was," which was caused by the eruption of Mount Tambora a year earlier in 1815 and the consequent blocking of the sun, should have their throats cut like pigs to ease their misery (Sen 2009).

Utilitarianism is pervasive within welfare economics. However, philosophical scepticism about the possibility of knowing whether or not other people were happy or gained greater pleasure led welfare economists to concentrate on observable choices. Sen has delivered a number of criticisms against utilitarianism, claiming that it ignores inequalities, rights, freedoms and it fails to take social conditioning or adaptive preferences into consideration. A dutiful housewife may say she is satisfied with her lot because that is what she has been brought up to expect. Furthermore, two people may exhibit the same choice behaviour preferring two kilos of rice to one, but may do so for different reasons. A person with a stomach parasite is in a different situation than someone who does not have one. Again, real freedoms are essential to assessing well-being and development (Sen 1999).

In *Food and Freedom* (1989), Sen draws out some of the connections between development as understood in terms of capabilities, food and ethics. Basic capabilities such as having enough food to eat are clearly fundamental to engaging in ethical activity, and having insufficient food may force individuals into undertaking things "they resent doing" and thus reduce their freedom and others' freedoms. Extreme examples of this include the Great Famine of China in which some parents ate their own children (Branigan 2013). Conversely, a lack of freedom may affect food production. Here Sen points to the policies introduced by Deng Xiao Ping in post-1979 China. These allowed peasants a greater say in the choice of food production as opposed to having it decided centrally by Beijing resulting in a significant increase in output. The lack of political freedoms under authoritarian regimes and colonial powers may also affect food distribution.

The emphasis on freedoms in the capability approach also points to the importance of agency. This again is linked to food and famine prevention for if we see people in famines as agents rather than victims who need charity, one appropriate response to a possible famine is to provide work programs so that people can increase their purchasing power and entitlements. John Stuart Mill argued against taking this approach in Ireland during the potato famine as he thought the Irish were "indolent, unenterprising, careless of the future, doing nothing for themselves, and demanding everything from other people..." (Henry 2016). The Irish, in Mill's opinion, would squander aid. The Irish, in John Stuart Mill's opinion were not active agents.

12.3 Climate Change, Unsustainability and Disasters

Sen has done little work on disasters since the 1980s. Rather his work has concentrated on issues connected with development and justice (Sen 1999, 2009). His efforts have been institutionalised in the form of the Human Development Index (HDI) and the Human Development Reports supported by the United Nations Development Program. Much of the work within the capabilities approach more generally has been on been on specific aspects of these issues, though it must be emphasised that Martha Nussbaum's work on justice cannot be considered a footnote to Sen (see especially Nussbaum 2001, 2006).

Here I wish to concentrate on something of a paradox. Sen has not undertaken much work on sustainability. On the one hand, we might see this as acceptable as we should not expect any author to cover everything and as Sen has said his child-hood experiences have greatly influenced the direction of his work – sustainability might appear to be secondary to the more immediate problems surrounding famines and poverty. Yet, Sen's conceptualization of development in terms of increasing the freedoms that people have to live the lives they value raises an obvious and immediate question: do we not have good reason to reject what others may value doing, or others reject what we are doing? Not surprisingly others have raised this issue, to quote Nussbaum for example:

...it is unclear whether the idea of promoting freedom is even a coherent political project. Some freedoms limit others. The freedom of rich people to make large donations to political campaigns limits the equal worth of the right to vote. The freedom of businesses to pollute the environment limits the freedom of citizens to enjoy an unpolluted environment. The freedom of landowners to keep their land limits projects of land reform that might be argued to be central that might be central to many freedoms for the poor. And so on. Obviously these freedoms are not among those that Sen considers, but he says nothing to limit the account of freedom or to rule out conflicts of this type. (Nussbaum 2003, 44)

With respect to sustainability, the paradox for Sen is that those countries which are most developed in terms of the HDI are all large, per capita, Greenhouse Gas emitters or in the case of Norway dependent on oil exports. If we return to Fig. 12.1, the capability approach's evaluative space concerns capabilities and functionings. Although Sen sees the importance of the consequences of our actions as being part of ethical analysis, the general use of the capability approach tends to be static rather than dynamic, i.e. it does not take the consequences of our actions and the correlative responsibilities into account. The type of development Sen is advocating is one that leads to unsustainability (climate change is already here), part of which is an increase in weather-related disasters. In other words, some freedoms can be reasonably rejected.

To meet this problem, I have argued for a legitimate freedom approach (see also Crabtree 2010, 2012) which defines sustainable development as a process of expanding the real freedoms that people value which are in accordance with principles that cannot be reasonably rejected by others (Crabtree 2013). This combines Sen's concept of development with the idea of reasonable rejection developed by Sen's

Harvard colleague Thomas Scanlon who offers a contractualist approach to ethics (Scanlon 1998; see also Barry 1995; Forst 2007; Parfit 2011). For Scanlon, judgments of right and wrong center on reasonable rejection:

When I ask myself what reason the fact that an action would be wrong provides me with not to do it, my answer is that such an action would be one that I could not justify to others on grounds I could expect them to accept... judgments of right and wrong by saying that they are judgments about what would be permitted by principles that could not reasonably be rejected, by people who were moved to find principles for the general regulation of behavior that others, similarly motivated, could not reasonably reject. (Scanlon 1998, 4)

Thus, the fundamental idea in Scanlon's approach is that an action (I would add, a lifestyle) is morally wrong if the actor cannot justify his or her action to others in accordance with principles that they could not reasonably reject. The Scanlonian formulation guarantees impartiality by ensuring everyone the right of veto as all can reasonably reject a principle. As Barry (1995) argues, the approach affords a very strong basis for equal rights for "it invites us to ask why anybody should freely consent to being treated less well in respect of rights than anybody else in his society" (Barry 1995, 70), or indeed the world, and can be extended across generations by employing the notion of trusteeship (Crabtree 2013).

In the present context, those who suffer or will suffer from climate change disasters can reasonably reject principles that allow for unmitigated climate change. Even with the Paris agreement, average temperatures are expected to rise over 3 °C by the end of the century. This is not just a problem for future generations as many people alive now will be alive in 2100 (82 years' time). People can reasonably reject a 3 °C world, which will be even warmer in some areas. This would seem to bring us back to utilitarianism and John Stuart Mill's no harm principle, but contractualism rejects the idea that there are criteria, such as harm, outside the contract which can be the basis for establishing principles of right and wrong. Indeed, if there were so there would be no need for contractualism as the criteria would already be established.

Returning to the disaster risk reduction literature, it makes clear there is no pure climate disaster and hence no pure climate change disaster. To repeat, there are two necessary causes of a disaster, namely a hazard and a society. Hence there are two sets of responsibility. This line of thought can lead us to question the dominant philosophical, international, institutional and civil society discourse which sees responsibility for climate change related disasters as being the responsibility of the Greenhouse Gas emitters alone. For example we find statements such as 'Climate change kills!' (DARA 2012) and the assertion of the World Health Organization (WHO) that climate change is expected to cause approximately 250,000 additional deaths per year between 2030 and 2050 (WHO 2013). The argument can also be found in much of the philosophical literature that discusses the polluter pays principle or principle of Common but Differentiated Responsibilities and climate change (Caney 2009, 2010; Gardiner 2004, 2006; Scruton 2012). This is also the thinking that lies behind the case brought by the Dutch Urgenda Foundation and 886 individual citizens against the Dutch government (Cox 2014). The argument is based on an understanding of vulnerability, primarily in terms of hazards that are caused by the developed countries (Jordan et al. 2013). The main principle within international environmental law relating to climate change is that of Common but Differentiated Responsibilities (CBDR), which states:

In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command. (IPCC 2018)

The idea of legitimate freedoms places ethical limitations on the kind of development that is acceptable. We can also reasonably reject principles that allow inaction and the failure in societies in which disasters occur to take disaster risk reduction measures. In *Famine, Affluence and Morality* Peter Singer argued for Western Aid to developing countries on the basis that:

If it is in our power to prevent something very bad from happening, without thereby sacrificing anything morally significant, we ought, morally, to do it. An application of this principle would be as follows: if I am walking past a shallow pond and see a child drowning in it, I ought to wade in and pull the child out. This will mean getting my clothes muddy, but this is insignificant, while the death of the child would presumably be a very bad thing. (Singer 1972, 231)

Such arguments do not simply apply to Western aid; they also apply to the societies in which disasters happen. For example, in 1999, approximately 10,000 people died as a result of the super cyclone disaster in Orissa. A similar cyclone in the same area in 2013 left 44 dead (The Hindu 2013). The difference being that approximately 500.000 people were moved out of path of the cyclone. Inaction by the state government could be reasonably rejected. This does not mean that all the negative effects of the cyclones could have been prevented. Disaster risk reduction literature is precisely about reducing risk. It does not claim that risk can be eliminated. There was substantial livelihood loss following both cyclones. The hazard still plays a role in disaster causation.

This raises a further question, for if the society in which a disaster happens has some of the responsibility for the disaster, then the responsibility of the Greenhouse Gas emitting nations is diminished by the actions or inactions of those countries in which the disasters happen (Scanlon 1998; Crabtree 2016). This principle is well known from tort law. If a driver breaks the speed limit and hits a child, then the driver is responsible for the injury to the child. However, if someone who is present, such as a traffic warden, has the duty to ensure that a child goes over the road safely, then the responsibility of the driver is diminished. The question, in relation to climate change, is what responsibilities people have in the affected societies. This varies considerably, and at a variety of levels down to local 'communities' that exclude people and the individual who ignores warnings (Scanlon 1998; Crabtree 2013). Part of the problem here is that responsibility becomes extremely complex such that litigation or the calculation of climate change loss and damage would

become almost impossible. This brief discussion does not exhaust the issues involved, but it does show that the complexity of ethical issues is increased when we embrace the shift in understanding of disasters in which Sen played a key role. It is a shift that has been ignored in much of the climate change debate.

The discussion also points to a fundamental problem within the capability approach. We might argue that development can be understood in terms of freedom, but if we are to answer the question, 'Is development sustainable or not?' we need to evaluate what the consequences of our doings and beings are and what is happening to the environment. This expands the evaluative space and brings resources back into the picture, albeit seeing these as broader than income. It would also lead us to reject the HDI as a stand-alone figure which does not relate to the environment.

12.4 Conclusion

Sen's work on famines was path-breaking and a significant achievement in itself. He has had an enormous impact on the field of development studies, policy and practice (through the HDI), and made a significant contribution to the theory of justice both as a critic and protagonist. The sad paradox is that by ignoring sustainability issues, the development Sen envisages will lead to more disasters. Thus while we need to reduce people's vulnerabilities by increasing their freedoms and adapting to climate change, we also need to engage in actions to mitigate climate change and the reduction of hazards more generally. We need to establish which freedoms are legitimate and which can be reasonably rejected.

References

Barry, Brian. 1995. Justice as impartiality. Oxford: Clarendon Press.

Branigan, Tania. 2013. China's great famine: The true story. https://www.theguardian.com/world/2013/jan/01/china-great-famine-book-tombstone.

Caney, Simon. 2009. Justice and the distribution of greenhouse gas emissions. *Journal of Global Ethics* 5 (2): 125–146. https://doi.org/10.1080/17449620903110300.

———. 2010. Climate change, human rights, and moral thresholds. In *Climate ethics: Essential readings*, ed. Stephen Gardiner, S. Caney, D. Jamieson, and H. Shue, 163–177. Oxford: Oxford University Press.

Cox, R. 2014. Liability of European states for climate change. *Utrecht Journal of International and European Law* 30 (78): 125–135. https://doi.org/10.5334/ujiel.ci.

Crabtree, Andrew. 2010. Sustainable development, capabilities and the missing case of mental health. In *A new agenda for sustainability*, ed. Nielsen, Klaus, A., Elling, B. Figueroa, M., and E. Jelsoe, 159–176. Aldershot: Ashgate.

Crabtree, A. 2012. A legitimate freedom approach to sustainability: Sen, Scanlon and the inadequacy of the human development index. *International Journal of Social Quality* 2 (1): 24–40. https://doi.org/10.3167/IJSQ.2012.020103.

- 2013. Sustainable development: Does the capability approach have anything to offer? Outlining a legitimate freedom approach. *Journal of Human Development and Capabilities* 14: 40–57. https://doi.org/10.1080/19452829.2012.748721.
- Crabtree, Andrew. 2016. Sustainability and unsustainability. Roskilde: Roskilde University.
- DARA and the Climate Vulnerable Forum. 2012. Climate vulnerability monitor, 2nd edn. *A guide to the cold calculus of a hot planet.* http://www.daraint.org/wp-content/ uploads/2012/09/CVM2ndEd-FrontMatter.pdf. Accessed 1 Sept 2016.
- Drèze, Jean, and A. Amartya Sen. 2013. An uncertain glory: The contradictions of modern India. London: Allen Lane.
- Forst, Rainer. 2007. The right to justification. New York: Columbia University Press.
- Gardiner, Stephen. 2004. Ethics and global climate change. Ethics 114: 555-600.
- Gardiner, S.M. 2006. A perfect moral storm: Climate change, intergenerational ethics and the problem of moral corruption. *Environmental Values* 15 (3): 397–413. https://doi.org/10.3197/096327106778226293.
- Henry. 2016. Liberalism and the Irish famine, http://crookedtimber.org/2016/01/28/millian-liberalism-and-the-irish-famine/ Accessed 12 Jan 2018.
- Hewitt, Ken. 1983. *Interpretations of calamity from the viewpoint of human ecology*. Boston: Allen and Unwin.
- Intergovernmental Panel on Climate Change. 2018. Working group III. Mitigation. http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=56. Accessed 12 Jan 2018.
- Jordan, A., T. Rayner, H. Schroeder, N. Adger, K. Anderson, A. Bows, and L. Whitmarsh. 2013. Going beyond two degrees? The risks and opportunities of alternative options. *Climate Policy* 13 (6): 751–769. https://doi.org/10.1080/14693062.2013.835705.
- Nussbaum, Martha C. 2001. Women and human development. Cambridge, UK: Cambridge University Press.
- . 2003. Capabilities as fundamental entitlements: Sen and social justice. *Feminist Economics* 9 (2–3): 33–59.
- Nussbaum, Martha. C. 2006. Frontiers of justice. Cambridge, MA: Harvard University Press.
- Parfit, Derek. 2011. On what matters. Vol. 1 and 2. Oxford: Oxford University Press.
- Pelling, Mark. 2011. Adaptation to climate change. London: Routledge.
- Rawls, John. 2001. In *Justice as fairness: A restatement*, ed. E. Kelly. Cambridge, MA: Harvard University Press.
- Rubin, Olivier. 2009. The merits of democracy in famine protection-fact or fallacy? *The European Journal of Development Research* 21 (5): 699–717.
- Scanlon, Thomas. M. 1998. *What we owe each other*. Cambridge, MA:Harvard University Press. Scruton, Roger. 2012. *Green philosophy*. London: Atlantic Books.
- Sen, Amartya. 1979. Equality of what? Tanner lecture on human values. In *Tanner lectures*. Stanford University. http://hdrnet.org/43/. Accessed 12 Jan 2018.
- ——. 1989. Food and freedom. World Development 17 (6): 769–781.
- 1998. Nobel prize biographical. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1998/sen-bio.html. Accessed 12 Jan 2018.
- ——. 1999. *Development as freedom*. Oxford: Oxford University Press.
- ——. 2009. The idea of justice. London: Allen Lane.
- Shapiro, Ian. 2011. Review of the idea of justice by Sen, A. *Journal of Economic Literature* XLIX (December): 1251–1263.
- Singer, Peter. 1972. Famine, affluence, and morality. *Philosophy & Public A Airs* 1 (3): 229–243. The Hindu. 2013. Odisha's death toll after cyclone, floods climbs to 44. http://www.thehindu.com/news/national/other-states/odishas-death-toll-after-cyclone-floods-climbs-to-44/article5247992.ece. Accessed 30 Oct 2013.

Wenar, Leif. 2017. John Rawls. In The Stanford encyclopedia of philosophy (Spring 2017 edn), ed. Edward N. Zalta. https://plato.stanford.edu/archives/spr2017/entries/rawls/. Accessed 12 Jan 2018.

Wisner, Ben, P. Blaikie, T. Cannon, and I. Davis. 2004. At risk: Natural hazards, people's vulnerability and disasters. London: Routledge.

World Health Organization. 2013. Climate change and health. http://www.who.int/mediacentre/factsheets/fs266/en/. Accessed 12 Jan 2018.

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