

## Climate Change and Children's Rights: An International Law Perspective

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### *Abstract*

This article sheds light on the legal structures available to protect children's rights possibly affected by the adverse effects of climate change. The vulnerability of children to climate change is discussed and examples of how children are affected by climate change are sketched. The article refers to the international legal framework on children's rights and climate change with a focus on relevant provisions under the United Nations Convention on the Rights of the Child and the provisions pertinent to children's rights under the United Nations Convention on Climate Change, before reflecting from a legal perspective on some major challenges with regard to children in a changing climate, namely humanitarian crises, migration and child labour.

### *A. Introduction*

Climate change is the biggest global threat of the 21st century. Besides women, the elderly, indigenous and disabled people, children are the poorest of the poor and the most vulnerable. Climate change effects on water, food security, health, and human settlements will affect those most who have contributed least to its cause and who have the least access to the world's resources. Children can be particularly at risk, especially in Africa, with its low adaptive capacity and projected climate change impacts.<sup>1</sup> Almost 11 million children die each year, of which 70% are attributable to the following six causes: diarrhoea, malaria, neonatal infection, pneumonia, preterm delivery and lack of oxygen at birth.<sup>2</sup> The effects of climate change will put

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1 IPCC (2007:52).

2 See <http://www.unicef.org/mdg/childmortality.html>, last accessed 10 June 2013.

the lives and well-being of children at increased risk: It is expected that the effects of climate change will increase the incidence of diarrhoea;<sup>3</sup> furthermore, “climate change will increase the opportunities for malaria transmission in traditionally malarious areas, in areas the disease has been controlled, as well as in new areas which have been traditionally non-malarious”;<sup>4</sup> and climate change leads to the spread of infectious diseases and respiratory ailments.<sup>5</sup> Added to this is the issue of undernutrition, worsened by climate-change-related food insecurity. The challenges related to the effects of climate change on children’s rights will require collaboration between many academic disciplines, as well as inputs from governments and civil society.

The impact of climate change on the realisation of child rights shows multiple effects of climate change on basic rights such as water, food and health for children in countries vulnerable to temperature and precipitation change. For example, a child may be less able to enjoy an adequate standard of living, education and health, owing to loss of livelihoods and food security resulting from increased water stress and habitat changes. Where natural disasters are becoming more frequent and intense, a child is at high risk of disrupted education, injury, forced migration and death. Children are vulnerable to climate change, as existing social inequalities are being further exacerbated by climate change, and will become ever more severe – unless action is taken to reduce the causes (greenhouse gas emissions) and help communities adapt to the consequences, by applying economic and social policy, instilling cultural values, and instituting legislative frameworks. Policymakers at the international, national and local levels need to apply a cost-benefit analysis that values future quality of life. Adherence to the Convention on the Rights of the Child could require that national government policymakers, especially those in developed countries, ensure the fair representation of children and young people and that children’s specific needs are given due consideration in adaptation and mitigation policy.<sup>6</sup>

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3 See for example Alexander et al. (2013).

4 Fernando et al. (2010); see also Paaijmansa et al. (2010).

5 WHO (2012).

6 UNICEF (2009b).

## B. *How Climate Change may affect Children*

Children are particularly vulnerable to the effects of climate change. Such a blanket description, used also for other especially vulnerable groups such as women or the elderly, is commonly found in climate-change-related research – mostly, however, without further indication as to what children are vulnerable to.<sup>7</sup> With regard to natural disasters, there is no doubt that some individuals may suffer more losses than others. In general, the poorest and those who are socially or economically marginalised will be the most at risk in terms of being exposed and vulnerable.<sup>8</sup> Children are found “to be more vulnerable to disasters in many countries, with larger disasters having an especially unequal impact”.<sup>9</sup> On the one hand, children are more vulnerable to disasters; on the other hand, it must be emphasised that children also have “the capacity to contribute to disaster preparedness, response, and recovery activities”.<sup>10</sup>

Children suffer the consequences of extreme climate and weather events disproportionately because of their less-developed physical and mental state, and therefore have differential capacities to cope with deprivation and stress in times of disaster, as the following facts may demonstrate.<sup>11</sup> Depending on their developmental stage, children are biologically more sensitive (e.g. children are at increased mortality risk from diarrheal diseases); in the event of floods, children are at greater risk of transmissible diseases and are more prone to drowning because they are less able to swim; and children with mobility and cognitive constraints may be at increased risk of injury and death. The impact of extreme events can furthermore limit the ability of parents to afford to educate their offspring, and may require children (especially girl children, whose access to education is typically accorded lower priority than that of boy children) to work to meet basic needs.

In a 2007 study by Save the Children (UK) titled *Legacy of Disasters – The Impact of Climate Change on Children*,<sup>12</sup> the following facts are highlighted:

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7 IPCC (2012:70) with further references.

8 (ibid.:266); Peek (2008).

9 IPCC (2012).

10 Peek (2008).

11 (ibid.).

12 Save the Children (2007).

- In the next decade, up to 175 million children are likely to be affected every year by the kinds of natural disasters caused by climate change.<sup>13</sup>
- The percentage of the world's population exposed to malaria is expected to increase from 45 per cent to 60 per cent in the next 100 years due to climate change. It is well-known that malaria is one of the biggest killers of children under the age of five.

Climate-change-related events threaten children's health, food security, livelihoods, protection and education.<sup>14</sup> As climate change also threatens sustainable development, it has the potential to push already poor families into deeper levels of poverty, thereby increasing the vulnerability of children to abuse, exploitation and displacement.<sup>15</sup>

It must be emphasised that there has been very limited primary data collection and research on the impacts of climate change on children.<sup>16</sup> Much of the existing literature focuses on the impact of natural disasters on children and their exposure to risk, not sufficiently recognising the medium and long-term effects of climate change on children.<sup>17</sup>

Climate change can affect children directly in a number of ways.<sup>18</sup> Firstly, climate change endangers the health of children.<sup>19</sup> The health-related effects of climate change are predicted as being heavily concentrated in poorer populations at low altitudes. This is where the most important climate-sensitive health outcomes such as undernutrition, diarrhoea and malaria are already present and where vulnerability to climate effects is the greatest.<sup>20</sup> According to estimates, primarily as a result of the effects of climate change, the incidences of diarrhoea are predicted to increase by between 2% and 5% by 2020 in countries with a per capita income below US\$6,000.<sup>21</sup> Furthermore, outbreaks of water-borne diseases such as cholera will become more prevalent.<sup>22</sup>

Climate change, combined with changes in land use, population growth and deforestation, are increasing the incidence of vector-borne diseases such

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13 (ibid:2).

14 (ibid.:2f.); UNICEF (2011:36).

15 Save the Children (2007:2); Save the Children (2009:3).

16 UNICEF (2011:26); Bartlett (2008:503).

17 UNICEF (2011:36).

18 For further details on climate change and children's health see for example Sheffield & Landrigan (2010).

19 Costella as quoted in Save the Children (2009:3).

20 UNICEF (2011:39).

21 Save the Children (2009:3).

22 (ibid.:9); Bartlett (2008:505f.).

as malaria and dengue fever.<sup>23</sup> Rising temperatures increase the risk of transmission.<sup>24</sup>

Secondly, climate change affects nutrition and food security in a number of ways, for example through water scarcity, reduced food production and sanitation of agricultural land.<sup>25</sup> Hunger and malnutrition follow and the statistics are staggering:<sup>26</sup> malnutrition contributes to the death of 3.2 million children every year. More than 178 million children around the world suffer from malnutrition and a third of children under five are chronically malnourished or stunted. It is estimated that, in 2080, 550 million people could be hungry as a result of climate change, of whom 480 million will be living in Africa.<sup>27</sup> Children are at risk of being hit the hardest.

Thirdly, children are directly affected through increasingly frequent and intense natural disasters.<sup>28</sup> Child mortality is high in events such as flooding, high winds and landslides. Children also experience psychosocial disruption and emotional turmoil during these disasters, which can have long-term implications for their health and well-being.<sup>29</sup> Displacement and the actual separation from parents or family members as a result of natural disasters have a profound effect on the emotional well-being of children.<sup>30</sup> Without a social safety net, children are highly vulnerable to trafficking, violence and exploitation.<sup>31</sup>

Climate change also has a number of indirect effects on children. In poor countries with high levels of child mortality where health systems are already under pressure, there is a great likelihood that these systems will become overstretched.<sup>32</sup> Natural resource-based livelihoods are highly sensitive to climate change and the resulting change in weather patterns.<sup>33</sup> Climate-induced migration and sudden natural disasters result in population displacements.<sup>34</sup> This creates challenges for child protection. The impact of climate

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23 Save the Children (2009:4); Bartlett (2008:506f.).

24 (ibid.).

25 (ibid.); UNICEF (2011:40f.).

26 Save the Children (2009:4–6).

27 (ibid.:6).

28 (ibid.); UNICEF (2008:9–11); Bartlett (2008:503–505).

29 Save the Children (2009:6).

30 (ibid.); UNICEF (2011:41).

31 UNICEF (2011:41); Bartlett (2008:509–511).

32 Bartlett (2008:503–508); Save the Children (2009:8).

33 Save the Children (2009:9); UNICEF (2011:41).

34 Save the Children (2009:10).

change on children's health, nutrition and general well-being places additional burdens on caregivers, typically women and girls.<sup>35</sup>

In summary, the reasons for the vulnerability of children to climate change are fourfold:<sup>36</sup>

1. Children's stage of physiological and cognitive development and innate curiosity leave them at a heightened risk of exposure to environmental hazards and the potential to be harmed by them.
2. Many of the main killers of young children – undernutrition (which contributes to more than one third of all under-five deaths), acute respiratory infections, diarrhoea, malaria and other vector-borne diseases – are known to be highly sensitive to climatic conditions.
3. The world's least developed countries are likely to bear the brunt of climate change. These countries have large child populations. In 2008, under-18s accounted for 47% of the population in the world's 49 least developed countries, compared with 21% in the industrialised countries.
4. Evidence for the correlation between civil strife and climate change is growing. A 2007 study estimated that 46 countries, with a total population of 2.7 billion people, may face a higher risk of violent conflict as climate change intersects with social, economic and political stresses. For children, this has consequences of psychosocial trauma, recruitment into armed forces, displacement and forced migration, which may in turn lead to separation from family and exposure to trafficking and exploitation.

It is clear from the four points above that in order to reduce the threats to child survival from the effects of climate change, focused strategies that address the particular needs of children are crucial. In view of the fact that children presently represent at least 50% of those affected by climate change, the time to act is now.

### *C. Paradigm Shift: From Victims to Agents of Change*

Children are without doubt prone to the adverse effects of climate change. It is, however, not accurate to present children as resourceless victims only. Children may also be protagonists in responding to the adverse effects of

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35 (ibid.:13); Bartlett (2008:508).

36 UNICEF (2009c:65).

climate change, if they are given the means to do so.<sup>37</sup> It has been established by Chapter 25 of Agenda 21 that —<sup>38</sup>

it is imperative that youth from all parts of the world participate actively in all relevant levels of decision-making processes, because it affects their lives today and has implications for their future. In addition to their intellectual contribution and their ability to mobilize support, they bring unique perspectives that need to be taken into account.

Children may serve as powerful agents of change, especially if states support children's rights to have their views respected and to be involved in decision-making processes. As the current Secretary-General of the United Nations, Ban Ki-Moon, stated:<sup>39</sup>

... young people are well placed to contribute to the fight even now. They are adept at spreading new habits and technologies. They are adaptable and can quickly make low-carbon lifestyles and career choices a part of their daily lives. Youth should therefore be given a chance to take an active part in the decision-making of local, national and global levels. And they can actively support initiatives that will lead to the passage of far-reaching legislation.

National adaptation planning should be made in consideration of the best interests of the child. The prioritisation of children and their rights, however, does not feature strongly in national adaptation plans; very few of the National Adaptation Programmes of Action (NAPAs) target children explicitly in their priority adaptation projects.<sup>40</sup> Nonetheless, involving children in adaptation measures is advisable for various reasons, including the following:<sup>41</sup>

- Children do have knowledge on adaptation measures as they have – as individuals, and as part of their communities – been part of autonomous adaptation processes in the past in cases where they have experienced cycles of droughts or floods, and have coped with and adapted to extreme climatic conditions with no or little government support.
- Children are capable of contributing to identify and realise adaptation processes.

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37 UNICEF (2009).

38 United Nations, Agenda 21, Chapter 25, available at <http://www.un-documents.net/a21-25.htm>, last accessed 20 June 2013.

39 Ki-Moon (2008).

40 See Children in a Changing Climate (2010:14).

41 (*ibid.*:24).

- Children have the capacity to absorb new information about their environment, and about climate change and to analyse its impacts
- Children have the capacity and enthusiasm to act on future visions and the needs of future generations.

It is thus essential to embed children's rights in national adaptation plans, to develop strategies to involve children as partners participating in disaster risk reduction from extreme events and in the development of respect for the natural environment. Furthermore, the role of children in adaptation in their communities can be increased. Such child-sensitive adaptation planning should include the following:<sup>42</sup>

- Climate vulnerability and capacity analysis disaggregated by age, gender, urban and rural. This would include analysis of children's knowledge and capacity relating to risk reduction and adaptation. Tools such as participatory vulnerability and capacity assessments can be oriented towards children and climate change.
- Participatory spaces created by, with, and for children locally and nationally. Children are part of civil society and different platforms for children's voice to be heard in any policymaking that affects them will strengthen adaptation planning.
- Child-centred resilience projects and programmes with dedicated support and resources (dealing particularly with underlying causes of vulnerability). This could involve delivering targeted assistance that has incorporated likely climate scenarios.
- Child rights-based indicators for monitoring and evaluation – both for broad 'enabling environment' frameworks and more targeted programmes. A degree of participatory monitoring and evaluation is essential, and inclusion of process indicators to assess children's empowerment and participatory governance.

#### *D. The International Legal Framework Pertinent to Climate Change and Children's Rights*

##### *I. General Human Rights Law*

The protection of children's rights under international treaty law can be traced back to the first Declaration of the Rights of the Child adopted by the League of Nations in 1924, which was a brief document containing only five principles by which members were invited to be guided in the work of child

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42 (ibid.:32).

welfare.<sup>43</sup> An extended version of this text was adopted by the General Assembly in 1948, which was followed by a revised version adopted by the General Assembly in 1959 as the United Nations (UN) Declaration on the Rights of the Child.<sup>44</sup> In 1978, however, a proposal for a new convention on children's rights was made by Poland,<sup>45</sup> which had consistently raised issues with regard to children's rights being binding.<sup>46</sup> Poland's draft, with minor amendments, served as the basis for the 1989 Convention on the Rights of the Child (CRC). The reasons for an international change of heart towards the protection of children's rights were manifold,<sup>47</sup> but all signatories fundamentally recognised that the 1959 Declaration on the Rights of the Child no longer reflected the needs of many of the world's children.<sup>48</sup>

Although legal instruments were developed that targeted the protection of children in particular, it has to be emphasised that basic human rights instruments already recognise these rights. The so-called International Bill of Human Rights,<sup>49</sup> for example, contains a broad bundle of human rights also applicable to children, and many of its principles are reflected and substantiated in children-specific legislation. Children enjoy protection by way of general human rights provisions, and the relevance of these provisions should not be underestimated.

The Universal Declaration of Human Rights, as the most prominent and fundamental UN human rights document, provides in its Article 25 that childhood is entitled to special care and assistance. Furthermore, the International Covenant on Civil and Political Rights (ICCPR), a legally binding document, which came into force in 1978 contains provisions specifically referring to children.<sup>50</sup> The Human Rights Committee has emphasised that

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43 Fortin (2005:35).

44 For further details on the 1959 Declaration and its ten principles, see Fortin (2005:35).

45 Poland submitted a draft resolution to be recommended for adoption by the UN Economic and Social Council. The resolution contained a draft text for the Convention on the Rights of the Child. See Detrick (1999:14f.).

46 See Van (1998:13).

47 Van Bueren (1998:13f).

48 (ibid.).

49 Three documents – the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights – are recognised as covering the core of universal human rights and are collectively labelled the *International Bill of Human Rights*.

50 Articles 14(1), 23(4) and 24.

“the rights provided for in Article 24 are not the only ones that the Convention recognises for children and that, as individuals, children benefit from all of the civil rights enunciated in the Covenant.”<sup>51</sup>

The International Covenant on Economic, Social and Cultural Rights contains several child-specific provisions,<sup>52</sup> with a focus on the right to education and protection from economic and social exploitation.

Moreover, the Convention on the Elimination of All Forms of Discrimination against Women also contains child-protective provisions. For example, it encourages states parties to specify a minimum age for marriage,<sup>53</sup> and it emphasises that the interests of children are paramount.<sup>54</sup> Another important legal document also applicable to children is the Convention on the Rights of Persons with Disabilities, which establishes the principle of respect for the evolving capacities of children with disabilities. The same applies to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. The Committee established under the latter Convention has already expressed its concern about the general vulnerability of abandoned children, who are at risk of torture and other cruel, inhuman or degrading treatment or punishment, especially children used as combatants.<sup>55</sup> It can therefore be said that children’s rights are covered by a multitude of general human rights provisions. However, owing to the physical and mental immaturity or dependent status of children,<sup>56</sup> the legal instruments to be discussed below have been adopted more specifically to enhance children’s rights.

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51 OHCHR (1989).

52 Articles 10(3) and 13.

53 Article 16(2).

54 Articles 5(b) and 16(1)(g).

55 In this context, the committee referred specifically to children used as combatants by the armed groups operating on the territory of the Democratic Republic of Congo, and urged the state party to adopt and implement emergency legislative and administrative measures to protect children, especially abandoned children, from sexual violence and to facilitate their rehabilitation and reintegration. The committee further recommended that the state party take all possible steps to demobilise child soldiers and facilitate their rehabilitation and reintegration into society. See UNCAT (2005).

56 See Brett (2009:227).

## II. *The Convention on the Rights of the Child*

The system of the UN encompasses four legally binding instruments tailored to protect children's rights, namely the Convention on the Rights of the Child (CRC); the Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography (CRC-OPSC); the Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict (CRC-OPAC); and the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the UN Convention against Transnational Organised Crime. With regard to climate change, the CRC is of particular relevance.

The CRC provides a sound basis for a human rights approach that acknowledges children as key role players in policies and programmes aimed at achieving environmental protection. The Convention was adopted by Resolution 44/252 of 20 November 1989 at the 44<sup>th</sup> Session of the UN General Assembly, and entered into force on 2 September 1990. To date, the Convention has 193 parties. The CRC, which consists of 54 Articles, incorporates the full range of human rights – civil, cultural, economic, political and social – and creates the international foundation for the protection and promotion of human rights and fundamental freedoms of all persons under the age of 18 (Article 1).

The Convention represents widespread recognition that children should be fully prepared to live an individual life in society, and be brought up in the spirit of peace, dignity, tolerance, freedom, equality and solidarity. The CRC follows a holistic approach to children's rights, recognising that the rights anchored in the Convention are indivisible and interrelated, and that equal importance must be attached to each and every right contained therein. The Convention foresees the granting of international assistance or development aid for programmes geared to the needs of children where such cooperation is needed to implement the provisions of the CRC properly and thereby advance the social, economic and cultural rights of children.<sup>57</sup>

Although the Articles of the CRC are interrelated and should be considered together, the Committee on the Rights of the Child has accorded four provisions contained in the Convention, namely Articles 2, 3, 6 and 12, the

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57 Ruppel (2009).

status of general principles.<sup>58</sup> The CRC is, therefore, founded, inter alia, on the following principles, which constitute the foundation for all children's rights: *The right to equality*: No child may be discriminated against on the basis of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. *The best interest of the child*<sup>59</sup> has to prevail: Whenever decisions are being taken which may have an impact on children, the best interest of the child has to be taken into account at all stages. This applies to the family as well as to state action. *The right to life and development*: Every member state has to ensure, to the maximum extent possible, the survival and development of the child by, inter alia, providing access to health care and education, and protecting the child from economic and social exploitation.

These principles contained in the CRC's Articles 2, 3, 6 and 12 are particularly relevant to climate change. No less important in the same context are the rights referring to civil rights and freedoms, containing, inter alia, the right to access to appropriate information; and the right not to be subjected to torture or other cruel, inhuman or degrading treatment or punishment. It is important to emphasise the role that children can play as communicators of good practice and active agents of change.<sup>60</sup> Engaging with children does not mean that they must provide all the answers – but it strengthens the case for adaptation policy, since it includes bottom-up processes which ensure that approaches are context-specific and take into account the needs of vulnerable groups.<sup>61</sup>

The principle of child participation deserves special attention, as “integrated, collaborative approaches, with children as key partners, are required to face the complex challenges that climate change poses to child rights”.<sup>62</sup> Thus, children's participation must be promoted on the international, national and community level. Child participation is well-established in international law in terms of Article 12 of the CRC. It is obvious that by linking children's local knowledge of changes, impacts and priorities with the work of experts in relevant sectors, development and adaptation ap-

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58 See Fortin (2005:37).

59 The concept of *the best interest of the child* is considered to be the provision underpinning all other provisions, even though, theoretically, none of the four principles is considered to be more important than another. See Fortin (2005:37).

60 Save the Children (2008:1–4).

61 Children in a Changing Climate (2009:3).

62 UNICEF (2009c:65).

proaches, strategies and assistance are more likely to meet their needs.<sup>63</sup> Underlying children's participation is the fundamental principle of strengthening their knowledge base through education. Strengthening children's knowledge, capacity and voice will enable them to –<sup>64</sup>

- be better equipped to build a future and a world that is environmentally sustainable and promotes health and well-being
- be supported and committed to promoting sustainable communities and climate change adaptation programmes that will make a difference now and in the future
- care about the impact of their lifestyle choices on other parts of the world and be able to take individual action; and
- become ambassadors for positive change in the home and global communities in which they live, learn, play and socialise.

The group of basic health and welfare rights summarises the Convention's Articles 6, 18(3), 23, 24, 26, and 27(1)–(3), namely the right to survival and development; the right to special protection of children with disabilities; the right to health and health services; the right to social security and child care services and facilities; and the right to an adequate standard of living. In this context, national climate change related efforts to combat HIV and AIDS and diseases such as malaria and tuberculosis, particularly among special groups of children at high risk, need to be mentioned. Special protection measures are laid down providing for, *inter alia*, children in situations of emergency; refugee children; children in conflicts; children in situations of exploitation; and children belonging to minority or indigenous groups.<sup>65</sup>

The group of rights on special protection measures, as laid down in Articles 22, 30, 32–36, 37(b)–(d), 38, 39 and 40, provide, among other things, for children in situations of emergency; refugee children; children in armed conflicts, including physical and psychological recovery and social reintegration; children in conflict with the law, with regard to the administration of juvenile justice; children deprived of their liberty, including any form of detention, imprisonment or placement in custodial settings; and children in situations of exploitation, including child labour (Article 32):

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63 Children in a Changing Climate (2009:5); Save the Children (2008:9).

64 Children in a Changing Climate (2009:10).

65 Ruppel (2009).

1. States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

2. States Parties shall take legislative, administrative, social and educational measures to ensure the implementation of the present article. To this end, and having regard to the relevant provisions of other international instruments, States Parties shall in particular:

- (a) Provide for a minimum age or minimum ages for admission to employment;
- (b) Provide for appropriate regulation of the hours and conditions of employment;
- (c) Provide for appropriate penalties or other sanctions to ensure the effective enforcement of the present article.

The institution responsible for monitoring compliance with and implementation of the provisions of the CRC is the Committee on the Rights of the Child. Provision for this UN treaty body is made in Articles 43 and 44 of the CRC. The committee is an independent body consisting of 18<sup>66</sup> international experts in the field of children's rights. The monitoring mechanism is a special reporting system as provided for in Article 44 of the CRC, according to which states parties undertake to submit reports on the measures they have adopted which give effect to the rights recognised in the Convention, and on the progress made on the enjoyment of those rights. States parties are obliged to submit an initial report within two years after acceding to the Convention, and periodic reports every five years after that. After submission, the reports of the states parties are reviewed by the committee, which is entitled to request further information from its authors if necessary. In its concluding observations, the committee addresses progress that has been made by the state party concerned in implementing the Convention, identifies areas of concern or outright incompatibilities of national law, and makes recommendations on how to improve the implementation of the Convention's provisions.<sup>67</sup> One major problem in the CRC reporting process – as in other UN human rights treaties – is the delay of governments in submitting their periodic reports. Currently, a total of 97 government reports are overdue in

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66 Before the amendment to the CRC (UN General Assembly Resolution 50/155 of 21 December 1995), which entered into force on 18 November 2002, the committee consisted of only ten experts.

67 Scheinin (2009:605).

respect of the CRC, while there are 96 overdue on the two Optional Protocols.<sup>68</sup>

States parties may request technical assistance and advisory services from the UN Centre for Human Rights in preparing their reports. When reports by states parties are overdue, the committee issues regular reminders. If a state party persists in not reporting to the committee, the committee may decide to consider the situation in the country in the absence of a report, on the basis of the information available. However, individual complaints or cases cannot be submitted to the committee and the CRC does not have its own mechanism. The fact that the CRC does not provide for specific enforcement mechanisms giving a right of individual petition, similar to the systems of the European Convention on Human Rights or the African Charter on the Rights and Welfare of the Child,<sup>69</sup> is considered to be one of the CRC's serious weaknesses.<sup>70</sup> The drafters of the CRC refrained from establishing enforcement procedures because they feared many countries, particularly developing countries, would be reluctant to ratify the Convention if such mechanisms were included.

In summation, it can be stated that, although the CRC is a legally binding instrument according to the principles of public international law, there is no supervisory body to compel states parties to comply with the provisions of the Convention. Moreover, individual complaints cannot be considered by the Convention's treaty body, the Committee on the Rights of the Child, and there is no judicial organ established under the Convention to which violations of children's rights can be brought.<sup>71</sup> Still, the Convention is an important instrument as it has heightened awareness of children's rights violations and, in many cases, has resulted in improved national law and policy in terms of the protection of children's rights. Also relevant to the worst forms of child labour are the Optional Protocols to the CRC.

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68 These figures include multiple overdue reports by the same state. Statistical data with regard to the seven major human rights treaties, including the CRC and its Optional Protocols, is available at <http://www.unhchr.ch/tbs/doc.nsf/newhvoerduebytreaty?OpenView&Start=1&Count=250&Collapse=3#3>, last accessed 11 May 2013. For general information on the submission of periodic reports under the CRC see =HCHR (2005).

69 See Ruppel (2009); Sheahan (2009).

70 Fortin (2005:48); Hammarberg (1990); for general measures of implementation of the CRC see OHCHR (2003.).

71 There are, however, ongoing campaigns by several agencies supporting a communications procedure under the CRC.

In summary, the following provisions of the CRC pertaining to climate change and children should be emphasised:<sup>72</sup>

- Article 2: The right not to be discriminated against. At present, climate change policies fail to take into account that children are not a homogeneous group and that different groups of children respond differently to climate change and adoption strategies<sup>73</sup>
- Article 3: The best interests of the child as a paramount consideration. This means that the best interests must be the guiding concern in all international, regional and domestic policies and programmes
- Article 6: The child's right to life, survival and development. This is probably the most powerful provision that establishes the connection between children's rights, sustainable development and the achievement of the Millennium Development Goals
- Article 12: The child's right to participate in all matters affecting him or her. This Article secures children's influence on adapting to and mitigating climate change at every level<sup>74</sup>
- Article 24: The right of the child to enjoy the highest attainable standard of health. This places an obligation on states parties to provide adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution. Furthermore, states parties must assure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, environmental sanitation and the prevention of accidents. This Article in other words commits governments to protect the right of every child to a safe and healthy environment in which to develop and grow. The importance of this commitment is obvious in the discussion of the impact of climate change on children; and
- Article 29: The education of the child should be directed to the development of respect for the natural environment. Creating emotional awareness from a young age provides children with critical thinking skills and empowers them to address rapidly changing environments.<sup>75</sup>

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72 UNICEF (2008:16).

73 UNICEF (2011:36).

74 Children in a Changing Climate (2009:1).

75 UNICEF (2008:23, 26).

The CRC read with “A World Fit for Children”, Declaration provides the framework to protect and preserve the right of every child to a safe and healthy environment in which to develop and grow.<sup>76</sup> The Declaration, which was unanimously adopted by the General Assembly Special Session on Children in 2002, embodies the commitment of states “to give every assistance to protect children and minimize the impact of natural disasters and environmental degradation on them.”

### *III. Children under the United Nations Framework Convention on Climate Change*

The United Nations Framework Convention on Climate Change (UNFCCC) does not contain specific provisions with regard to children. However, at least indirectly, children are given special attention. As one of the general principles, Article 3 of the UNFCCC states that “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.” It can be stated that child-specific concerns and children’s rights are encompassed in the foundational principle of inter- and intra-generational equity, as incorporated within the Convention.

Children should particularly benefit from the support (such as financial and technological support to be provided by developed countries under Article 4.3 of the UNFCCC) that is awarded by the UNFCCC to developing countries if one considers, that children in developing regions are particularly at risk.<sup>77</sup>

One of the commitments of all parties to the UNFCCC is to “promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process ...”.<sup>78</sup> The aforementioned provision is further specified in Article 6 of the UNFCCC

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76 (ibid.:ix).

77 According to the UN Inter-agency Group for Child Mortality Estimation (2012:2) for example, the under-five mortality rate in developing regions in 2011 was 57 deaths per 1,000 live births – more than 8 times the rate in developed regions.

78 Article 4.1(i) of the UNFCCC.

and the 2012 Doha work programme<sup>79</sup> on Article 6 of the UNFCCC. Several projects and events have been initiated in the implementation of Article 6 of the UNFCCC. In order to empower children and young people to take action on climate change, the UNFCCC secretariat together with United Nations entities and youth organisations have, for example, established the United Nations Joint Framework Initiative on Children, Youth and Climate Change. The initiative coordinates activities and shares information among participating entities, empowering children and young people to take action on climate change.<sup>80</sup> Despite several initiatives related to the involvement of children and youth<sup>81</sup>, through recognition of youth and children as a major stakeholder constituency to the UNFCCC, the New Delhi Work Programme has for example been criticised for not specifically recognising children as key stakeholders.<sup>82</sup>

### *E. The Millennium Development Goals (MDGs)*

An understanding of the interactions and overlaps between climate change and wider development pressures is key to the discussion of MDGs.<sup>83</sup> This complex relationship is captured in the following statement made by the MDG Africa Steering Group:<sup>84</sup>

The challenge of meeting the eight MDGs in African countries is compounded by the grave long-term risk that climate change poses. African countries demonstrably require additional resources for adaptation since they are particularly vulnerable to the effects of climate change and the growing risk of natural disasters. At least some of these additional resources will be needed to “climate proof” all projects and policies intended to achieve MDGs and to strengthen the resilience of communities to the effects of natural disasters. Threats posed by climate change and natural disasters further increase the need for regional co-

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79 Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012, FCCC/CP/2012/8/Add.2, available at <http://unfccc.int/resource/docs/2012/cop18/eng/08a02.pdf>, last accessed 10 June 2013.

80 See for example the initiative’s recent publication *Youth in Action on Climate Change: Inspirations from around the World*, aiming at highlighting concrete activities young people are leading around the world.

81 For more information on programmes and initiatives, see [http://unfccc.int/cc\\_inet/cc\\_inet/youth\\_portal/items/6583.php](http://unfccc.int/cc_inet/cc_inet/youth_portal/items/6583.php), last accessed 10 June 2013.

82 See Earth Child Institute (2012).

83 UNICEF (2011:36).

84 MDG Africa Steering Group (2008:1).

operation and integration in areas of economic policy, infrastructure (e.g. power pools, transport and communications infrastructure), research, and the management of trans-boundary river basin.

Achieving the MDGs is critical for children, especially as each of the MDGs can be linked to climate change, requiring adaptation solutions related to children.<sup>85</sup> It is likely that climate change will make achieving the Millennium Development Goals even more difficult.<sup>86</sup> A reading of Article 6 of the CRC with the MDGs underlines the reality that climate change is inextricably linked to the broader sustainable development agenda for children, including the difficult challenge of poverty reduction.

## *F. Children in a Changing Climate: Some (Legal) Hotspots*

### *I. Humanitarian Crises*

The effects of climate change leading to natural disasters and complex emergencies may affect children's rights to survival, development, protection and participation, among others. Critical issues in this regard are child nutrition, health and education. Humanitarian crises increase the risk for children to be exploited for economic and sexual purposes or even to be employed as a weapon of war. The effects of climate change raise concerns about food security as they result in increased competition for limited resources, including water. The legal framework for child rights in emergencies is particularly provided by Articles 38 and 39 of the CRC and the Optional Protocol on the Involvement of Children in Armed Conflict. The UN Security Council has furthermore adopted several resolutions to protect children in emergencies, such as resolution 1612 adopted in 2005, introducing a monitoring and reporting mechanism on the use of child soldiers; and resolution 1820 adopted in 2008, aimed at ending the abuse of children and civilians in the context of war.

Providing child protection in emergencies is of utmost importance. Humanitarian action includes integrating child protection into disaster preparedness, providing medical and psychosocial care, establishing child-friendly spaces, mobilising communities for child protection, rebuilding ed-

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85 UNICEF (2008:17).

86 Stern (2006); UN Inter-agency Group for Child Mortality Estimation (2012).

education systems in the wake of disaster or conflict, as well as setting in place legal counselling and socioeconomic reintegration programmes.

## *II. Migration*

Migration, whether forced or voluntary, is one of the major challenges related to the effects of global warming. The number of people who migrate within countries or across national borders is increasing dramatically<sup>87</sup> and will continue to do so owing to “demographic factors, economic disparity, violent conflict, state failure, natural disasters, and resource and environmental pressures, especially climate change”.<sup>88</sup> Children and youth migrating with or without their parents account for a large share of internal and international migrants.

On one hand, migration is considered to be an important adaptation strategy in response to the degradation of people’s immediate environments,<sup>89</sup> helping them to overcome the impacts of environmental stresses. Migration can indeed be an escape from immediate threats such as natural disaster and conflict; it can provide children with a better life and increased opportunities and thus be a positive experience for them. On the other hand, migrating children are also faced with serious challenges, especially in countries where legal protection is absent, and when migrating without their parents or families. Child migrants are at a high risk of exploitation and trafficking.

Risks associated with climate-induced migration include traumatising, sexual abuse and child trafficking, maltreatment and neglect, discontinuation of school, child labour, and relocation to informal settlements with insufficient infrastructure and high (environmental) risks, among others. As stated by the special representative of the secretary general on Violence Against Children, Marta Santos Pais, in 2011, “[T]he protection of the rights of children in migration is an ethical and legal imperative”.<sup>90</sup> Relevant legal documents protecting child migrants are the CRC and its Optional Protocols

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87 It has been estimated that 214 million persons worldwide are international migrants, and 740 million persons are internal migrants. According to the World Bank, about a third of the migrant flow from all developing countries is youth aged 12 to 24 years of age. See ILO (2011).

88 ILO (2011).

89 See for example Gemenne (2010).

90 Santos Pais (2011).

prohibiting discrimination of any kind, and “requiring States to safeguard the rights of all children under their jurisdiction, including their protection from violence and exploitation, whether they are nationals, foreigners or stateless”.<sup>91</sup> Further relevant provisions are contained in the United Nations Convention against Transnational Organized Crime and the Protocols Thereto. The United Nations Convention against Transnational Organized Crime, adopted by General Assembly resolution 55/25 of 15 November 2000, is the main international instrument in the fight against transnational organised crime.<sup>92</sup> Two of the three Protocols supplementing the Convention are particularly relevant for child migrants, namely the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children (the first global legally binding instrument with an agreed definition on trafficking in persons);<sup>93</sup> and the Protocol against the Smuggling of Migrants by Land, Sea and Air.<sup>94</sup> Countries must become parties to the Convention itself before they can become parties to any of the Protocols.

### *III. Child Labour*

In June 2013, Pope Francis commemorated the World Day Against Child Labour and called child labour a “disgusting phenomenon that is constantly increasing, particularly in poor countries.” He went on in saying that “there are millions of children, mostly baby girls, who are victims of this hidden form of exploitation that often leads to abuse, ill-treatment and discrimination” and concluded his appeal by calling on the international community to bring about more effective measures to combat child labour.<sup>95</sup> Child labour

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91 (ibid.).

92 Text available at <http://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf>, last accessed 12 June 2013. As of 11 June 2013, the Convention has 176 parties.

93 Text available at <http://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf>, last accessed 12 June 2013. The Protocol came into force on 25 December 2003. As of 11 June 2013, the Protocol has 155 parties.

94 Text available at <http://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf>, last accessed 12 June 2013. The Protocol came into force on 28 January 2004. As of 11 June 2013, the Protocol has 136 parties.

95 See <http://www.zenit.org/en/articles/pope-calls-child-labor-a-disgusting-phenomenon>, last accessed 20 June 2013.

is a further challenge aggravated by the adverse effects of climate change and closely related to climate-induced migration<sup>96</sup>

The persistence of child labour is one of the biggest failures of development efforts. And now there are concerns that the global economic downturn will put a further brake on progress towards the 2016 goal for the elimination of the worst forms of child labour and render the challenge of achieving the MDGs all the more difficult.

Many children are still engaged in labour, including the worst forms thereof, like trafficking, armed conflict, slavery, sexual exploitation and hazardous work. A 2010 report to the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work reveals that globally there are 306 million children in employment, of which 215 million children are caught in child labour,<sup>97</sup> while 115 million are involved in hazardous work.<sup>98</sup> While the number of children involved in work is declining in the Asia-Pacific region, Latin America and the Caribbean, it is increasing in sub-Saharan Africa. These numbers are exacerbated by climate change and the vulnerability of children to climate change, and child labour therefore cannot be over-emphasised.<sup>99</sup> The effects of climate change could lead to many children being absorbed into child labour, including into its worst forms, for multiple reasons:<sup>100</sup>

- The workload of children, particularly girls, increases disproportionately during drought and in the aftermath of natural disaster
- A decline in access to education is closely associated with the breakdown of social and economic structures. One common reason for non-attendance at school is the deterioration of child health
- Loss of livelihoods and food insecurity prevent access to education for many children; and
- Natural disasters may force children out of their homes, or even their countries. A large number of child migrants are involved in child labour.

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96 ILO (2010:ix).

97 (ibid:5). These children are classified as child labourers because they are either under the minimum age for work or above that age and engaged in work that poses a threat to their health, safety or morals, or are subject to conditions of forced labour.

98 (ibid.).

99 See Mapaure (2009:201) with further references.

100 ILO (2010:75).

Child migrants experience a double vulnerability, as migrants and as children. "Migrant child labourers often receive less pay, work longer hours, less often attend school and face higher death rates at work in comparison to local child labourers."<sup>101</sup> Migrating child labourers, inter alia, suffer from isolation, violence, sub-standard working conditions, non-payment of wages, and the threat of being reported to the authorities.<sup>102</sup>

Various international legal instruments have been drafted in order to protect children from child labour.

### 1. *Child Labour under the CRC*

The following concrete legal tools within the CRC are immediately relevant for preventing the economic exploitation of children. Article 32 provides that children need to be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. Member states are required to set minimum ages for the admission to employment; provide for appropriate regulation of the hours and conditions of employment; and to ensure the effective enforcement of the provisions above via appropriate penalties or sanctions. Article 33 is related to the prevention of the use of children in the illicit production and trafficking of narcotic drugs and psychotropic substances. Article 34 provides for the protection of the child from all forms of sexual exploitation and sexual abuse, including the exploitative use of children in prostitution and in pornographic performances. Article 35 is relevant with regard to the abduction, sale or traffic in children for any purpose, including commercial exploitation. Article 38 protects children under the age of 15 from being recruited into armed forces and from directly taking part in hostilities.

### 2. *Child Labour under the Legal Framework of the ILO*

In fact, children's rights are at the core of the ILO's mandate. The Declaration on Fundamental Principles and Rights at Work adopted in 1998 states that members of the ILO, even if they have not ratified the relevant conven-

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101 ILO (2011:3).

102 (ibid.).

tions, have an obligation arising from their very membership to respect, promote and realise the principles of freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour, and the elimination of discrimination in respect of employment and occupation. These principles are reflected in eight<sup>103</sup> conventions that are fundamental to human rights within and outside the ILO regime. The two most relevant of these conventions on the protection of children's rights are outlined below. As to reporting and monitoring of the ILO Conventions, Article 22 of the ILO Constitution provides that members are obliged to submit periodic reports to the ILO.

a) The ILO Minimum Age Convention, 1973 (No. 138)

The Minimum Age Convention is one of the eight fundamental human rights conventions under the ILO umbrella, and has been ratified by 166 countries.<sup>104</sup> The Convention, which was adopted in 1973, was upheld by the Committee on the Rights of the Child as an appropriate standard, providing principles, which apply to all sectors of economic activity. All signatories to the Convention are required to fix a minimum age for admission to employment, and have to undertake to pursue a national policy designed to ensure the effective abolition of child labour. Furthermore, members are obliged to raise the minimum age for admission to employment progressively, to a level that is suited to the fullest physical and mental development of young people.<sup>105</sup>

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103 The eight fundamental human rights conventions under the ILO relate to fields of freedom of association and collective bargaining (Conventions 87 and 98); the elimination of forced and compulsory labour (Conventions 29 and 105); the elimination of discrimination in respect of employment and occupation (Conventions 100 and 111); and the abolition of child labour (Conventions 138 and 182).

104 As of 13 June 2013, see [http://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:P11300\\_INSTRUMENT\\_ID:312283](http://www.ilo.org/dyn/normlex/en/f?p=1000:11300:0::NO:11300:P11300_INSTRUMENT_ID:312283), last accessed 13 June 2013.

105 Passage based on Ruppel (2009:71ff.).

b) ILO Convention Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, 1999 (No. 182)

The ILO Convention No. 182 bans the worst forms of child labour, including slavery, sale and debt bondage; forced labour; recruitment for armed forces, prostitution, drug trafficking or other illicit activities; and recruitment for other work that harms the health, safety or morals of children. The Convention was adopted on 17 June 1999, and has enjoyed a fast pace of ratification. Currently, 177 members have ratified the Convention.<sup>106</sup> The Convention was adopted in recognition of the fact that the effective elimination of child labour depends on economic factors and may, therefore, take time to be accomplished. Nonetheless, there are certain forms of child labour that cannot be tolerated. Therefore, the Convention calls for immediate action to secure the prohibition and elimination of the worst forms of child labour, irrespective of the level of development or economic situation of the country. These worst forms against which all persons under the age of 18 must be protected include all forms of slavery or similar practices, such as sale and trafficking, debt bondage, serfdom, and forced or compulsory labour; the use of children in armed conflicts; the use of children for prostitution or pornography; the use of children for illicit activities such as drug trafficking; and work likely to harm their health, safety or morals, as determined at the national level.

c) The Roadmap for Achieving the Elimination of the Worst Forms of Child Labour

In 2010, the Hague Global Child Labour Conference agreed to the Roadmap for Achieving the Elimination of the Worst Forms of Child Labour by 2016. This Roadmap aims to remove children from the worst forms of child labour and to offer them a future without child labour. The Roadmap includes a focus on child migrants. In Article 5 it states that “Governments should consider ways to address the potential vulnerability of children to, in particular, the worst forms of child labour, in the context of migratory flows”.

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106 As of 13 June 2013, see [http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300\\_INSTRUMENT\\_ID:312327:NO](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312327:NO), last accessed 13 June 2013.

### G. Concluding Remarks

Statistical data on the situation of children in a changing climate reflect the sad reality that children belong to the groups most affected by the negative effects of climate change. Human insecurity, including food and health insecurity, humanitarian crises, migration and child labour are some of the issues that potentially affect children most in the context of climate change. However, children may also be protagonists in responding to the adverse effects of climate change, if they are given the means to do so. Although international law – with the holistic approach of the CRC leading the way – provides a solid legal framework to protect children, children’s rights remain at risk, not least because of the lack of effective enforcement mechanisms. Participation and access to justice are the key principles for child-sensitive policymaking, national adaptation planning and all forms of climate-smart (and child-friendly) development.

### References

- Alexander, Kathleen A., Marcos Carzolio, Douglas Goodin & Eric Vance, 2013, Climate Change Is Likely to Worsen the Public Health Threat of Diarrhoeal Disease in Botswana, *International Journal of Environmental Research and Public Health* 10 (4), 1202–1230.
- Bartlett, Sheridan, 2008, Climate Change and Urban Children: Impacts and Implications for Adaptation in Low and Middle-income Countries, *Environment and Urbanization* 20, 501–519.
- Brett, Rachel, 2009, Rights of the Child, in: Krause, Catarina & Martin Scheinin, *International Protection of Human Rights*, Turku, Institute for Human Rights, Åbo Akademi University, 227–247.
- Children in a Changing Climate, 2009, A Right to Participate: Securing Children’s Role in Climate Change Adaptation, London, Children in a Changing Climate, available at [http://www.childreninachangingclimate.org/database/CCC/Publications/CCC\\_RightToParticipate\\_2009.pdf](http://www.childreninachangingclimate.org/database/CCC/Publications/CCC_RightToParticipate_2009.pdf), last accessed 06 June 2013.
- Children in a Changing Climate, 2010, Child Rights and Climate Change Adaptation: Voices from Kenya and Cambodia, London, Children in a Changing Climate, available at <http://www.plan-uk.org/resources/documents/37227/>, last accessed 12 June 2013.
- Detrick, Sharon, 1999, *A Commentary on the United Nations Convention on the Rights of the Child*, Dordrecht, The Hague, Kluwer Law International.

- Earth Child Institute, 2012, United Nations Framework on Climate Change Convention Article 6 stakeholder group inputs under the Amended New Delhi Work Programme, London, Earth Child Institute, available at <http://unfccc.int/resource/docs/2012/smsn/ngo/219.pdf>, last accessed 10 June 2013.
- Fernando, S. Deepika, Renu Wickremasinghe & Ananda R. Wickremasinghe, 2010, Climate Change and Malaria – A Complex Relationship, *UN Chronicle*, available at [http://www.un.org/wcm/content/site/chronicle/cache/bypass/home/archive/issues2010/achieving\\_global\\_health/climatechangeandmalaria?pagination=true&ctnscroll\\_articleContainerList=1\\_0&ctnlistpagination\\_articleContainerList=true](http://www.un.org/wcm/content/site/chronicle/cache/bypass/home/archive/issues2010/achieving_global_health/climatechangeandmalaria?pagination=true&ctnscroll_articleContainerList=1_0&ctnlistpagination_articleContainerList=true), last accessed 10 June 2013.
- Fortin, Jane, 2005, *Children's Rights and the Developing Law*, Cambridge, Cambridge University Press.
- Gemenne, Francois, 2010, Migration, a Possible Adaptation Strategy, Institute for Sustainable Development and International Relations (IDDRI) Research Paper 3, available at [http://www.iddri.org/Publications/Collections/Syntheses/Sy\\_1003\\_Gemenne\\_Migration.pdf](http://www.iddri.org/Publications/Collections/Syntheses/Sy_1003_Gemenne_Migration.pdf), last accessed 11 June 2013.
- Hammarberg, Thomas, 1990, The UN Convention on the Rights of the Child – and How to Make it Work, *Human Rights Quarterly* 12 (1), 97–105.
- ILO/International Labour Organization, 2010, Accelerating Action Against Child Labour – Global Report under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work, Geneva, ILO, available at [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_126752.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_126752.pdf), last accessed 13 June 2013.
- ILO/International Labour Organization, 2011, Migration and Child Labour – Essentials, available at <http://www.ilo.org/ipecinfor/product/viewProduct.do?productId=16975>, last accessed 11 June 2013.
- IPCC/Intergovernmental Panel on Climate Change, 2007, Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Core Writing Team: Pachauri, Rajendra K. & Andy Reisinger (Eds), Geneva, IPCC, available at [http://www.ipcc.ch/publications\\_and\\_data/publications\\_ipcc\\_fourth\\_assessment\\_report\\_synthesis\\_report.htm](http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm), last accessed 13 January 2013.
- IPCC/Intergovernmental Panel on Climate Change, 2012, *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change*, Field, Christopher B., Vicente Barros, Thomas F. Stocker, Dahe Qin, David J. Dokken, Kristie L. Ebi, Michael D. Mastrandrea, Katharine J. Mach, Gian-Kasper Plattner, Simon K. Allen, Melinda Tignor & Pauline M. Midgley (Eds), Cambridge, Cambridge University Press.
- Ki-Moon, Ban, 2008, Message for International Youth Day 2008, Youth and Climate Change: Time for Action, text available at <http://www.un.org/News/Press/docs/2008/sgsm11729.doc.htm>, last accessed 12 June 2013.
- Mapaure, Clever, 2009, Child Labour: A Universal Problem from a Namibian Perspective, in: Ruppel, Oliver C. (Ed.), *Children's Rights in Namibia*, Windhoek, Macmillan Education Namibia, 201–222.

- MDG/Millennium Development Goals Africa Steering Group, 2008, *Achieving the Millennium Development Goals in Africa – Recommendations of the MDG Africa Steering Group*, New York, MDG Africa Steering Group, available at <http://www.mdgafrica.org/pdf/MDG%20Africa%20Steering%20Group%20Recommendations%20-%20English%20-%20HighRes.pdf>, last accessed 07 June 2013.
- OHCHR/Office of the High Commissioner for Human Rights, 1989, Human Rights Committee General Comment No. 17: Article 24 (Rights of the Child), available at <http://www.unhchr.ch/tbs/doc.nsf/0/cc0f1f8c391478b7c12563ed004b35e3?Opendocument>, last accessed 11 May 2013.
- OHCHR/Office of the High Commissioner for Human Rights Committee on the Rights of the Child, 2003, General Comment No. 5 on General Measures of Implementation of the Convention on the Rights of the Child, available at [http://www.unhchr.ch/tbs/doc.nsf/\(symbol\)/CRC.GC.2003.5.En](http://www.unhchr.ch/tbs/doc.nsf/(symbol)/CRC.GC.2003.5.En), last accessed 8 November 2012.
- OHCHR/Office of the High Commissioner for Human Rights Committee on the Rights of the Child, 2005, General Guidelines for Periodic Reports Regarding the Form and Content of Periodic Reports to be Submitted by States Parties under Article 44 (1)(b), adopted by the Committee, CRC/C/58/Rev. 1, available at [http://www.unhchr.ch/tbs/doc.nsf/\(Symbol\)/CRC.C.58.Rev.1.En?Opendocument](http://www.unhchr.ch/tbs/doc.nsf/(Symbol)/CRC.C.58.Rev.1.En?Opendocument), last accessed 11 May 2013.
- Paaijmansa, Krijn P., Simon Blanford, Andrew S. Bell, Justine I. Blanford, Andrew F. Read & Matthew B. Thomas, 2010, Influence of Climate on Malaria Transmission Depends on Daily Temperature Variation, *Proceedings of the National Academy of Sciences of the United States of America* 107 (34), 15135–15139.
- Peek, Lori, 2008: Children and disasters: Understanding Vulnerability, Developing Capacities, and Promoting Resilience – An Introduction, *Children, Youth and Environments* 18 (1), 1–29.
- Ruppel, Oliver C., 2009, The Protection of Children’s Rights under International Law from a Namibian Perspective, in: Ruppel, Oliver C. (Ed.), 2009, *Children’s Rights in Namibia*, Windhoek, Macmillan Education Namibia, 53–100; at [http://www.kas.de/proj/home/pub/8/2/dokument\\_id-18139/index.html](http://www.kas.de/proj/home/pub/8/2/dokument_id-18139/index.html); last accessed 11 May 2013.
- Santos Pais, Marta, 2011, Statement at the Global Migration Group Symposium on Migration and Youth: Harnessing Opportunities for Development, held in New York 17–18 May 2011, available at [http://srsg.violenceagainstchildren.org/sites/default/files/documents/SRSG\\_statements/GMG%20symposium%20Migration%20and%20Development.pdf](http://srsg.violenceagainstchildren.org/sites/default/files/documents/SRSG_statements/GMG%20symposium%20Migration%20and%20Development.pdf), last accessed 11 June 2013.
- Save the Children, 2007, *The Legacy of Disasters – The Impact of Climate Change on Children, London*, Save the Children, available at [http://www.childreninachangingclimate.org/legacy\\_of\\_disasters.pdf](http://www.childreninachangingclimate.org/legacy_of_disasters.pdf), last accessed 06 June 2013.
- Save the Children, 2008, *In the Face of Disaster – Children and Climate Change*, London, Save the Children, available at [http://www.savethechildren.org.uk/sites/default/files/docs/In\\_the\\_Face\\_of\\_Disaster\\_1.pdf](http://www.savethechildren.org.uk/sites/default/files/docs/In_the_Face_of_Disaster_1.pdf), last accessed 07 June 2008.
- Save the Children, 2009, *Feeling the Heat – Child Survival in a Changing Climate*, London, Save the Children, available at [http://www.childreninachangingclimate.org/data-base/stcuk/Publications/2009\\_sc\\_feelingtheheat.pdf](http://www.childreninachangingclimate.org/data-base/stcuk/Publications/2009_sc_feelingtheheat.pdf), last accessed 06 June 2013.

- Scheinin, Martin, 2009, International Mechanisms and Procedures for Monitoring, in: Krause, Catarina & Martin Scheinin, *International Protection of Human Rights*, Turku, Institute for Human Rights, Åbo Akademi University, 601–620.
- Sheahan, Frances, 2009, *Advancing Children's Rights: A Guide for Civil Society Organisations on How to Engage with the African Committee of Experts on the Rights of the Child*, Nairobi, Save the Children Sweden & Plan Nairobi.
- Sheffield, Perry E. & Philip J. Landrigan, 2010, Global Climate Change and Children's Health: Threats and Strategies for Prevention, *Environmental Health Perspectives* 119 (3), 291–298, available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3059989/>, last accessed 07 June 2013.
- Stern, Nicholas, 2006, *The Economics of Climate Change*, London, HM Treasury.
- UN Inter-agency Group for Child Mortality Estimation, 2012, *Levels and Trends in Child Mortality*, New York, UNICEF, available at [http://www.childinfo.org/files/Child\\_Mortality\\_Report\\_2012.pdf](http://www.childinfo.org/files/Child_Mortality_Report_2012.pdf), last accessed 10 June 2013.
- UNCAT/United Nations Committee Against Torture, 2005, Consideration of Reports Submitted by States Parties under Article 19 of the Convention: Conclusions and Recommendations of the Committee against Torture – Democratic Republic of the Congo, CAT/C/DRC/CO/1, available at <http://www.unhcr.org/refworld/pdfid/45c30b7cc.pdf>, last accessed 11 May 2013.
- UNICEF/United Nations Children's Fund, 2008, *Climate Change and Children – A Human Security Challenge*, Policy Review Paper, Florence, UNICEF Innocenti Research Centre, available at [http://www.unicef-irc.org/publications/pdf/climate\\_change.pdf](http://www.unicef-irc.org/publications/pdf/climate_change.pdf), last accessed 06 June 2013.
- UNICEF/United Nations Children's Fund, 2009a, *A Brighter Tomorrow: Climate Change, Child Rights and Intergenerational Justice*, London, UNICEF, available at [http://www.worldfuturecouncil.org/fileadmin/user\\_upload/Maja/Future\\_Justice\\_Library/UNICEF\\_ntergenerationaljustice\\_2\\_.pdf](http://www.worldfuturecouncil.org/fileadmin/user_upload/Maja/Future_Justice_Library/UNICEF_ntergenerationaljustice_2_.pdf), last accessed on 11 May 2013.
- UNICEF/United Nations Children's Fund, 2009b, *Facts on Children*, New York, UNICEF.
- UNICEF/United Nations Children's Fund, 2009c, *The State of World's Children – Special Edition Celebrating 20 Years of the Convention on the Rights of the Child*, New York, UNICEF, available at [http://www.unicef.org/rightsite/sowc/pdfs/SOWC\\_Spec%20Ed\\_CRC\\_Main%20Report\\_EN\\_090409.pdf](http://www.unicef.org/rightsite/sowc/pdfs/SOWC_Spec%20Ed_CRC_Main%20Report_EN_090409.pdf), last accessed 07 June 2013.
- UNICEF/United Nations Children's Fund, 2011, *Exploring the Impact of Climate Change on Children in South Africa*, Pretoria, available at [http://www.unicef.org/southafrica/SAF\\_resources\\_climatechange.pdf](http://www.unicef.org/southafrica/SAF_resources_climatechange.pdf), last accessed 06 June 2013.
- Van Bueren, Geraldine, 1998, *The International Law on the Rights of the Child*, The Hague, Kluwer Law International.
- WHO/World Health Organization, 2012, *Atlas of Health and Climate*, Geneva, WHO, available at <http://who.int/globalchange/publications/atlas/report/en/index.html>, last accessed 10 June 2013.

