

<b>Institution:</b> SOAS University of London		
<b>Unit of Assessment:</b> 18 – Law		
<b>Title of case study:</b> Responses to the water crisis in India: Drafting new water legislation		
<b>Period when the underpinning research was undertaken:</b> 2002-2014		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Philippe Cullet	Professor of International and Environmental Law	2002–present
<b>Period when the claimed impact occurred:</b> 2015–31 July 2020		
<b>Is this case study continued from a case study submitted in 2014? Y</b>		
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)  Research conducted at SOAS on water law and governance in India shaped the country's development and review of key water management legislation. With impact at national and state levels, the research shaped and informed national groundwater and framework water legislations, as well as draft acts in [text removed for publication] and Madhya Pradesh. The research also influenced media debate and coverage of water issue in India, in international as well as Indian media outlets, thus raising further awareness of this contentious issue whereby a significant percentage of the Indian population is deprived of access to safe and sufficient drinking water.</p>		
<p><b>2. Underpinning research</b> (indicative maximum 500 words)  Water governance has been a contentious issue in India. A significant proportion of the population do not have sufficient access to drinking water for reasons including falling water tables, declining infrastructure, economic factors and social norms. These problems, however, have long been ignored in the drafting of water law, which is concerned primarily with water's economic potential and the rights of landowners. The unprecedented number of water reforms adopted since the late 1990s have been conceived within a narrow framework, overlooking existing scientific knowledge and new challenges, such as those posed by the increase in groundwater use.</p> <p>Research conducted by Philippe Cullet (Professor of International and Environmental Law at SOAS from 2002) has focused on water law and governance, specifically on groundwater, drinking water, sanitation and institutional reforms in India. Cullet has addressed the failure of the conceptual framework informing water law reforms to consider the multiplicity of water uses and functions, especially its human rights, social and environmental dimensions, issues widely explored in his 2009 monograph, <i>Water Law, Poverty and Development: Water Sector Reforms in India</i> [3.1] and an edited volume [3.2]. Using primary sources and an analysis of legal frameworks and their underpinning ideas, Cullet's research has proposed broad-based reforms to water laws at the national level informed by a human rights, equity and sustainability perspective. Such reforms would help to ensure that water laws contribute to the realisation of the human right to water for the poor and marginalised, particularly in rural areas, rather than focussing simply on water's economic dimension.</p> <p>Similarly, in [3.3] Cullet examined the on-going development of Indian case law concerning water, specifically the relationship between water and the environment and control over water. Cullet assessed water sector and law reforms proposing drastic changes to the sector, and outlined the problems posed by the Indian courts' lack of a unified response. [3.4] continued to evaluate water laws in India, focusing on drinking water, in particular in rural areas, in terms of the realisation of the human right to water. [3.5] analysed more generally the different dimensions of the right to water, including issues related to the privatisation of water services and controversies around free water policies. [3.6] reflected Cullet's specific work on groundwater where he underlined the</p>		

deficiencies of the existing legal framework governing groundwater in India (which is based on nineteenth-century principles), asserting that it leads to further deterioration of the resource annually. With 80% of the country's drinking water needs derived from groundwater, Cullet argued for the necessity of reforms that ensure a delinking of access to groundwater from land rights, but in such a way as to preclude a more damaging form of privatisation that would adversely affect groundwater users.

Cullet's ground-breaking research has been the only sustained academic effort to analyse the multi-pronged reforms taking place in water law in India since the 1990s. The limited expertise on new issues in water law, coupled with Cullet's novel work, has enabled his work to generate significant impact on water governance and policy making in India.

### 3. References to the research (indicative maximum of six references)

3.1. Cullet, P. (2009). *Water Law, Poverty and Development: Water Sector Reforms in India*. Oxford: Oxford University Press. ISBN 9780199546237. Available on request

3.2. Cullet, P. et al., eds (2009). *Water Law for the Twenty-First Century: National and International Aspects of Water Law Reforms in India*. Abingdon: Routledge. ISBN:9780415477536. Available on request

3.3. Cullet, P. (2010). 'Water Sector Reforms and Courts in India: Lessons from the Evolving Case Law'. *Review of European, Comparative & International Environmental Law*, 19(3), pp. 328–338. <https://doi.org/10.1111/j.1467-9388.2010.00693.x> **Peer-reviewed**

3.4. Cullet, P. (2011). 'Realisation of the Fundamental Right to Water in Rural Areas: Implications of the Evolving Policy Framework for Drinking Water'. *Economic & Political Weekly*, 46(12), pp. 56–62. <https://www.jstor.org/stable/pdf/41151995.pdf> **Peer-reviewed**

3.5. Cullet, P. (2013). 'Right to Water in India – Plugging Conceptual and Practical Gaps'. *International Journal of Human Rights*, 17(1), pp. 56–78. <https://doi.org/10.1080/13642987.2012.700454> **Peer-reviewed**

3.6. Cullet, P. (2014). 'Groundwater Law in India: Towards a Framework Ensuring Equitable Access and Aquifer Protection'. *Journal of Environmental Law*, 26(1), pp. 55–81. <https://doi.org/10.1093/jel/eqt031> **Peer-reviewed**

### 4. Details of the impact (indicative maximum 750 words)

Prof Cullet's research fed into the development of key water management legislation in India – both at the national and at the state levels. These included 1) the 2011 Groundwater Model Bill and its subsequent redrafting in 2015; 2) the revision commissioned by the Union Government in 2015 of the 2011 (water) Framework legislation; and 3) the [text removed for publication] and Madhya Pradesh water legislation draft acts. Cullet was heavily involved in the drafting of all these proposals, which reflected to a large extent the recommendations he made in his research, in particular the introduction of the public trust doctrine to water legislation; the incorporation of the fundamental right to water in statutory instruments, the inclusion of protection principles (e.g. precautionary principle), and the introduction of the principle of subsidiarity that came to reinforce existing provisions for decentralisation. The research also influenced media debate and coverage of water issue in India, in Indian as well as international media outlets.

#### *Informing groundwater legislation*

The impact described here builds on earlier policy impact whereby Cullet was invited by the Planning Commission of India (Government of India) in 2011 to chair the committee that was tasked with the draft of the Model Bill for the Conservation, Protection and Regulation of Groundwater, 2011. The Groundwater Model Bill, 2011 was highly critical of the inadequacies of the existing legal framework for groundwater and largely reflected Cullet's research since, as chair, he had a leading input into the framing of the text. Informed by Cullet's research, the central objectives of the Bill included the need to regulate and control iniquitous groundwater use and distribution; to ensure safe drinking water for all; to regulate groundwater extraction to ensure its sustainability; and to prevent the contamination of groundwater resources [5.1]. The Groundwater Model Bill was put forward as part of documents for the 12th Five-Year Plan (2012–2017) but there was no particular effort by the Central Government to push it further before the end of Parliament's term in May 2014. The Government that was elected in the 2014 general election

took a number of political and policy initiatives in the water sector. With regard to water legislation, it started by asking 3 members of the Central Ground Water Board (CGWB) to assess the Groundwater Model Bill, 2011. Their report made minor suggestions for changes but on the whole entirely endorsed the policy framework and the basic principles proposed in 2011 (such as recognising the common nature of groundwater and the need to govern it at the most local level possible), which overwhelmingly reflected Cullet's research.

This positive assessment led the Government of India to set up the 'Committee to Redraft the Draft Model Bill for Conservation, Protection & Regulation of Ground Water, 2011' in October 2015 [5.2]. The Committee was chaired by Dr Mihir Shah who was in charge of all water-related work in the Planning Commission and who had asked Cullet to convene the 2011 committee to draft the Groundwater Model Bill. He naturally asked Cullet to be part of this new committee who comprised 7 members, out of which 5 had been part of the 2011 committee. The composition of the committee was in itself an endorsement of the work done by Cullet in 2011 [5.2 p3].

The Committee was tasked to 'redraft' the 2011 text [5.3]. This was based on the comments made in report of the CGWB, as well as additional terms of reference framed by the Government. The work undertaken by the committee between the end of 2015 and mid-2017 involved reconsidering each principle and provision of the 2011 text. All the basic premises of the text remained untouched and the principles on which the legislation was based were the same. At the same time, addressing the various comments and queries required substantial drafting. As one of only 2 lawyers on the committee and its senior member, Cullet ended up doing a large part of the drafting required.

The work of the Committee led to a first draft in 2016 [5.4]. This was then discussed with senior state-level bureaucrats (water is a state subject, hence the model legislation needs to be adopted by individual states) in early 2017 [5.7]. The Government then reconvened the Committee to address the comments made by states [5.6]. Subsequently, the NITI Aayog (the successor to the Planning Commission of India) requested a presentation of the new model bill. Following additional comments by the NITI Aayog [5.8], a final draft version of the model bill was adopted by the Committee in August 2017 [5.9, 5.10]. State governments are at liberty to adopt groundwater legislation based on the model bill. Indian states have indeed legislative competence over water – which is also the reason why Parliament would in principle not adopt a groundwater legislation. The first adopted legislation that reflected some of the new thinking enshrined in the 2017 text was the Uttar Pradesh Ground Water (Management and Regulation) Act, 2019. It reflected, for instance, the need for a decentralised institutional framework based on the subsidiarity principle and the idea of introducing groundwater security plans. It also included a separate chapter on water pollution, and a chapter on impact assessment and transparency [5.13 chs v and vii respectively]. Some states moved towards adopting water acts, which also addressed groundwater and with principles that mostly reflected the principles of the model bill. The state of Madhya Pradesh decided in August 2019 to appoint a committee to develop a water strategy for the state, which included the drafting of a provisionally titled Madhya Pradesh Right to Water (Conservation and Sustainable Use) Act, 2019. Cullet was asked by the Panchayat and Rural Development Department to join the group/to work with the group [5.12]. Being the only lawyer involved, he took on a central role in the drafting of this legislation. [Text removed for publication]. In the case of the Madhya Pradesh and the [text removed for publication] drafts and some parts of the Uttar Pradesh legislation, the structure, basic principles and underlying thinking can be traced directly to the 2011 Model Bill, which in turn reflected Cullet's research.

#### *Shaping the framework water legislation*

Because of limited developments in law-making at the state level, the Union Government decided in 2015 that the same committee entrusted with redrafting the 2011 Groundwater Model Bill should in addition draft a new framework water legislation that would provide an umbrella charter of water principles applicable throughout the country – something that special constitutional procedures allow [5.3]. This provided an opportunity to revisit the work of the Planning Commission of India's committee drafting a groundwater framework legislation in 2011 (a group chaired by the late R. Iyer and of which Cullet was a member) and a subsequent draft by a committee set up by the

Ministry of Water Resources in 2013. In the 2000s, a few academics and policy makers, including Cullet and R. Iyer, promoted the idea of a framework legislation arguing that despite water being a state subject, India needed legislation that would bring together all the various water-related principles developed in particular by the Supreme Court of India and the high courts over time, and which were not reflected in any legislation [3.4]. This legislation would play the role of an umbrella legislation setting out principles valid throughout the water sector, something that does not exist at present. The Parliament can adopt this legislation through a provision of the Constitution that allows the Centre to legislate on matters reserved for states (as in the case of water) if states request Parliament to do so. This legislation would not replace all the existing sectoral legislation (such as irrigation legislation, or the proposal groundwater legislation discussed above) but would provide a broad contextual legislation for all other more specific acts. The draft proposed by the Water Resources Ministry adopted in 2016 by the drafting committee [5.4] integrated different parts of the previous 2 drafts and a lot of new thinking. It received many positive comments when it was submitted to public feedback/assessment, including from corporations such as General Electric (India) which congratulated the Ministry 'for its leadership in promoting conservation and efficient use of water resources in the country' and stated that it 'strongly supports Draft Model Bill' [5.5a ii p2]. Intergovernmental authorities such as the World Health Organisation, and NGOs such as WaterAid India which recognised that the 'move towards a comprehensive legislation on water is a welcome step' [5.5b ii p1]. The draft was often referred to between 2018 and 2020 but had not been formally submitted to Parliament as of 2020.

*Raising the visibility of water issues in Indian and International media and online debate*

The dialogue around water legislation Cullet influenced was picked up by media outlets in India. Cullet was asked to contribute several pieces outlining the water crisis faced by the country, including by The Print and The Hindu [5.11a and b]. The pieces stimulated interest from the general public, as shown by comments. One reader described how '[the] Article introduce us real situation of water in India. One side water flood and another side that water everywhere but not a drop to drink'; another found that 'the seriousness of the article is not felt either by public or the policy maker', citing their own city (Chennai) 'as an example where we are heading for a severe water crisis by irrevocable decisions and lack of attention' A third reader considered that 'This article correctly points out to a very urgent and critical issue which seems, as the author says, "invisible" to the public' [all 5.11b ii]. Cullet was also cited in a number of well-read Indian and international media outlets addressing the issue and more broadly inequality in India, including Word Finance, Reuters, Hindustan Times and Business Today [5.11c-f]. The law drafting process Cullet was helping to shape was also covered and scrutinized by the media [5.11g-j], thus raising the public awareness on the political and legal debate.

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

- 5.1. Report on the Groundwater Model Bill, 2011 leading to the setting up of a new committee to redraft the same (August 2015).
- 5.2. Order setting up the Groundwater committee (15 October 2015).
- 5.3. Order setting up the Committee to draft the Framework legislation (28 December 2015).
- 5.4. Draft National Water Framework Bill, 2016.
- 5.5. Compiled public comments
  - a) Model Groundwater Bill, 2016; i) general public comments; ii) from General Electric Industry Lt.; iii) from Navjyoti Foundation; iv) from ATREE
  - b) Draft National Framework; i) general public comments; ii) from WaterAid India; iii) from WWF India
- 5.6. Order reviving the Groundwater Committee (13 February 2017)
- 5.7. Notice of meeting with state-level senior officials to discuss the Groundwater Model Bill (31 January 2017).
- 5.8. Notice of meeting at the NITI Aayog to discuss the Groundwater Model Bill (26 May 2017).
- 5.9. Minutes of the XIIIth meeting of the Groundwater Committee (11 August 2017).
- 5.10. Model Groundwater (Sustainable Management) Bill, 2017.
- 5.11. Media file:
  - a) 'Patchwork laws can't solve India's water crisis, Modi govt must push these 2 key bills now' – The Print, 12 June 2019.

- bi)** 'A gathering crisis: the need for groundwater regulation' – The Hindu, 8 Aug 2017. (bii) For comments, see article online: <https://www.thehindu.com/opinion/op-ed/a-gathering-crisis-the-need-for-groundwater-regulation/article19446507.ece>
- c)** 'Long term infrastructural changes key to reducing severity of drought in India' – World Finance, 15 Oct 2019.
- d)** 'With fees and laws, India rushes to save vanishing groundwater' – Reuters, 24 Jan 2019.
- e)** 'How to avoid the middle income trap' – Hindustan Times, 18 June 2019.
- f)** 'The real cost of water' – Business Today, 22 May 2016.
- g)** 'Centre plans model law on water' – The Hindu, 3 April 2016.
- h)** 'Citizens have right to safe water says draft legislation' – The Hindu, 4 June 2016.
- i)** 'How India sees the coming crisis in water – and is preparing for it' – Indian Express, 26 Sept 2016.
- j)** 'Sustaining the liquid mosaic – longer steps needed' – Economic and Political Weekly, 24 Dec 2016.
- 5.12. Order setting up the Madhya Pradesh committee, August 2019 (Hindi, with English translation)
- 5.13. Uttar Pradesh Ground Water (Management and Regulation) Act, 2019.