

# SIGNIFICANCE AND BREWING CHALLENGES OF CIVIL SOCIETY IN AFFILIATING SUSTAINABLE GROUNDWATER RESOURCE GOVERNANCE: EXPERIENCES AND PERCEPTIONS OF BANGLADESH

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## Abstract

*Water is regarded as indefeasible necessity of human civilization. In the South Asia region, the groundwater resource is poised as essence of life, security and development. Bangladesh is not an exception from that. Due to scarcity as well as disproportionate availability of surface water supply, the groundwater resource is veered into vital source to undergird heavy demand of water supply for livelihoods, industrial and agricultural purposes. Considering these, the groundwater resource governance is crucial since it is the mainstay of upholding economic, social and development rights; failure to ensure proper governance would only drag the country into the tentacles of environmental scourge, conflict and food insecurity. The paper endeavors to analyse the role and significance of civil society on groundwater resource management. It explores the nature of challenges that civil society is encountering during its engagement with groundwater resource governance. This paper undertakes to outline national legislative and policy response to groundwater resource management in Bangladesh. It also scrutinizes in detail of groundwater resource aspect in international law and would reveal that, considering the gravity of the issue, both the domain of international law and national law contribute below the par to the issue. The paper further contends that existing legislative and policy structure of Bangladesh eventually maims the civil society from contributing and bars it to facilitate effective participation of the commons. In the concluding remarks, the paper highlights suggested recommendations stemming from discussions, observations and policy reports to bolster the affiliation of civil society in the governance of groundwater resource.*

Key Words: Groundwater, Civil Society, Bangladesh, Water Governance, Water Law.

## 1. Introduction

Water is assumed as elixir of life conceiving indefeasible components of living beings.<sup>1</sup> It is the most precious and indispensable resource on earth, from uphill to down dale.<sup>2</sup> The earliest civilizations like the Mesopotamian,

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<sup>1</sup> D Dave & SS Katewa, Textbook of Environmental Studies 38, Cengage Learning India Pvt. Ltd (2012)

<sup>2</sup> Id., 258

the Egyptian and the Harappan built upon the banks of rivers.<sup>3</sup> Hence, water played a vital role, like a life line, in governing the development of human civilizations across the world. In latter-day, significance of water has remained the same. Freshwater is also core of sustainable development issue.<sup>4</sup> In preceding centuries, the sustainability of groundwater resources was not in question because of smaller populations and technical limitations that prevented abstraction of large quantities of groundwater.<sup>5</sup> However, tremendous development in drilling technology in tandem with motorized pumps in the late 19<sup>th</sup> and early 20<sup>th</sup> century had spearheaded abstraction of groundwater from deeper aquifers, which in consequence led to a dramatic increase in the usage of groundwater. Following the cheery view of engineering and technical progress by the second half of the 20<sup>th</sup> century, worldwide groundwater use has been soared by a geometrical order of magnitude.<sup>6</sup>

According to a Report of the Chatham House as to water issues in South Asia, the largest increase in urban population over the next 40 years will take place in this region.<sup>7</sup> Bangladesh is not excluded from the forecast. Actuated by this prediction, there is no option to undermine and deal the groundwater management issue of Bangladesh in isolation.<sup>8</sup> Sadly, the water management of Bangladesh has not focused on conservation of groundwater and common people are mostly unaware of the importance of conserving water.<sup>9</sup> The focus has always been on the resource development, whereas resource ‘management’ has not yet received necessary attention. Situation has abseiled further downward, because unregulated exploitation of groundwater has brought aquifers under severe stress, threatening the sustainability of the resource.<sup>10</sup> State mechanisms have undertaken measures to troubleshoot the situation. However, these measures lack either logical or sequential implementation strategy.<sup>11</sup> As always occurs in such cases, lack of coordination among government bodies are the major bulwark to the

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<sup>3</sup> Id., 38

<sup>4</sup> Q Fan and MAK Azad, *Towards a Cleaner Bangladesh: Safe water, Sanitation, and Hygiene for All*, September 15, 2017, available at: <http://blogs.worldbank.org/endpovertyinsouthasia/towards-cleaner-bangladesh-safe-water-sanitation-and-hygiene-all> (Last visited on December 29, 2017)

<sup>5</sup> AN Findikakis, *Highlights and Common Themes of Groundwater Management Practices Around the World 1*, CRC Press (AN Findikakis and K Sato eds., 2011)

<sup>6</sup> Id.

<sup>7</sup> G Price, *Attitudes to Water in South Asia 2* (Chatham House Report, 2014) (*hereinafter* Price)

<sup>8</sup> Id., 9

<sup>9</sup> Id., 44

<sup>10</sup> AS Qureshi et al, *Groundwater Management in Bangladesh: An Analysis of Problems and Opportunities* 28 (CIMMYT Report 2015)

<sup>11</sup> Price 48, *supra* note 7

policy implementation.<sup>12</sup> However, situation can be changed by creating spaces for meaningful and formal involvement of civil society. Civil society, though lacks any universal definition, encompasses broad arena of civil elements made up of foundations, groups, communities, non-governmental organizations undertaking activities for the benefit of the public good.<sup>13</sup> Although there is distinction between non-governmental organization (NGO) and civil society organization<sup>14</sup>, both are interconnected.<sup>15</sup> Prevalence of NGOs is often deemed as a sign of well-functioning civil society.<sup>16</sup> In the present Chapter, due to their close nexus, the term NGO and Civil Society has been used interchangeably.

A salient feature of civil society and non-governmental organization (NGO) is that these non-state actors can influence public policy from outside the formal structure of government.<sup>17</sup> They can scrutinize government-sponsored initiatives through persistent advocacy and by acting as watchdogs, can hold governments accountable to their commitments.<sup>18</sup> However, various examples of mismanagement of funds within the sphere of NGOs have added some substances to skepticism. Regarding groundwater governance, state mechanism has interacted and responded to different NGO initiatives in a variety of ways.<sup>19</sup> On the other side, think tanks of civil society opine that governments wish to control them, and that the NGOs will lose their autonomy if they integrate more closely.<sup>20</sup>

## 2. Overview

The paper endeavours to chisel portraits of groundwater resource management of Bangladesh with concentration in the role and significance of civil society into the issue. After providing brief accounts on basic concepts and occurrence of groundwater in Bangladesh, succeeding parts of

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<sup>12</sup> Id.

<sup>13</sup> L Leonard & M Pelling, *Civil Society Response to Industrial Contamination of Groundwater in Durban, South Africa*, 22 (2) *Environment & Urbanization* 580 (2010); see also Harry Blair, *Civil Society, Democratic Development and International Donors* 183, University Press Limited (Rounaq Jahan ed., 2000) (*hereinafter* Blair)

<sup>14</sup> Blair 184, *supra* note 13

<sup>15</sup> Id.

<sup>16</sup> AS Sujatha, *NGO and Social Development* 152, ALP Books (2013) (*hereinafter* Sujatha)

<sup>17</sup> Id., 55

<sup>18</sup> *Not without us: The Civil Society's Role in Implementing the Sustainable Development Goals*, 2016, available at: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/319308/6-Not-without-us-civil-society-role-implementing-SDGs.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/319308/6-Not-without-us-civil-society-role-implementing-SDGs.pdf?ua=1) (Last visited on January 02, 2018)

<sup>19</sup> N Heyzer, *Toward New Government-NGO Relations for Sustainable and People-Centered Development* 11, Palgrave Macmillan (N Heyzer et al eds., 1995)

<sup>20</sup> JV Riker, *From Cooperation to Cooperation and Collaboration in Government-NGO Relations: Toward an Enabling Policy Environment for People-Centered Development in Asia* 112, Palgrave Macmillan (N Heyzer et al eds., 1995)

the chapter lay out analysis segments to evaluate in detail of groundwater resource aspect in international law and would reveal that, considering the gravity of the issue, both domain of international law and national legal mechanism contribute below the par to the issue. The paper undertakes to appraise national legislative and policy response to groundwater resource management in Bangladesh. In appraisal, this part of the paper would contend that existing legislative and policy structure of Bangladesh eventually maims civil society from contributing and bars it to facilitate effective participation of the commons. The paper explores the nature of challenges that civil society is encountering during its engagement with groundwater resource governance and would chisel through analysis that groundwater resource mismanagement is greatly responsible with governance problem rather than resource scarcity. The degree of management problem is abseiled by legislative loopholes; policy overlaps and fragile governance management. Most often, state mechanism of the country fails to comprehend that formal and participatory involvement of civil society is a sustainable strategy rather than a rift in the flute of groundwater governance policy.

In later segment, the paper would delve into concise analysis as to how legislations related to foreign donation regulation is making undue pitfalls and bulwarks to the activities of civil society. In Bangladesh, environmental civil societies and NGOs are experiencing motely of obstacles such as difficulty in registration; financial difficulties and constraints in carrying out activities. After sifting through legislative provisions concerning civil society regulation, a dominant trend from the perspective of state mechanism would become much starker. In concluding remarks, the paper recaps suggested recommendations stemming from discussions, observations and policy reports to bolster the formal and significant affiliation of civil societies and NGOs in the governance of groundwater resource.

### **3. Groundwater in Bangladesh: Acquaintance with Concept and Occurrence**

Groundwater is existed in the earth crust as sub surface water either within a saturated or non-saturated soil or between consolidated rock formations. It is pertinent to mention here that all sub surface water is not groundwater. Water in soil mixture, which is termed as non-saturated soil, is not categorized as groundwater. However, the legal view defines groundwater in such way which is different from the scientific view.<sup>21</sup> For example, the wordings of section 2 (26) of the Water Act of Bangladesh illustrates

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<sup>21</sup> R Nelson & P Quevauviller, *Groundwater Law* 175, Springer (AJ Jakeman *et al* eds., 2015)

‘groundwater’ as any water underneath the soil which flows through aquifers and can be abstracted onto the surface either by natural or artificial process.<sup>22</sup> Though groundwater and surface water molecules are elements of the same hydrological cycle, there exists dragging line.<sup>23</sup> Unlike, surface water, groundwater is widespread and can underlie vast areas of land.<sup>24</sup> Surface water flows rapidly from upstream to downstream whereas groundwater flow patterns are multidimensional and complex.<sup>25</sup>

Bangladesh lies at the north tip of the Bay of Bengal, encompassing significant part of the Ganges basin<sup>26</sup> which is consisted of the delta of the Ganges, the Brahmaputra and the Meghna rivers.<sup>27</sup> The groundwater system of Bangladesh can be bucketed into four layers: surface storage; root zone; semi confining layer; and lastly, main aquifers.<sup>28</sup> An aquifer can be defined as an identifiable geological formation which is capable to conceive exploitable quantities of water.<sup>29</sup> Other than the coastal region of the country, aquifer status over rest of the places of Bangladesh are suitable for groundwater abstraction.<sup>30</sup> In coastal part of the country, salinity is a bulwark to groundwater abstraction.<sup>31</sup> In contrast, the aquifers in the northwest region extends almost to ground surface. Due to these features, water can be abstracted with ease from beneath the ground in most of the areas of the country. Even in the northeast part, where aquifers are comparatively deeper, water can be abstracted by using drilling methods.<sup>32</sup> These facts highlight the reasons why in Bangladesh, groundwater is responsible for supplies of approximately 90 per cent of drinking, irrigation and industrial water requirements.<sup>33</sup>

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<sup>22</sup> Bangladesh Water Act, 2013, § 2(26)

<sup>23</sup> Kerstin Mechlem, *International Groundwater Law: Towards Closing the Gaps?*, 14 Yearbook of International Environmental Law 48 (2003) (*hereinafter* Mechlem)

<sup>24</sup> *Id.*, 49

<sup>25</sup> F Stauffer, *Protection of Groundwater Environments* 303, CRC Press (AN Findikakis & K Sato eds., 2011)

<sup>26</sup> SK Jain et al, *A Comparative Analysis of the Hydrogeology of the Indus Gangetic and Yellow River Basins* 45, CRC Press (A Mukherji et al eds., 2009)

<sup>27</sup> A Rahman *et al*, Introduction 9, University Press Limited (A A Rahman & P Ravencroft eds., 2003) (*hereinafter* Rahman)

<sup>28</sup> A Nishat et al, *Assessment of Groundwater Resources of Bangladesh* 93, University Press Limited (A A Rahman and P Ravencroft eds., 2003) (*hereinafter* Nishat)

<sup>29</sup> Mechlem, *supra* note 23

<sup>30</sup> Nishat, *supra* note 28

<sup>31</sup> *Overview of the Hydrogeology of Bangladesh* in *Groundwater Resources and Development in Bangladesh: Background to the Arsenic Crisis, Agricultural Potential and the Environment* 60 University Press Limited (2003)

<sup>32</sup> Rahman 10, *supra* note 27

<sup>33</sup> *Supra* note 27,32

## 4. Groundwater in International Law: Evolution and Constraints

### 4.1 Groundwater Resource: View from Legal Perspective

There was no specific law governing groundwater in ancient times. The Hammurabi Code contains number of articles which directly or indirectly refer to water. In those provisions there were mentions of punishment for those who have been negligent in controlling irrigation water.<sup>34</sup> Water law in ancient South Asia region evolved slowly from custom, religion and written codes. Although international legal instruments appraise groundwater differently they are often scattered among motley of legal texts; may be rigged with either too lenient and ineffective.<sup>35</sup>

### 4.2 Brewing Developments on Groundwater in International Law

Governance of groundwater at the international level has received less attention than has surface water. Until recently, international norms and values for groundwater were almost non-existent. International legal research has been mostly oriented towards surface water. Prior to late 1960s, international law has typically considered groundwater only as subsidiary to surface water. Whereas numerous treaties deal with surface water issues, very few address only groundwater or contain groundwater specific provisions.<sup>36</sup> Unlike surface water, the hidden nature of groundwater as well as lack of scientific and technological data may be responsible behind it. More to that point, the complex nature of aquifers; the fact that the physical and chemical processes remain essentially unseen; existence of factual uncertainties and deficit of data are the reasons for this neglect of groundwater. Furthermore, the great majority of international legal instruments concerning water refers to surface water and only incidentally to groundwater.<sup>37</sup> While surface water has been dealt with in international agreements and other regional instruments, groundwater is included in the scope of these instruments in ceremonial manner.<sup>38</sup> The 1997 United Nations Convention on the Law of Non-Navigational Uses of International Watercourse which represents the latest authority in water law, includes groundwater in its coverage in a very limited way.<sup>39</sup> The Convention refers groundwater only in so far as it is related to surface waters.<sup>40</sup> The

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<sup>34</sup> AN Charalambous, *Transferable Groundwater Rights: Integrating Hydrogeology, Law and Economics* 48, Routledge (2013)

<sup>35</sup> DA Caponera, *Principles of Water Law and Administration* 271, Taylor & Francis (2007) (*hereinafter* Caponera)

<sup>36</sup> Mechlem 53, *supra* note 23

<sup>37</sup> Caponera 262, *supra* note 35; *See also supra* note 23

<sup>38</sup> Mechlem 47, *supra* note 23

<sup>39</sup> RM Stephan, *Evolution of International Norms and Values for Transboundary Groundwater Governance* 148, Springer (AR Turton et al eds., 2007)

<sup>40</sup> U Beyerlin & T Marauhn, *International Environmental Law* 88, Hart Publishing (2011)

substantive treaty norms are heavily biased towards surface water management.<sup>41</sup> From that point of view of legal recognition, international groundwater law can be deemed as the poor cousin of the (surface) water law.

However, international non-governmental organizations have been comparatively active in the legal orb of groundwater issues. The Helsinki Rules was developed by the International Law Association (ILA) and adopted in 1966 covered groundwater.<sup>42</sup> Various non-binding legal instruments address groundwater with comparatively more specific and detailed provisions. Within the framework of international organizations, two United Nations (UN) conferences have focused on groundwater issues. The first one was the UN Water Conference, 1977 held at Mar del Plata. The second one was the UN Conference on Desertification held in Nairobi in 1977. In the conference of 1977, the principle of equitable utilization is referred by stating that in relation to the use, management, and development of shared water resources, the national policies should take into consideration the right of each state sharing the resources to equitably utilize such resources as the means to promote bonds of solidarity and cooperation.<sup>43</sup> The 1977 Mar del Plata Action Plan<sup>44</sup> lists recommendations for groundwater management. It focuses primarily on the utilization of aquifers; on increasing aquifer related knowledge and mentions the analysis of data on groundwater for planning purposes;<sup>45</sup> assistance for recording quantitative and qualitative characteristics of groundwater resources<sup>46</sup>; to exploit the groundwater aquifers to their physical limits and to protect springs and groundwater from over draught and salinity, and to ensure proper sharing of the resources;<sup>47</sup> exploring the potential of the conjunctive use of the surface and subsurface resources to maximize efficacy and efficiency<sup>48</sup> and supporting research on low cost groundwater pumping equipment. In the second Conference, the UN Conference on Desertification, held in Nairobi in 1977 recommended wise and efficient management of shared water resources for rational use.<sup>49</sup>

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<sup>41</sup> Mechlem 53, *supra* note 23

<sup>42</sup> DA Caponera, National and International Water Law and Administration 400, Kluwer Law International (2003)

<sup>43</sup> United Nations, *Report of the United Nations Water Conference*, New York, 1977, p. 51

<sup>44</sup> Mar del Plata Action Plan, *Report of the United Nations Water Conference*, Mar del Plata, 14-25 March 1977, UN Doc. E/CONF.70/29

<sup>45</sup> *Id.*, Article 3(o)

<sup>46</sup> *See supra* note 44, Article 4(b)

<sup>47</sup> *Id.*, Article 10 (a)

<sup>48</sup> *Id.*, Article 10 (b)

<sup>49</sup> United Nations, *Report of the United Nations Water Conference Mar del Plata, 14-25 March 1977*, Pagination v.181, p. 141-179 (January 1, 1977)

In 2004, the International Law Association (ILA) adopted the Berlin Rules on Water Resources,<sup>50</sup> suspending the 1966 Helsinki Rules, and in 2008, the International Law Commission adopted its Draft Articles on the Law of Transboundary Aquifers. The wordings of the Draft Articles give an impetus to the protection and management of groundwater resources which is a subject of long neglected issue. However, it is not evident yet whether these articles will lead to a legally binding convention or non-binding set of guidelines. Based on customary international law on water resources, the 'Draft Articles on the Law of Transboundary Aquifers' includes the principle of equitable and reasonable utilization,<sup>51</sup> the obligation not to cause significant harm<sup>52</sup> and the obligation to cooperate.<sup>53</sup> The International Law Commission's 'Draft Articles' also refers to precautionary action in article 12, stipulating that 'aquifer state' shall take precautionary approach in view of uncertainty about the nature and extent of an aquifer system of its vulnerability to pollution.

## 5. Groundwater Governance in Bangladesh: Legislative and Policy Response

Groundwater governance is a complex challenge intertwined with multi sectoral and multi-jurisdictional urban and rural economic development challenge.<sup>54</sup> Strong backing of legal framework provides necessary leverage to administration to use, manage and protect vital resources to achieve the goal of equitable and sustainable water use.<sup>55</sup>

During the early 1950s, strategy for economic development of Bangladesh, then erstwhile East Pakistan, was focused on improvement of flood control and drainage and development of supplementary irrigation for the monsoon season. Groundwater governance development can be traced to series of policy plans and externally driven policy changes in 1960s<sup>56</sup> which set out program of regional flood control, surface water irrigation and drainage.<sup>57</sup> However, prior to 1970s, groundwater was largely neglected as resource.<sup>58</sup> The position veered due to the role of groundwater in reducing the crop deficit through irrigation and impact on reducing health mortality and

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<sup>50</sup> International Law Association, *Report of Seventy-First Conference* 340-411, 71 International Law Association Conference Report (2004)

<sup>51</sup> International Law Commission, *Yearbook of International Law Commission*, 66<sup>th</sup> Session, Vol. II, part two, Article 4 (2008)

<sup>52</sup> Id., Article 6

<sup>53</sup> Id., Article 7

<sup>54</sup> Rahman 7, *supra* note 27

<sup>55</sup> See *supra* note 1

<sup>56</sup> Rahman 13, *Supra* note 27

<sup>57</sup> Id.,13,87

<sup>58</sup> Id.,12



morbidity from water-borne disease.<sup>59</sup> Prior to mid-1980s, groundwater development was controlled by the public sector through system of regulations and controls on minor irrigation equipment.<sup>60</sup> The period from mid to late 1980s was marked by policy changes and vital attention shifted away from the equity of access concern towards economic efficiency.

## 5.1 Groundwater in Legal Framework of Bangladesh

Common populace generally deems groundwater as ‘god given resource’. Such perception generates indifferent attitude towards wastage. However, water is not infinite and it cannot be treated as perpetual gift of nature. The water management in Bangladesh has not yet focused sufficiently on conservation. People are mostly unaware of the importance of conserving water.<sup>61</sup> Groundwater is deemed as national resource in Bangladesh<sup>62</sup> and the ownership is vested on state mechanism.<sup>63</sup>

Bangladesh, like other South Asian states, belongs to common law legal system<sup>64</sup> and does have set of laws governing the use and control of water.<sup>65</sup> Some laws are dated back to British colonial regime. Most relevant of them are: The Irrigation Act, 1876;<sup>66</sup> the State Acquisition and Tenancy Act, 1950;<sup>67</sup> Bangladesh Irrigation and Water Rate Ordinance, 1983<sup>68</sup>; Groundwater Management Ordinance, 1985.<sup>69</sup> The Irrigation Act is designed to determine the levy of water rates; and defines the construction of drainage systems. The State Acquisition and Tenancy Act, 1950 removes the ambiguity on control and ownership of subsoil or groundwater. This Act recognizes the right of state on groundwater (sub soil) resources through section 3 (1) (II), Section 3 (4) (a) and section 81(1).<sup>70</sup> Although state ownership of groundwater became recognized with the Act, it has never

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<sup>59</sup> Id.

<sup>60</sup> A Nishat et al, Assessment of Groundwater Resources of Bangladesh 89, University Press Limited (A A Rahman and P Ravencroft eds., 2003)

<sup>61</sup> Price 44, *supra* note 7

<sup>62</sup> Rabia Bhuiyan, *MP v. Ministry of Local Government and Rural Development* 27 BLD (2007) AD 261

<sup>63</sup> Policy, *National Water Policy*, Ministry of Water Resources, Government of Bangladesh (1999)

<sup>64</sup> Clarence J Dais, *The Impact of Social Activism and Movements for Legal Reform in South Asia* 3, University Press Limited (Sara Hossain *et al* eds., 1997) 3

<sup>65</sup> Conference, *Nature's Bounty and Scarce Commodity- Competition and Consensus over Groundwater Use in Rural Bangladesh*, Annual Conference of the International Association for the Study of Common Property (1996)

<sup>66</sup> Act III of 1876

<sup>67</sup> Act XXVIII of 1951

<sup>68</sup> Act XXXI of 1983

<sup>69</sup> Ordinance XXVII of 1985

<sup>70</sup> Act XXVIII of 1951

been treated accordingly.<sup>71</sup> The preamble of the Groundwater Management Ordinance, 1985 mirrors its aim for managing the groundwater resource for agricultural purpose and for matters connected therewith.<sup>72</sup> Prior to 1999, due to deficit of water policy, efforts remained disjointed, jumbled and supply driven which are detrimental to national interest. The Water Policy of 1999, that introduces the idea of integrated water management,<sup>73</sup> seeks to remedy the ruffled situation by bringing order and discipline in the exploration, management and use of water resources in Bangladesh.<sup>74</sup> It advocates the use and development of groundwater in an efficient and equitable way.<sup>75</sup>

The Water Act 2013<sup>76</sup> is the newly inducted water regulation in Bangladesh. It lends provisions and wordings from preceding water regulations, and supersedes all previous water related policies. There are number of additional policies that overlap and connect to the present Water Act<sup>77</sup> and these are: Disaster Management Act 2012; Integrated Small-scale Irrigation Policy 2011; Coastal Development Strategy 2006; the Coastal Zone Policy 2005; the National Policy for Safe Water Supply and Sanitation 1998; the Environmental Conservation Act 1995 and the Groundwater Management Ordinance, 1985.<sup>78</sup> Section 4 of the Water Act 2013 constitutes National Water Resource Council, which is the highest decision-making body as to water resource issues.<sup>79</sup> Under the Chairmanship of the Prime Minister, the Council would be comprised of 34 members. Most of the members would be consisted of Ministers, State Ministers, Secretary and Director General of various ministries and commissions of the state mechanism.<sup>80</sup> In the Council, there would be a water resource expert who would be nominated by the Prime Minister of Bangladesh.<sup>81</sup> However, only one representative of the non-government organization would be included in the Council.<sup>82</sup> The Council is entitled to make policies and give instructions for integrated water development issues and safe abstraction of groundwater;<sup>83</sup> would

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<sup>71</sup> See *supra* note 65

<sup>72</sup> *Supra* note 62

<sup>73</sup> Price 48, *supra* note 7

<sup>74</sup> 'National Water Policy' (Ministry of Water Resources, Government of Bangladesh 1999)

<sup>75</sup> Water Wealth: State of Groundwater Management in Bangladesh 15, Center for Science & Environment (2012)

<sup>76</sup> Act No. XIV of 2013

<sup>77</sup> Water Governance in Bangladesh: Challenges and Opportunities around Policy, Institutional Function and Implementation for a Sustainable Water Future 6, WWF (2015)

<sup>78</sup> Ordinance XXVII of 1985

<sup>79</sup> Bangladesh Water Act, 2013, § 5

<sup>80</sup> Bangladesh Water Act, 2013

<sup>81</sup> Bangladesh Water Act, 2013, §4(1)(ff),

<sup>82</sup> *Id.*, §4(1)(gg)

<sup>83</sup> *Id.*, §5 (a)

provide instruction about national water resources plan.<sup>84</sup> The Council also has the responsibility to advice to government about issues relating to information and data exchange; research and training program.<sup>85</sup>

In the Water Act 2013, aspects relating to water pollution and drinking water provision are not adequately covered. The referred Act has been developed by the Ministry of Water Resources within their scope as water regulator. In the Act, other ministries' policies and interests have had hardly been reflected and there is no direction in case of any ambiguous and overlapping issues. Policy ambiguities as well as overlaps should be urgently reviewed to understand how all relevant policies can be optimized as an interactive and mutually supportive system of legislation.<sup>86</sup> One of the stark gaps of the Water Act, 2013 is the issue of women participation in decision making during planning, operations and maintenance of water projects. It was overlooked even though the participation of women has been emphasized in the National Policy for Safe Water Supply and Sanitation 1998.<sup>87</sup>

It is pertinent to mention here that the water policy recommends government agencies to work in partnership with NGOs. However, Current NGOs' involvement in national policy formulation processes is still below the par.<sup>88</sup> Civil society and NGOs are not well represented in governance mechanism. According to Water Act 2013, only one representative from the NGO sector was selected by the Prime Minister Office to be a member of the National Water Resources Council; and one representative to be a member of the executive committee. To ensure effective and practical policy, the number of NGO representative with community water management experience can be increased, perhaps to at least two representatives in the National Water Resources Council and the Executive Committee.

## 5.2 Challenges and Loopholes yet to be highlighted

Groundwater governance in Bangladesh is scourged either by outdated and inadequate legal frameworks or weak institutions. The geographical reality of the country avails no scope to overview the internal water management issue in lame manner.<sup>89</sup> Nevertheless, internal water management of Bangladesh lacks coordination and effective implementation; and is rigged with resource constraints in terms of data, technology, equipment, funding

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<sup>84</sup> Id., §5 (b)

<sup>85</sup> Id., §7

<sup>86</sup> *Supra* note 77

<sup>87</sup> Id., 14

<sup>88</sup> Id., 38

<sup>89</sup> Price 9, *supra* note 7

and expertise etc.<sup>90</sup> Even the amended laws are heavily biased towards surface water and the deficit of coordination between state mechanism and civil society is conspicuous. More to that point, there are variegated government agencies under several ministries dealing with water issues. Their mandates are different and therefore, the priorities they set out are also often conflicting.<sup>91</sup> Such problem often results in poor coordination between the government institutions in water sector. To illustrate, the Dhaka WASA (Water Supply & Sewerage Authority) is not legally bound to follow the policy. Bangladesh Water Development Board (BWDB) manages mainly irrigation and floods issues. BIWTA (Bangladesh Inland Water Transport Authority) focuses mainly on water navigation issues.<sup>92</sup> These give images of serious lack of coordination among government mechanism.<sup>93</sup> Besides, lack of monitoring mechanism makes the situation more acute. There is gap in research, data collection in tandem with efficient human resource in government institutions which are in dire need to be compensated.

Government organizations are supposed to take the lead in governance, to coordinate with all other actors to take care of regular groundwater management tasks at different levels.<sup>94</sup> Sadly, the actual scenario is quite the opposite. The 2004 National Policy for Arsenic Mitigation observes that different ministries, government agencies, academics, NGOs and multinational development partner agencies are pursuing separate programs without any coordination. This is resulting in duplication of activities and conflicting strategies that inhibit synergy and optimal use of scarce resources.<sup>95</sup> Government agencies tend to take top-down engineering approach, whereas the challenges of the complex socio economic of groundwater require also complementary bottom up stakeholder involvement approach.<sup>96</sup> A top down approach would not meet the needs for sustainability goals. On the other hand, bottom up approach helps to gain knowledge about water harvesting structures and a corresponding shift in the value of water; helps to engage the local community in the maintenance of water structures.

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<sup>90</sup> Price 55, *supra* note 7

<sup>91</sup> *See supra* note 65

<sup>92</sup> Price 48, *supra* note 7

<sup>93</sup> *Id.*

<sup>94</sup> Global Diagnostic on Groundwater Governance 131, FAO (2016)

<sup>95</sup> Policy, *National Policy for Arsenic Mitigation*, Bangladesh (2004)

<sup>96</sup> *See supra* note 94, 17

## 6. Civil Society in Groundwater Governance: Hovering between Role and Constraints

Civil societies secure vital space in society as critics, advocates and policy partners to maintain checks and balance between power exercises of state mechanism and to secure rights of the populace.<sup>97</sup> Consequently, in the domain of environmental governance, they are observed to involve into gap filling role which has been created by state mechanisms' inability. The BELA (Bangladesh Environmental Lawyers Association), BLAST (Bangladesh Legal Aid and Services Trust), BEDS (Bangladesh Environment and Development Society) and BCAS (Bangladesh Centre For Advance Studies) etc. are stark examples who are delved into championing environment order by using legal mechanism as tool; developing capability to address resource management and governance issues through utilizing available intellectual, technology and human resource.

Although institutional setting is prerequisite for effective groundwater governance,<sup>98</sup> it is very often observed that relevant state mechanism lacks such institutional structure due to inadequate human and financial capacity and web of other complex issues ranging from technological, scientific, geographical and public concerns.<sup>99</sup> As a result, enforcing groundwater governance related legislations and policies usually appear to be far tricky. More to that point, along with legislative mechanism, it is equally necessary to educate and create awareness, cooperation among existing networks, and increase stakeholder engagement. These technical and administrative requirements would pave stepping stones for meaningful involvements of civil societies and NGOs,<sup>100</sup> since public participation, volunteerism, inclusiveness in project and public interest protection are the salient features of civil society and NGOs.<sup>101</sup>

### 6.1 Civil Society as Agents of Change in Bangladesh

Bangladesh is well known place for civil societies that remains active in areas such as micro credit and empowerment of marginalized communities.<sup>102</sup> Here, civil societies and NGOs are more successful in environment protection and poverty alleviating. This consideration has

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<sup>97</sup> Sujatha, *supra* note 16

<sup>98</sup> RG Varady et al, *Modes and Approaches of Groundwater Governance: A Survey of Lessons Learned from Selected Cases across the Globe*, 8 Water 423 (2016)

<sup>99</sup> *Id.*, 424

<sup>100</sup> Sujatha 5, *supra* note 16

<sup>101</sup> J Soussan *et al*, *Understanding Rural Change: Socio-Economic Trends and People's Participation in Water Resource Management in Bangladesh* 31, Bangladesh Center for Advance Studies (1994)

<sup>102</sup> F Quadir, *Civil Society in Bangladesh* 3, Ashgate Publishing (Dr. F Quadir & Y Tsujinaka eds., 2015)

resulted in the rapid growth of NGOs involved in initiating and implementing various management measures.<sup>103</sup> Thus, NGOs have become a major partner of government and that creates scope enabling them to exert increasing influence on government policies and actions.<sup>104</sup>

Civil society and NGOs have emerged as significant actors in the development scene of Bangladesh only in the 1970s.<sup>105</sup> During the war time and post war time, civil societies were involved in providing food and essential commodities; in developing physical infrastructures.<sup>106</sup> At the beginning, civil societies replicated the mainstream development program through community based approach and target group approach.<sup>107</sup> During that time, civil societies realized that the post-war relief efforts do not solve the problems of the common people and for that purpose they decided to incorporate new strategy to focus on development at the grass root level.<sup>108</sup> At the outset of 1980s, NGOs in Bangladesh continued to grow in strength as they started to receive a part of the increasingly volume of foreign assistance. During the Military regime of 1980s, growing NGO community started to emphasize advocacy work, called for loosening of bureaucratic restrictions.<sup>109</sup> In 1990s, NGO advocated programs intensified. Prior to that, NGOs involvement in advocacy work was sporadic.<sup>110</sup> In mid 1990s, civil society community stepped in as reference and observer to break the political deadlock among major political parties of Bangladesh.<sup>111</sup> At that time, relationship with state mechanism has also undergone some changes where one stop services for monitoring and regulating NGOs and civil societies activities has been ensured through the establishment of 'NGO Affairs Bureau' (NGOAB) under the Office of the Prime Minister of Bangladesh.<sup>112</sup>

Regarding groundwater and environment related issues, the NGOs of Bangladesh usually put pressure on government management agencies

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<sup>103</sup> Sujatha 2, *supra* note 16

<sup>104</sup> NA Siddique and G Faruqi, *Governance of NGOs in Bangladesh: Control Mechanisms and their Limitations* 231, Routledge (Nizam Ahmed ed., 2016); *See also* Sujatha 62, *supra* note 16

<sup>105</sup> Tasneem Siddiqui, *NGOs in Bangladesh: Challenges on the Threshold of the New Millennium* 411, Asiatic Society of Bangladesh (AM Chowdhury & Fakrul Alam eds., 2002) (*hereinafter* Siddiqui)

<sup>106</sup> Siddiqui 416, *See supra* note 105

<sup>107</sup> *Id.*, 417

<sup>108</sup> *Id.*, 416

<sup>109</sup> Rounaq Jahan, *Bangladesh: Promise and Performance* 20, University Press Limited (Rounaq Jahan ed., 2000) (*hereinafter* Jahan)

<sup>110</sup> 'Economics and Governance of Nongovernmental Organizations in Bangladesh', Vol 11 (The World Bank 2006) Report 33

<sup>111</sup> Jahan 23, *supra* note 109

<sup>112</sup> Siddiqui 418, *supra* note 105

through publishing reports, briefs, filing public interest cases and by spreading concern among people and community.<sup>113</sup> Environmental NGOs involve themselves in both class action and public interest cases in the legal arena of Bangladesh. State agencies are aware and can sense the pressure that civil society and NGOs have been monitoring their projects and performances.<sup>114</sup>

## 6.2 Envisioning Role of Civil Society in Groundwater Governance

The management as to groundwater refers to sustainable groundwater flow and preservation of water quality.<sup>115</sup> This encompasses the decisions on groundwater exploitation and on land use, such as regulations and limitations to the use of agrochemicals, establishing well head protection areas or setting the limits of areas in which the aquifer is subjected to specific regulations to protect water quantity and quality.<sup>116</sup> Many problems are associated with groundwater governance issues that are not technical but managerial and administrative in nature.<sup>117</sup> Major groundwater management problems stem from the very large number of actors involved and they encompass persons, enterprises, societies, agencies and public organizations holding groundwater rights and wells; those who are the users of groundwater; people living in the territory who are the possible subject of water taxes; restrictions and conditions of the activities; or who may suffer from water quantity and quality impairment; and the agencies in charge of land management, public works and transport.<sup>118</sup> Due to absence of political commitment, low budgets and consequent low management capacity, the performance of public agencies varies in practice from virtually inactive to proactive and effective.<sup>119</sup> Consequently, such deficit of coordination generates pitfalls and crevices in the proper governance issue and, as a consequence, main objectives of such governance would swerve into fiasco. Civil society and NGOs can play the role of weaving all strings of actors together. In the orb of groundwater governance, civil society can play the gap filling role by raising awareness of the public participation;<sup>120</sup> pressurizing government mechanisms for effective enforcement of existing legislation; sorting out infrastructural, technological and development

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<sup>113</sup> Blair 204, *supra* note 13

<sup>114</sup> Blair 205, *supra* note 13

<sup>115</sup> Groundwater Resources of the World and their Use 26, UNESCO (IS Zektser and LG Everett eds., 2004)

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> Blair 205, *supra* note 13

<sup>119</sup> *See supra* note 94, 12

<sup>120</sup> Sujatha 70, *supra* note 16

related constraints towards securing integrated management of groundwater.  
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In Bangladesh, civil society has already been cooperating closely with government organizations and other civil groups in formulating programs and plans relating to gender, environment, development and human rights issues. The national environmental management action plan of the country has been prepared by the ministry of environment in collaboration with environmental NGOs and other civil society groups.<sup>122</sup> Hence, their potentials and roles cannot be underrated in anyway. They can delve into the role in identification of weaknesses and gaps in current policy or legal framework; in information gathering and education of the public, private sector and government.<sup>123</sup>

### **6.3 Civil Society in Groundwater Governance: Legislative & Policy Pitfalls**

At the beginning, there were four main laws concerning the functions and regulations of the NGOs<sup>124</sup> namely the Societies Act 1860<sup>125</sup>; the Voluntary Social Welfare Agencies Ordinance, 1961<sup>126</sup>; Foreign Donations (Voluntary Activities) Regulation Ordinance, 1978 and the Foreign Contribution (Regulation) Ordinance, 1982. Most of the NGOs in Bangladesh registered themselves under the Societies Act 1860 (Act XXI of 1860) and comply provisions of Voluntary Social Welfare Agencies Ordinance, 1961.<sup>127</sup> These laws intended to ensure sound international governance and external accountability.<sup>128</sup> The wordings of these laws were implemented by NGO Affairs Bureau (NGOAB), which is located within the Prime Minister's Office, presumably reflecting the importance which the Bangladeshi government attaches to the role of NGOs in the development of the country. This bureau regularly monitors the activities of the NGOs operating in Bangladesh with foreign assistance and they are under legal obligations to regularly report to the bureau about their activities, funding and expenditure. NGOs in Bangladesh whose projects were implemented under the auspices of foreign funds were subject to the Foreign Donation (Voluntary Activities)

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<sup>121</sup> MR Rahman and JU Chowdhury, *Interaction between Surface Water and Groundwater: Need for Integrated Management* 305, University Press Limited (A A Rahman & P Ravencroft eds., 2003); *See also* Sujatha 66, *supra* note 16

<sup>122</sup> Sujatha 79, *supra* note 16

<sup>123</sup> *Id.*, 68

<sup>124</sup> *NGO Legal Framework in Bangladesh* available at: <http://www.icnl.org/research/library/files/Bangladesh/frame.pdf> (Last visited on January 09, 2018)

<sup>125</sup> Act XXI of 1860

<sup>126</sup> Act XLVI of 1961

<sup>127</sup> *See supra* note 124

<sup>128</sup> *Supra* note 104, 238



Regulation Ordinance, 1978 and Rules made under that Ordinance.<sup>129</sup> These two ordinances have been replaced by the new Act titled the Foreign Donations (Voluntary Activities) Regulations Act, 2016. The preamble of the Act also repeals the Foreign Donations (Voluntary Activities) Regulations Ordinance, 1978 and Foreign Contribution (Regulation) Ordinance, 1982,<sup>130</sup> however, the newly enacted law is a merger of the referred two repealed laws. The act gives the authorities much wider discretion to interfere with the work of NGOs and can cancel projects without specifying the grounds.<sup>131</sup> The act requires all foreign funded NGOs to submit all projects for approval to the NGO Affairs Bureau.<sup>132</sup> The Bureau has power to inspect, monitor and evaluate the activities of foreign funded NGOs, through regular meetings between bureau staffs and NGO leaders.<sup>133</sup> The Bureau can establish monitoring committee and if necessary, appoint third party accessor or evaluator for specific NGO or its projects.<sup>134</sup> It can impose sanctions for non-compliance and the imposed penalties range from cautionary letters; fine; registration cancellation; suspension of projects.<sup>135</sup>

The existing legal mechanisms fail to troubleshoot the brewing controversy as to different affairs of civil society namely, weak regulatory framework and financial accountability; over dependence on foreign donations.<sup>136</sup> Though, state mechanism contends that the existing regulation is necessary for greater oversight of the civil society sector, it expands the government's ability to interfere with the works of NGOs and to cancel their registrations. In addition to state mechanisms less tolerant views on civil society, there is also a strong demand for accountability of NGOs.<sup>137</sup> NGOs are often marred with accusation of not being able to demonstrate impact and effectiveness of any project in reasonably rigorous manner. This is partly because of ambiguities in their accountability and due to their lack of eagerness.<sup>138</sup> Parliamentarians of Bangladesh in different occasions demand stricter monitoring of activities of the local and international NGOs operating in Bangladesh. In a cabinet meeting, the Ministers urged for scrutinizing the earnings and expenditures of the NGOs.<sup>139</sup> It appears that the existing law,

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<sup>129</sup> M Mir and SK Bala, *NGO Accountability in Bangladesh: Two Contrasting Cases*, 26 (5) International Journal of Voluntary and Nonprofit Organizations (2015)

<sup>130</sup> Foreign Donation Act, 2016

<sup>131</sup> Foreign Donation Act, 2016, §16

<sup>132</sup> *Id.*, §6

<sup>133</sup> *Id.*, §13

<sup>134</sup> *Id.*, §10

<sup>135</sup> *Id.*, §15

<sup>136</sup> Jahan 5, *supra* note 109

<sup>137</sup> *See supra* note 124

<sup>138</sup> Sujatha 59, *supra* note 16

<sup>139</sup> <http://www.thedailystar.net/frontpage/keep-watch-ngos-1494223>

policy and perception of state mechanism have been continuing to downplay the role of civil society. The existing legislations regarding civil society's contribution and participation in environmental governance are peppered with skepticism. Such vibe has been created where dilemma and ambiguity continue to hover somewhere between the state mechanism and civil society. Seamless endeavor between them to tackle groundwater governance bulwarks appear to be a distant foghorn. Absence of uniform legislation as to NGO affairs is the drawback that causes failure to grasp the significance of cooperation between them. The laws need to be suitable to be a helpful mechanism for NGOs to meet the recent day realm of development activities.<sup>140</sup> All the relevant laws and regulations connected to NGOs need to be harmonized and streamlined to create a uniform regulatory framework. Drafting of such uniform law would efface overlapping and contradictory requirements.<sup>141</sup> Bangladesh needs to amend its legal framework for NGOs, so that these non-state actors can be an effective ally in the development process.<sup>142</sup>

## 7. Concluding Remarks

Groundwater constitutes the largest reservoir of freshwater on the earth.<sup>143</sup> Due to excessive extraction, its level has dropped in various places of Bangladesh and adverse effects of which have been observed in many places. Hence, instead of addressing groundwater issue in isolation, a holistic treatment is requisite to ensure that all stakeholders' views and contentions are considered.<sup>144</sup> Such outlook helps to garner balanced economic, social welfare and ecosystem outcomes.<sup>145</sup> Governance in groundwater encompasses political, administrative and civil society as three distinct actors with established formal and informal institutions.<sup>146</sup> There is no doubt that civil society and NGOs will continue to be influential actors in shaping the nature of environmental governance and development programs in the years to come.<sup>147</sup> Hence, it is vital to oversee that relevant legal instruments would truly create enabling environment<sup>148</sup> for meaningful

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<sup>140</sup> Jahan 68, *supra* note 109

<sup>141</sup> Jahan 67, *supra* note 109

<sup>142</sup> Jahan 83, *supra* note 109

<sup>143</sup> *See supra* note 25

<sup>144</sup> AJ Jakeman *et al*, *Integrated Groundwater Management: An Overview of Concepts and Challenges* 7, Springer (AJ Jakeman *et al* eds., 2015)

<sup>145</sup> *Id.*, 6

<sup>146</sup> GD Gooch, *From Dialogue to Trialogue: Sustainable Ecosystem Governance and Civil Society* 124, Springer (AR Turton *et al* eds., 2007)

<sup>147</sup> Niaz Ahmed Khan, *Rural Development in Transition: An Institutional Perspective* 405, Asiatic Society of Bangladesh (AM Chowdhury & Fakrul Alam eds., 2002)

<sup>148</sup> Barnett F. Baron, *The Legal Framework for Civil Society in East and Southeast Asia* 4 (4) *The International Journal of Not-for-Profit Law* (2002)

involvement of civil society.<sup>149</sup> Laws pertaining to these non-state actors can have both positive and negative impacts. Such laws may contribute to the development and effective participation of these institutions by providing protections. Again, such regulatory laws may be misused to bolster backlash against civil society institutions. Sadly, relevant laws of Bangladesh only empower the state institutions to sneak into invasive supervisory oversight of civil societies. Such legislative provision to arm government authority to interfere into activities of civil society and NGOs would have negative effect in the governance of groundwater and other environmental issues. However, the laws of Bangladesh have exposed reluctance to consider the formal and meaningful involvement of civil society as yardstick sustainable groundwater governance. In other words, legislative and policy response to groundwater governance is still in its infancy. The state machineries are aggressively delved into drafting policy recommendations on groundwater irrigation and industrial usages of it.<sup>150</sup> The perception of government policy makers about groundwater is still very traditional with concentration on price or license issue regulations.<sup>151</sup> Any precautionary or preventive measure is taken as least concern. Once such tendency has consumed the policy makers of a state mechanism, any groundwater governance strategy is doomed to failure. In groundwater governance policy and legal framework, great deal of ink has been shed in license regulation, authority jurisdiction and committee formation issues. Economic and development rights, human rights to life, accountability, environmental principles attached with groundwater governance- all are seemed to adrift hopelessly in the uncharted sea of policy, legislations and recommendation. A more troubling phenomenon is the absence of scholars and researchers from the disciplines of law and social sciences. Gauzy veil is also placed on legislations and policy recommendations regarding the role of civil societies which have dedication on environment and groundwater issues. Hence, the real challenge today boils down to strengthen the governance architecture in tandem with bolstering seamless governance endeavor between government institutions and civil society.

Nevertheless, it is hopeful that the government has at least begun to address the issue. Administrative discretion of state agencies needs to be reduced

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<sup>149</sup> *Not without us: The Civil Society's Role in Implementing the Sustainable Development Goals*, available at: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/319308/6-Not-without-us-civil-society-role-implementing-SDGs.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0006/319308/6-Not-without-us-civil-society-role-implementing-SDGs.pdf?ua=1) (Last visited on January 02, 2018)

<sup>150</sup> Tushaar Shah, *Sustaining Asia's Groundwater Boom: An Overview of Issues and Evidence 13*, International Water Management Institute (SS Jinendradasa ed., 2003)

<sup>151</sup> KG Villholth et al, *The Role of Groundwater in Agriculture, Livelihoods and Rural Poverty Alleviation in the Indo-Gangetic and Yellow River Basins: A Review 19*, CRC Press (A Mukherji et al eds., 2009)

and they also need to be more tolerant of civil societies' critical views.<sup>152</sup> Indeed, looming past the legal and policy rigmaroles, in the years ahead, it is likely that the civil society and the state agencies would become the locomotives for sustainable groundwater governance. Else, if the ruffled situation is just papered over with temporary solutions, the existing crisis in groundwater governance would never fade away.

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<sup>152</sup> Jahan, *supra* note 109