Ashoka Trust for Research in Ecology and the Environment

COMMENTS ONTHE DRAFT NATIONAL WATER FRAMEWORK BILL, 2016

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Overall this bill is a major improvement over the 2013 draft in many respects. The language is clearer, and more streamlined. The integration of surface and groundwater and effort to achieve consistency with the Model Groundwater Bill is a big step forward. The reinstatement of informed consent, expansion of the definition of "Water for Life" and inclusion of sediment and nutrients in ecological flows are also major improvements.

Our detailed comments below fall into four categories.

1. There are aspects where despite the goal of being "people-centric", the bill focuses on technocratic solutions, which may fail to recognize the gendered, caste-differentiated nature of the solutions.

2. In a few clauses, such as the water security plans, the bill lacks details on implementation/ enforcement. In the absence of guidelines, there is a danger that the Bill will either have no impact or even make the situation worse.

3. In a few specific topics like water quality standards and urban water management there are significant omissions, which must be addressed.

4. Finally, enforcement agencies and mechanisms have not been clarified. Where there are existing laws (e.g. EPA, FRA) or agencies with overlapping jurisdictions or conflicting mandates, the lack of clarity may result in a delay in enforcement.

Chapter, Section of the Bill	**Comments**
Definitions	The definition of " groundwater" now includes springs and base flow allows linking GW to SW - this is an improvement over the previous draft.
	The definition of ‘Water for life’ has been broadened to include the basic safe water requirements for realising the fundamental right to life of each human

	being, including drinking, cooking, bathing, sanitation, personal hygiene and related personal or domestic uses, with an additional requirement for women for their special needs; and includes water required for domestic livestock. This is a positive step.
	The new draft substitutes the term environmental flows for ecological flows. However, these terms actually have different meanings. Ideally, ecological flow and environmental flow both should be defined and the policy should distinguish between the two. Environmental flows is about maintaining a flow regime to sustain physical characteristics (pollution abatement or to reduce salt-water ingress in a coastal area). This is quite different from ecological requirements of specific endangered species or ecosystems though the two concepts are linked.
Ch II: 3 (1)	The 2013 Alagh Committee draft was more specific on water quality, which appears to have been diluted in this version. The wording in the present draft on the right to water for life overlooks the question of quality of water. This is an important point to consider specially when there is an effort to move towards 24/7 in some cities. This is especially important when the right to water for life includes cooking and drinking (needing the best quality of water), bathing and personal hygiene (quality of water need not be as high as drinking water quality) sanitation (flushing/pouring can use treated wastewater) and livestock. Specifically, the current definition on right to water does not acknowledge the multiple source dependence, a common situation in Indian cities. The “right to water” aims to provide a certain quantity of water. However, if households supplement water from their own wells in areas piped water is inadequate, has the obligation of the state been fulfilled? If urban local body supplies two qualities of water and thus meets the quantity standard, has the obligation of the state been fulfilled? The lack of inclusion of water quality in the definition makes these determinations ambiguous. The right to water has its legal origin in the extension of Article 21 to include the right to water within the right to life and the public trust doctrine. The enforcement of both the fundamental rights and the public trust doctrine has been challenged in courts. In the present instance, which tier of governance or which unit of the state can this right be enforced against? There is a need to clarify this perhaps in the rules of how enforceability of the right to water for life will be achieved if at all.

Ch II: 3 (2)	The Framework Bill requires water supply agencies to comply with Bureau of Indian Standard and CPEEHO standards. However these standards are slightly outdated. For instance, there is no discussion on emerging contaminants. It is also unclear, what standards apply in the event of use of recycled water by households for toilets and landscaping.
Ch II: 3 (3)	Which administrative unit or department of the state will ensure that the private agency is complying with the drinking water standards, in case water delivery is privatised? Again, clarifying rules on a regulatory framework, where water supply is privatised may be needed.
Ch III: 6	Ch. III, section 6, is commendable as an outline principle. The wording may however need to be expanded for two reasons: First, the Framework Bill appears to view ecosystem needs as only being in competition with human needs. The problem is that this conceptualisation delinks ecosystem services from human welfare and well being. Often, however, ecosystems such as wetlands, estuaries and deltas also contribute to human needs in direct (livelihood, flood control) and indirect (flood control, tourism) ways. By viewing ecosystem water use only as a competitor with human water uses, win-win opportunities to improve both human and ecological outcomes may be missed. Second, the Bill only appears to consider "blue water" or water flows in rivers, wetlands and aquifers. Ecosystem consumption of water via evapotranspiration from forests or "green water" may also need to be recognized as a legitimate use of water resources. This is especially likely to become an issue as India undertakes national afforestation programmes under the Green India Mission as part of its INDCs to combat climate change.
Ch III: 6 (4)	In the exercise of its power to protect rivers from construction on floodplains and sand mining will the appropriate government have to be consulted with during the environmental clearance process under the Environment Protection Act, 1986? There is a need for clarification of how the powers of the appropriate government intersect with the powers of the gram sabha under the EPA during the public hearing process for granting environmental clearance and granting of forest clearances under the Forest Rights Act.
Ch III: 9 (1-2)	Overall, other than the recognition of the right of access to water and sanitation, sanitation is not given much space in the bill. However, in most cities the lack of underground sewerage is a significant cause of contamination of rivers, lakes and aquifers. By selectively emphasizing appropriate wastewater treatment and water supply but leaving out sewerage networks, the Bill does not tackle the

	main problem in most Indian cities, that even whether there are toilets the sewerage does not reach STPs, which often end up being under-utilized. Addressing this calls for a combination of decentralized (honey-suckers and neighbourhood STPs) and centralised treatment options which are poorly addressed in Section 9. Without explicit acknowledgement of this, there is a danger that the current trend of investing only in water supply and STPs will continue without solving the problem.
Ch III: 11 (1)	The rules and steps for authorization for groundwater abstraction and pricing is clear for agriculture and industry. However, one needs to distinguish between livelihoods and sustainable livelihoods, with the former capturing only the income and well-being aspects while the latter also captures the stability of the resource base on which incomes depend upon. As such, priority should be accorded to sustenance agriculture only for crops contributing to local and regional food security in areas or seasons identified as water stressed.
Ch IV: 12(1-8)	The new draft emphasizes GW-SW linkages and this is HUGE improvement in Indian water law and is commended. The attempt to establish consistency between the Model Groundwater Bill and the National Draft Framework Act is also commendable. However, there is a disjuncture in the hydrological unit for planning, which is the river basin/aquifer and the administrative unit of governance at the local level. While this is to be expected given the complexity of the resource, it is unclear how this will be resolved in practice. There is a need to clarify how the plans at the different levels interact in the decision-making process - it is unlikely that lower level agencies will be able to figure this out on their own.
Ch IV: 12(9-12)	Although climate change is recognized as an emerging threat, it has been poorly integrated into the Framework Bill. This has practical implications. The absence of long-term data on trends in surface and ground-water fluxes renders the current classifications of basins across the country as "water surplus" or "water deficient" and consequent planning of inter-basin transfers is quite problematic. Yet, climate change and long-term anticipated changes are not explicitly mentioned in either the River Basin Plans or in Chapter V on the Water Security Plans.
Ch IV: 13 (1,4)	The new draft Bill places a slightly higher emphasis on planning and management and slightly less on development, which is an excellent step forward.

	The 2013 Alagh Committee draft did not have any requirement for " the involvement and agreement among concerned states and their citizens from the outset." So this is also a significant improvement. The reinstatement of the Informed Consent clause (a major critique of the last draft) is commended. But while the Bill addresses project affected peoples it is less explicit in linking the River Basin Master Plan to ecosystems sustenance. The principle of "Sustaining Ecosystems" is discussed at length, but there is no particular mechanism to ensure accountability. For instance, unlike the clause on project affected peoples, there is no requirement for public availability of an Environmental Impact Assessment statement. In the absence of such a mechanism, it is unclear how this objective can be achieved.
Ch V: 15-16	Overall, devolving water security plans at the lowest level is a step in the right direction. However, in order to ensure that the water security plans actually move India towards an equitable, sustainable resilient water future, the water security plans MUST address the basic problem of water accounting/budgeting. We argue that ultimately, the problem of water management is about allocating the available water endowment among all users and uses - human and ecosystem, within and across watershed/aquifer units. At present, the bill leaves the quantification of current water use, maximum allowable water use (and consequently enforcement of abstraction limits) to individual gram panchayats. However, in reality groundwater use is not going to become sustainable unless there is a clear and consistent way to estimate how much total water (GW+SW) is available in a given year. The bill leaves the critical quantification decisions to the local bodies without providing any further guidance on how it must be done. Ideally, a national model groundwater bill must take a uniform view of the science, while relying on the principle of subsidiarity only for allocation decisions. In developing River Basin Plans and Water Security Plans, assessment of the effects of land-cover on infiltration, recharge, flow between shallow and deep groundwater, and linkages between surface and ground-water must be based on the current state-of-the-art science throughout the country. Because so much leeway is given to local agencies, there is a danger that in many areas the scientific capacity to assess how much water is truly available, may simple not exist. Without understanding how much water is available and how much is currently being used and by whom, water security is a non-starter. For the law to work as envisaged, the water security plans must include comprehensive water budgeting from head-waters to estuaries and deltas in a way that addresses all stake-

	holders, upstream and downstream, and all uses, drinking water, agriculture, industry and ecosystems. The plans must include both surface and ground water and must explicitly involve quantification of current water use including ET from agro-ecosystems and plantations, and wastewater return flows from within and imports outside the boundary. Once the water budget is available, the community can decide how much total water use is "allowable". Then the question becomes that of "fair" intersectoral allocation of a known quantum of water - at which point it becomes a political decision.
Ch V: 15-16	Achieving consensus on the state of the science is relatively straightforward and guidelines can be put forth, decisions on the meaning of "fair and equitable" allocation and how to enforce them are necessarily subjective. On one hand, there is a strong case to be made that (based on the principle of subsidiarity) that these decisions be left to communities. On the other hand, there is a danger that certain core principles on equity, right to water for drinking and livelihoods, ecosystem water needs may receive short shrift in communities that are inherently unequal. In fact, there is an inherent tension between local control and imposing national principles, which must be delicately balanced. While the bill need not prescribe these, an accompanying document on "model water security plans" might specify the types of decisions that must be grappled with. It may not be desirable to adopt a one size fits all approach (in line with the principle of subsidiarity). So documenting the issues ad options in some way is desirable. For instance, on the issue of fair allocation, the Model Bill takes the position that basic domestic water is a right and livelihood water use is also a right, and only industrial/commercial use requires permits. The problem is that by far the major contributor to GW depletion is commercial agriculture. And many commercial farmers are "small holders" by global standards. Then the whole question of defining and prioritizing legitimate water needs at each spatial scale from head-water to deltas needs to recognize that current cropping patterns in some regions (e.g. Bananas and sugar-cane in semi-arid or sub-humid regions) may not be necessarily a legitimate or sustainable water demand and cannot be classified as sustenance water. This is particularly true in areas which are groundwater dependent as the water is not "delivered" by any agency; so enforcement is likely to be complicated. Even if the total amount of water available to agriculture is determined how does one allocate between farmers? Is it to be on a per farmer basis or a per hectare basis, per family? By auction? Or is it revised every 5 years? And is the entitlement

	temporarily transferable/ saleable by the individual? The draft seems to say that industry has to 'buy' the right/permit from the GP or Block P; but it does not explicate when and how the GP/BP can allocate water to industry. The bill mentions groundwater dependent ecosystems but currently does not have any systematic mapping of these. Again there is a possibility that in some places, local stakeholders may simply not care value ecological needs (e.g. inflow into RAMSAR wetlands or dry-season flow in rivers to sustain the livelihoods of fishing communities) when creating water security plans. This may require some national norms on what types of consideration should be given to ecosystems and traditional livelihoods in preparation of water security plans.
Ch V: 19 (1-2)	Overall, the water quality regulations in India are weak and fragmented. The current draft does not go far enough in addressing the fundamental weaknesses or acknowledging links between water quantity and quality. Currently, in India, we do not have defined ambient surface water quality standards. The setting up of ambient surface water quality standards is a necessary first step. At present CPCB classifies river /surface water bodies based on their current water quality levels. The monitoring of surface water bodies is done merely *for classification purposes* only. After surface water is classified there are no further recommendations on whether the water body needs further improvement or should be left as it is. Because water quality is not linked to use, ensuring suitable water quality for ecological flows and wildlife, while implicit in the "Nirmal Dhara" principle, is not explicitly discussed in the water quality section. Lack of data on water quality is a huge problem, which the Bill does not address. Regular and systematic monitoring is key to generate baseline data. A baseline would help us assess the effectiveness of initiatives to improve water quality. Identification and mapping of major industrial and agricultural units/areas within the watershed is also an important step to assess pollution loads. In case of urbanizing watersheds there is virtually no dilution of the effluent streams with storm water for most of the year. In such watersheds, it is important to apply load based standards -- concentration based standards do not make sense. Moreover, given that new types of contaminants emerging in the environment, it is important to have a mechanism that allows revisions and upgrade to the list of contaminants at regular intervals, where appropriate. Non-point source pollution from sewage and agricultural activity is also a concern, which is missing in the current Bill.

	Ideally, water quality should be an integral part of water security plans. The number and type of water quality parameters monitored for a surface water body should depend on the type of activities (industrial/agricultural) which dominate the watershed rather than a standard set of water quality parameters for all aquifers and water bodies in the country. There should be budget included for capacity building to allow local testing of water quality parameters with 24 hour sampling of critically polluted water bodies.
Ch V: 19 (3)	There seems to be overlapping of administrative jurisdiction between the pollution control boards and the National Green Tribunal in cases of adjudication of these principles and the ability of the appropriate government to enforce the precautionary principle and polluter pays principle. This creates multiple legal avenues for checking on water pollution, which may delay enforcement.
Ch V: 20 (1-4)	The emphasis on real-time data, forecasting for flood information is commended. However, currently the Bill stops at forecasting floods and ensuring that natural drainage pathways are not obstructed. There is no discussion about “people” and the role local norms and culture plays in flood deaths and damage. It might be worth emphasizing that often inadequate investments are made in the "last-mile" of getting the information to the communities in danger. It might be useful for the Framework Bill to emphasize the use of modern ICT technologies to ensure that this missing link is addressed. Otherwise, too much money may be invested in building state-of-the-art forecasting systems, with very little impact on the ground. But even ICT solutions on how flood warnings will be made available to people must be sensitive to gender and culture. For example, during the 1991 cyclone in Bangladesh many more women died as compared to men. The reason is that information was passed between men-folk while women stayed at home waiting for a male relative to come and rescue them. Women were typically not taught to swim, so many perished even after they left their homes. Therefore, an improved warning system is surely desirable, but there should also be clear plan of how the warnings will be transmitted and to whom. Secondly, the clearing natural drainage pathways in encroached areas needs a closer look. Often these areas are populated by the poorest households – so if the solution is to clear the drainage pathway, then the question of rehabilitation of displaced households need to be addressed. Finally, the Bill is silent about what happens after the floods when women and children are left vulnerable to water borne disease, illness and violence. The management of floods, therefore, should not stop at only flood forecasting and warning. It should also include plans for the post-flood period. While the

	Framework Bill need not address this per se, it could reference other pieces of legislation for consistency.
Ch VI: 21	The Drought Management Plans similarly addresses only the physical aspects of water (replenishing groundwater, vulnerability assessments) but does not acknowledge the differential impacts on social groups. Like floods, the Bill focuses on structural approaches to mitigation. but not the social aspects or drought relief. Drought forecasting to enable crop switching, shortage sharing, water markets, insurance, support prices etc. are not discussed though these can have far-reaching consequences in actually alleviating drought. Again, drought impacts women and men differently. Often men-folk leave agriculture to look for better opportunities in cities, women are left behind taking care of the land and livestock. However, as they are not the head-of the household, getting access to drought relief becomes very difficult – increasing their vulnerability. In such case, the there is a need to recognize the right of the women to access drought relief through recognition of livestock needs or women-oriented livelihoods (and consequently water availability for these).
Ch VI: 23 (1-4)	The chapter covers Urban Water Management, Participatory Irrigation Management and Industrial Water Management. The clauses on metering and pricing, incentives for conservation and reuse etc are acceptable in the new version. However, there are some gaps: Commercial/Institutional Water use is not acknowledged as a separate category but may be increasingly important as India becomes a service economy. This is important because in practice, where water is delivered through a single piped system to both domestic and commercial consumers, prioritising lifeline water use poses a logistical challenge. By ignoring this critical component of urban water use, the fundamental conflict is framed as a conflict between "drinking water for cities" vs. " poor small-farmers", when often the conflict is between commercial water use and commercial farmers. A noticeable omission is the lack of recognition of urban groundwater, which is mentioned in the Model Groundwater Bill but is missing from the National Framework Bill. There is also no mention of "Integrated Urban Water Management (IUWM)" in general and storm water in particular. As a result, the Bill essentially envisages a future where water is brought from increasingly distant sources and wastewater is carried away and treated far from the city. In reality, many Indian cities, currently depend on a blend of local groundwater and imported surface water and a significant fraction of the water cycles internally. Groundwater provides a significant fraction of urban water use, yet urban

	aquifers are getting increasingly contaminated. The Bill also leaves no space for discussion of whether urban environmental amenities (such as urban lakes) are a legitimate user of water. Yet in many Indian cities, there is massive citizen mobilization around lakes. Urban lakes and aquifers must be viewed as an integral part of urban water systems and their use legitimized through IUWM. The Bill's treatment of urban water issues in very conventional and does not provide any space for reimagining urban water. Accordingly, the pollution related aspects of the Bill only discuss wastewater treatment and industrial effluents but do not link the problem with poor sanitation. In the Bill, sanitation is only considered in terms of the right to water and sanitation; the linkage between poorly designed sanitation and ground-water quality is ignored. Toilets are mentioned, but no discussion on what happens to the groundwater in areas which lack a sewerage network. Leakage from aging sewerage systems also contaminates groundwater. This link between water quality, supply and sanitation needs to be addressed perhaps by referring a comprehensive National Water Quality Framework Bill!
Ch VI: 23 (2)	It would be good to define what constitutes a water pilferage as it can legally both be indicative of an offence and a limitation on the right to water for life and other authorized uses (i.e. if the theft is done in order to gain access to a minimum lifeline quantity of water, is a household stealing or merely exerting its right to water?)
Ch VII: 26 -27	Data collection is not enough. A key component of data is interpretation by professionals and researchers to understand the state of the water resources. The current draft only considers direct dissemination to end users like farmers, but doesn't envision the need to create a rich thriving scientific community in India. At present, the data provided on WRIS often skips key fields, without which a scientific assessment is impossible. E.g. publicly available monitoring well data do not contain information on well and screening depths, elevations and GPS locations without which contouring groundwater levels is impossible. The draft also does not mention the cost of data. Presently IMD datasets are extremely expensive. Without climate data assessing the long-term impacts of climate change is impossible. Data affordability has greatly stymied original research on hydrologic sciences in India. This is equally true of the state disaster management agencies which have installed thousands of weather stations but do not make the data available to researchers/scientists and NGOs free of cost. The justification for charging money for data already paid for by tax payer money is unclear.

	Moreover, if only the private sector can afford the data then achieving the principles of the National Water Framework is going to be difficult. The current draft does not guarantee *free or complete* data. In the absence of affordable data it is not clear how the project developers can "take into account all social and environmental aspects in addition to techno-economic considerations of the project in consultation with project affected and beneficiary families". How can the project affected groups negotiate on an equal footing in the absence of a mandate that data be made freely available? Finally, the underlying assumption in the Bill is that all data will flow from the government to society. There is no provision for data validation by citizens. This often ends up being a legitimacy issue when government plans are question by data collected via citizen science. This is particularly a concern if there is a possibility of active manipulation of data or even benign neglect but often that government data are not collected at the scale needed to develop a proper water security plan. For instance, our field surveys show consistent underreporting of borewells, irrigated area when compared with satellite imagery or on-the-ground surveys etc. How can water security plans be made in the absence of a transparent and externally validated datasets? In a democracy, we must push towards making ALL data freely available and allow collection, validation and use of data by citizens, scientists and students etc. This is the only way to guarantee the principle of subsidiarity in letter and spirit.
Ch VIII: 29 (1)	There seems to be an emphasis on resolving water related conflicts through negotiation, mediation and conciliation. The problem arises in the fact that procedures for mediation and negotiation are yet to be legislated, this far only processes for arbitration and conciliation have been legislated under the Arbitration and Conciliation Act. This lack of a statutory process guiding the mediation and negotiation process can provide undue discretion to the relevant authorities in deciding on the process of dispute resolution. The rules should adequately consider the question of what the procedural rules will be to guide the mediation and negotiation process. A larger question is whether alternative dispute resolution methods like mediation will be appropriate in cases where the parties to the dispute are situated differently in terms of power and ability to negotiate. There is also lack of capacity and training within the legal and administrative community to handle mediation and negotiation processes. The question of capacity building around the proposed ADR methods should be addressed in the rules or policies guiding the implementation of this Act.