

Rivers have been part of civilization, for a country having a large population such as India, it supports a number of purposes including drinking water and sustaining livelihoods. Floodplains are an important component of river ecosystems. They play multiple roles such as helping absorb excess water during flooding, act as filter improving water quality and provide a habitat for wildlife. Floodplain refers to the land adjoining a river or water channel which is subject to flooding during periods of high discharge. This means that floodplains may be inundated with water only during certain periods of the year while remaining dry during the rest. Floodplains depending on the stretch of the river could be forested areas, grasslands, sustenance agriculture and water bodies such as lakes and ponds¹. Decreasing river flows due to multitude of reasons ranging from presence of dams upstream to the loss of catchment areas have made floodplains vulnerable while the growing demand for land has meant that floodplains are used for development beyond traditional occupations such as agriculture, fisheries and animal grazing.

Broadly, rivers have been legislated at the national level and state level. Rules for regulating development on floodplains can be found as early as the River Conservancy Act of 1884 that directed surveys, defined limits for the river which was termed "river-bed"; any construction or plantation within the river-bed was to be permitted by officers titled Conservators of Rivers covering the states of Tamil Nadu and Andhra Pradesh. The Central Water Commission (CWC), a part of the Ministry of Water Resources (MoWR) had circulated a model bill for Flood plain zoning in 1975 which proposed delineating the areas which are subject to flooding including classification of land with reference to relative risk of floodplain use intended to safeguard the health, safety and property of the general public; once notified by the State government would prohibit or restrict the activities in the floodplain. This saw little interest, with Manipur one among the few states that enacted the bill but were yet to enforce the legislation².

In 2001, the thought of floodplain protection through a notification along the lines of the Coastal Regulation Zone (CRZ) notification emerged during a national workshop at Delhi resulting in a note submitted to the Ministry of Environment and Forests (MoEF). A couple of meetings were called by National River Conservation Directorate (NRCD) but evoked no action³. In a press release dated 8th August 2011, the minister for MoEF in a response to a question posed in the Lok Sabha stated that they will now manage riverfronts as well as constitute an expert group for formulation of guidelines for management of river fronts through river regulation zones. This was coined "River Zone Control Act". In addition, they received suggestions for the protection of floodplains from NGOs with specific reference to the Yamuna which had come under increasing threat⁴. The National Water Policy, 2012 includes a section of the conservation of rivers and river corridors while also mentioning that encroachments and diversion of water bodies must not be allowed and promotes restoration to the extent feasible.

¹ <http://www.fao.org/docrep/006/x1358e/X1358E02.htm>

² http://planningcommission.nic.in/aboutus/committee/wrkgrp12/wr/wg_flood.pdf

³ http://sandrp.in/rivers/Rivers_Legal_and_Institutional_Issues_in_India.pdf

⁴ <http://pib.nic.in/newsite/PrintRelease.aspx?relid=74045>

State Pollution Control Boards have also taken measures to regulate industries located on floodplains with the intention of reducing water pollution. As early as 1989, Tamil Nadu Pollution Control Board passed an order stating that no industry causing serious water pollution should be permitted within 1 km of reservoirs, rivers and public drinking water sources. Maharashtra Pollution Control board framed a River Regulation Zone policy for the state in 2000 (later revised in 2009) based on the designated best use as per water quality for rivers, high flood line and categorizing industry based on their pollution levels. However, this was later withdrawn based on a resolution passed by the state government dated February 3rd, 2015.

With floodplains, it is also important to look at relevant land use legislation which comes under the ambit of states. State Town and Country Planning Acts were enacted by the states based on Model Laws in 1962 (later revised in 1985) floated by central agencies. The 74th Constitution Amendment Act, 1992 further promoted devolution of powers to urban local bodies to formulate district and metropolitan plans. However, states have been slow in adopting reforms and amending their acts as suggested in Urban and Regional Development Plan Formulation and Implementation Guidelines (URDPFI) first released in 1996, subsequently revised in 2014 to reflect more recent trends in urban development. The URDPFI 2014 under the guidelines for buffer zones recommends zoning in order to regulate land use in the floodplains identified based on last 50 or 100 year flooded area of water bodies or river.

It is interesting to note that multiple efforts to regulate floodplains have seen little progress since both land and water are state subjects, the onus seems to lie on respective States/Union Territories to take steps towards regulation of rivers within their jurisdiction. The National Green Tribunal in the case of Akash Vashishtha & Anr. Vs. Union of India & Ors stated that it is an admitted position in law that construction upon floodplain area is prohibited and passed an order restraining any illegal and unauthorized construction, be it temporary or permanent, on the flood plain zone of the Yamuna in 2013.

The floods in Uttarakhand (2013) and Kashmir as well as Pune (2014) were the trigger for the Ministry of Environment Forests and Climate Change (MoEFCC) to release a "River Regulation Zone" (RRZ) notification draft under the Environment Protection Act (EPA), 1986.

The RRZ notification intends to regulate developmental and industrial activities upto 5 kms from the banks of the river stretches having floodplains and an equivalent area for mountain/hill stretches under three River Conservation Zones (RCZ) demarcated with reference to the Highest Flood Level (HFL) with a 100 year return period. The Prohibited Activity Zone (RCZ-PA) in the immediate vicinity of the river is offered the highest protection since existing activities and constructions within the zone should adhere to the notification whereas leniency is shown beyond the RCZ-PA. A lot of attention has been paid to regulating new developments within the three zones although it seems more a case of pushing activities outside the RCZ-PA therefore the definition of the limits of the RCZ-PA is key. In fact, it would have been better if the RRZ notification focused on regulating the RCZ-PA along with partial or full areas under the Restricted Activity Zone (RCZ-RAI) and delegated the management of Regulated Activity Zone

(RCZ-RAII) to existing local planning authorities. The preparation of flood zone maps for all rivers in each state has been long overdue and the inclusion of a timeframe of 24 months is a welcome step.

The notification touches upon gravel and sand extraction by taking the permission grant route after due assessment of sediment influx and annual replenishment capacity. Surprisingly, no reference is made to Sustainable Sand Mining Management guidelines circulated by the MoEFCC in 2015 which attempts to ensure that gravel and sand mining is carried out in an environmentally sustainable and socially responsible manner. The RRZ draft is most likely based upon the report prepared by the Expert group which had been constituted by the MoEF ⁵.

It remains to be seen how National and State RCZ authorities who are responsible for implementation of this provision will handle conflict resolution between stakeholders, more importantly coordination with state authorities/agencies who in turn need to carry out necessary action and how they can be held accountable. The forwarding of proposals regulating development in the zones to State RCZ authorities indicates a lack of institutional capacity at the district level. In terms of public participation, there is scope for increased citizen participation beyond the representation by NGOs opted into the authorities, ranging from participatory preparation of RCZ management plans to reporting violations and addressing grievances. The notification rightly recognizes and permits traditional occupation supporting local livelihoods who could be involved. Unfortunately, there isn't emphasis on restoration of floodplains in this draft with a mere mention of formulation of procedures by the State RCZ authorities when this should have been one of the core objectives.

The MoEFCC needs to learn from its experience with the CRZ notification which doesn't seem to reflect in the RRZ draft. Some of the recommendations from the Shailesh Nayak committee such as the overlapping jurisdiction and provisions with the State Town and Country Planning regulations as well as existing master plans, issues with demarcating zone boundaries may very well apply to the implementation of the RRZ notification.⁶

On January 8th this year, the draft notification was circulated to States/Union Territories for comments. In May, the minister for MoEFCC in a response to question raised in the Rajya Sabha said "10 states have responded to it. Some have raised objections. Some have supported it. We have written to the remaining 19 states to give their response. As soon as the responses come, we will hold a meeting."⁷ The states' response is not surprisingly to say the least, clearly there needs to a revised notification draft and a proactive consultative approach by

⁵ <http://cdn.downtoearth.org.in/dte/userfiles/images/Minutes%20of%203rd%20RRZ%20meeting.pdf>

⁶ <http://www.indiaenvironmentportal.org.in/files/file/Shailash%20Nayak%20Committee.pdf>

⁷

<http://economictimes.indiatimes.com/news/economy/infrastructure/19-states-yet-to-respond-to-centres-river-regulation-plan/articleshow/52188122.cms>

the MoEFCC on an issue that has seen public interest rise in the aftermath of flooding in major Indian cities.

* In 2014, the Union Ministry of Environment and Forests (MoEF) was renamed the Union Ministry of Environment ,Forests and Climate Change acknowledging the challenge that climate change poses.