

Check dams in *Magnificent Sahyadris*

Western Ghats- A biodiverse rich forests with chirrup of birds, trickles of river, whistling of wind, buzzing of bees, croaks of frogs, creaks of crickets, chatter of monkeys, hiss of snakes; isn't it enough? You can go on listing things about western ghats for its wealthy flora & fauna. Everyone of them knows about western ghats and its fragile ecosystem. However, Government of Karnataka; Minor Irrigation Minister J C Madhuswamy plans to build 1400 check dams in *Magnificent Sahyadris*. In anticipation of having a clear picture on this issue, let's have a look on two major issues in different locations.



Water crisis in Chile

Chile has seen, in the past decade, one of the worst droughts in a thousand years. Rainfall has decreased creating a water deficit of 75% percent, and higher; In August 2019, the Chilean government declared an agricultural emergency as the drought persisted, with concerns of land desertification. After climate change, agribusiness is one of the major contributors to the drying up of rivers and aquifers. Overexploitation of resources has forced small-scale farmers and livestock ranchers out of business, while large monocrops, like avocados, consume vast amounts of water. In Chile there are around 110 basins where water rights have been over-granted, that is, more water rights have been delivered than the existent water in rivers and groundwater. Added to the current regulations and water management, water depletion continues and there is still no progress toward a deep reform of the regime for its correction and value as a fundamental resource for the subsistence of life.

Drying up of Aral sea

The Aral Sea is situated in Central Asia, between the Southern part of Kazakhstan and Northern Uzbekistan. Up until the third quarter of the 20th century it was the world's fourth largest saline lake, and contained 10grams of salt per liter. The two rivers that feed it are the *Amu Darya* and *Syr Darya* rivers, respectively reaching the Sea through the South and the North. The Soviet government decided in the 1960s to divert those rivers so that they could irrigate the desert region surrounding the Sea in order to favour agriculture rather than supply the Aral Sea basin. By establishing a program to promote agriculture and especially that of cotton, Soviet government led by Khrouchchev in the 1950s deliberately deprived the Aral Sea of its two main sources of water income, which almost immediately led to less water arriving to the sea. Not only was all this water being diverted into canals at the expense of the Aral Sea supply, but the majority of it was being soaked up by the desert and blatantly wasted (between 25% and 75% of it, depending on the time period).



The water level in the Aral Sea started drastically decreasing from the 1960s onwards. Smaller lakes within the Aral Sea that have stopped being fed by river flows tend to have higher salinity due to evaporation, causing some or all fishes that either survived or had been reintroduced in the 1990s to die. Even re-watering those lakes does not compensate for the increased salinity over the years. In 1998, water level was down by 20m, with a total volume of 210km³ compared to 1,060km³ in 1960. As the Aral Sea has dried up, fisheries and the communities that depended on them collapsed. The increasingly salty water became polluted with fertilizer and pesticides. The blowing dust from the exposed lakebed, contaminated with agricultural chemicals, became a public health hazard. The salty dust blew off the lakebed and settled onto fields, degrading the soil. Croplands had to be flushed with larger and larger volumes of river water. The loss of the moderating influence of such a large body of water made winters colder and summers hotter and drier.

As minister has said, check dam construction will be implemented in 5 districts. For every check dam they have given an approximation of 60-70 acres of land utilisation which means nearly 84000-100000 acres of forest will be destroyed; isn't it a vast area? This question arises because by building these check dams water rapidly accumulates in the ground and results in a surge of water saturated rock earth and debris and there will be alteration in topography in those mountains which causes disturbances in the natural stability of slope which in turn causes landslides. A river's natural flow maintains and preserves estuarine ecosystem. If we start storing water in check dams, it disturbs the vital nesting, breeding and feeding habitats for many species. Also, another important phenomenon to consider is, if you got the same amount of water falling from the sky now as before 25 years, a lot of it is evaporating. Keep in mind landslides, damage of estuarine ecosystem and also evaporation of water; does western ghats belongs to its flora & fauna or people or government? why government is not considering people's opinion before implementing such eco sensitive projects? This is not a way of democracy!

In this world, not even one species harm nature intentionally except humans. Most of the changes in climate and landscape that we are about to explore are at the least indirect products of human induced changes. While we must remember at all times the society is responsible for the crisis that has unfolded in chile and aral sea, the point we want to make is that most of the actual changes that have affected chile and aral sea are the result of our environment's reaction to the stresses society has imposed on it. Thus, the difficulty lies as much in understanding the way climate and other natural systems functions as in being capable of weighing the potential consequences of our actions before we undertake them. In case of western ghats we should be much more careful before any dangerous consequences arise by implementing any of development projects in it.

We have given you an overview on certain issue, now its your opinion and your actions are your decision. You can mail/send post cards to Minor Irrigation Department and Department of Ecology & Environment.

With Regards

Team Kalosmi