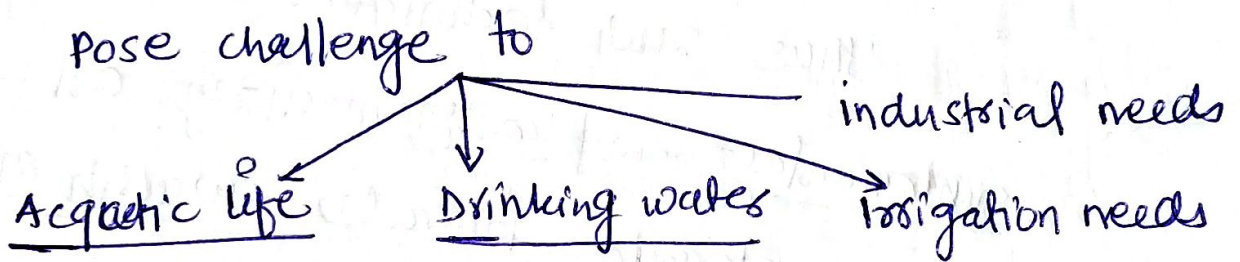


Sewage and waste water are the main cause of river water pollution in India. White man made wetlands provides an effective solution to tackle it.

According to an article in Down to Earth more than 275 rivers in India are severely polluted mostly across - Assam, UP, MN, MP, etc. River Ganga, Yamuna which passes through industrial towns pose challenge to



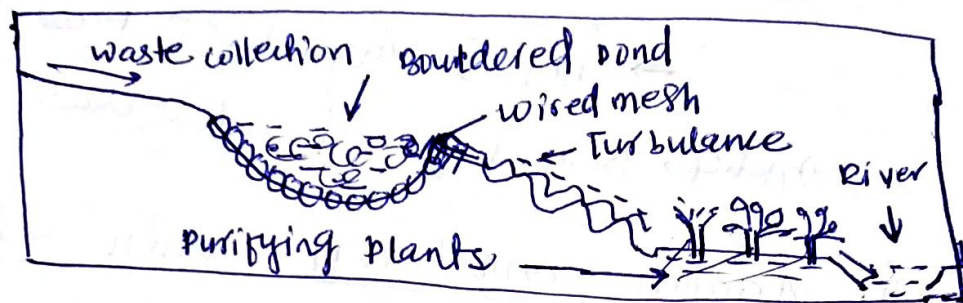
several government schemes like Namami Gange Yojna with 20,000 cr budget, to create modern & powered treatment plants gained limited success -

man made wetland technique which is adopted in South Delhi is most viable option.

As shown in figure its a three

stage process with

1st stage - is a pond made by using stones & boulders to collect non point source discharge. It opens into an oxidation pond where water is separated from waste using wired fence.



second stage - here the sewage is passed through a zig-zag land inclined towards sivets to create a turbulance. This is a aeration technique to increase o₂ content in sewage for dicomposition and degassing.

3rd stage - here purifying plants are used to absorb toxic matels & compounds from sewage. The remaining is then discharged into river.

Benefits

- (i) laymen technique - can be made using mansega workers. Easy to understand and build.
- (ii) cost effective - does not require power at any stage and can be build using natural & local material.
- (iii) Environment friendly.

Thus such technique can play a supplementary and complementary roll in India's struggle towards swachh Bharat.