

## DEVELOPMENT POLICIES AND FLOOD IN INDIA

**Anil K. Dwivedi & Shashi**

*Pollution and Environmental Assay Research Laboratory (PEARL),  
Department of Botany, DDU Gorakhpur University,  
Gorakhpur-273009, India*

**ABSTRACT:** Ganga Express Way (Construction of 1047 km. long road in Ganga basin parallel to the river) is a mega project of Uttar Pradesh Government in India, which would not only destroy the humanity in this area, but human, plants and animals existence will face a challenge, as this area will be pushed to perennial flood. This paper discusses the environmental backlashes and presents a critical analysis of the environmental issues.

**Keywords:** Flood, Ganga, Desertification, Pollution, Road Accidents, Biodiversity.

### 1. INTRODUCTION

The developed countries are very much cautious, regarding environmental concerns. In such countries, any major project is subjected to peer critical analysis before its implementation. It is done so as to avoid any ecological backlashes. Nature stabilizes it self for any major interference. This stabilization may be in any form which may be destructive for humanity also. Development at the cost of Environment should not be permitted. A 1047 km. long Ballia to Noida ultra modern Ganga Express Way, a project of the Uttar Pradesh Government in India has been commissioned. According to this, an eight-lane road is to be constructed along the left side of the River Ganga, between Ballia and Noida. With this project 36 tehsils belonging to 19 districts would be benefitted. After completion of Ganga Express-way, the distance from Eastern UP to Delhi would be reduced to 10 hours (*www.upgov.nic.in*).

The manuscript deals with a critical analysis of the project in amalgamation with the environmental concerns. This project will consume  $1,047,000 \times 8 \times 7$  sq. m. of fertile agricultural land, excluding the adjoining area and the link roads. This Indo-Gangetic Plain is well known for its fertility and productivity. In the light of this, in no way does it appear justifiable to sacrifice such a huge area and that too at a time when the world is facing problems feeding the exploding population. The policy has provisions to allot land to the affected family, whose house had been acquired, and they would be compensated by providing housing plots with a maximum limit of 250 sq. m. for rural areas and 150 sq. m. in urban areas, thus converting the farmers in to land-less labors.

### 2. SILTATION AND FLOOD

The planners say that it would stop erosion of land and save million of hectares of cultivable

land. They ignored the fact that each year the Ganga brings billions of tones of fertile soil instead of eroding it. This fertile soil is deposited along the river basin. It is this soil which is responsible for high fertility of the area. Now, if a road is constructed along one side of the river, it will act as a dam or barrier for the free flow of water. As a result, huge amount of mud will be deposited on the riverbed, decreasing the cross-section area of the river. During rainy season, when excess amount of water flows through the Ganga, the water will find its way into cities, resulting in floods. After a few years, when the river bed would be almost filled, Ganga may be forced to change its path and pass through cities. Similar phenomenon occurred in Bihar (India) this year, in which the river Koshi changed its path due to siltation. In this way, perennial floods would become a common Phenomenon in this belt (Dwivedi and Shashi, 2007). One cannot deny the fact that the same process in the coronary artery of a human leads to heart attack resulting in death. [\* Internal error: Invalid file format. | In-line.WMF \*]

### 3. DESERTIFICATION OF DOAB

The Indo-Gangetic Plain is fertile because it receives fertile and fresh soil each year and also the river regularly provides water for irrigation. After construction of the road, the high barrier will lead to two disadvantages. First, the off-side of the road will become waterless. Since soil of the adjoining belt is sandy, in no way does it appear feasible to perform irrigation through other sources in such a soil. In the years to come, this will lead to desertification. Secondly, construction of the huge barrier would also require large amount of soil, as in normal practice the soil would be dug from the nearby agricultural field (Dwivedi and Shashi, 2007).

This will give rise to another problem. The low land generated in this way will collect the rainwater on the off-side of the river, which will promote the development of sodic and saline soil. Both the above processes will lead to progressive development of desert area. In addition, the temporary lentic ecosystem would become a prominent source of various water-borne diseases, such as dengue, malaria, encephalitis, etc.

### 4. WATER POLLUTION

According to the planners, the developer will generate hundred percent funds for constructing this Express-way, from the public. In lieu of this capital, the developer would develop “investment regions” along the Express Way. About 500 large and 7000 medium and small scale industries would be set up in 10,000 acres of land. Nearly 500 large and small scale agro-based industries would also be set up (Dwivedi *et al.*, 2006). Not only will the agricultural land reduce, but also all the industrial effluents and garbage would be directly dumped into the Ganga. Kanpur is an ideal example for such experiment, where colour of Ganga shows diurnal variation. The Ganga would be welcomed by the industrial effluents, right from its entry in Uttar Pradesh. Further, this situation would not last in Ballia; instead, during its course in Uttar Pradesh the Ganga would be converted in to “moving poison”. The Ganga in Bihar and West Bengal would also suffer. Ground water aquifers are interconnected with the perennial aquatic bodies; as a result the ground water of the adjoining towns would also no longer remain pollution free (Shashi and Dwivedi, 2008). Under all these situations the area of doab (Fertile land between two rivers) would be no better than hell.

## 5. AIR POLLUTION

As a consequence of the above situations not only will the ground and surface water be affected but air as well, and the areas will no longer remain safe. The harmful gasses released from the industries as well as the vehicular exhaust will ruin life in this area. Industries generate a variety of gaseous pollutants which lead to different abnormalities in the life of human, plant as well as animals (Shashi and Dwivedi, 2008). On one hand the world is worried for the present level of pollution, at the same time we are being pushed towards greater pollution.

## 6. BIODIVERSITY DEGRADATION

Every ecosystem has its own community and there is also the existence of equilibrium among the components of the ecosystem. Any change in the system, whether it is physical, chemical or biological brings about a considerable change in its structure. It is a universal fact that biodiversity is maximum in the optimum situation (Dwivedi, 2008). Now, the changes discussed above will directly affect the biodiversity of this state. The present commercialized mass is unaware of the benefits of the biodiversity. Biodiversity degradation will destroy the composition of cormophytes, thallophytes, microorganisms, and other aquatic animals as well as the terrestrial forms. As an expectation, the oxygen in the atmosphere will not be sufficient for respiration for living beings. In addition, no one can even imagine the presence of any life form including fishes in the water.

## 7. INVITATIONS TO ROAD ACCIDENTS

Path of rivers are wavy, we need not to explain that the shortest distance between any two points is a straight line. This wavy path will also increase the cost of construction, maintenance and fuel consumption in addition to the time required for the journey and cost of transportation (Shashi and Dwivedi, 2008). The 1047 km. distance would be covered in just 10 hours, according to the planners ([www.upgov.nic.in/news11.asp?idn=2726](http://www.upgov.nic.in/news11.asp?idn=2726)), meaning thereby that the average speed of the vehicle would be 104.7 km. per hour; such a speed may surely increase the risk of accidents, especially when the roads are also wavy.

## 8. EXPRESS WAY VERSUS WATER WAYS

Under this project, an investment of Rs. 400,000 million on the basis of public-private partnership and Rs. 800,000 million in development areas is expected. A project of such magnitude is being implemented for the first time in the country, and the planners them-self accept this. As an alternate suggestion, it would be advantageous to develop the Ganga Waterways. This will not only prevent economic loss, but also ensure that the water resources available to us are properly utilized. It would require less than 20% of the budget of the proposed plan towards development of the Ganga Waterways. The voyage would be economical, pollution-free as well as long lasting. Yantze River of China, instead of being a river of sorrow, today it fetches millions of Yuan from the tourists as it offers one of the best river cruises ([www.boloji.com/writers/vijayjoshi.htm](http://www.boloji.com/writers/vijayjoshi.htm)).

## 9. DISCUSSION

If industrialization and enormous transportation are the only synonyms of development, one should condemn such development. We should look for sustainable development instead of only development. The above discussed processes such as, siltation, flood, water borne diseases, desertification, reduced agricultural land, air and water pollution will affect the normal life. At the same time development of water-ways would provide jobs to the jobless hand of this area, the human resource available to us would be utilized and this region would succeed in gaining attraction of the globe for its pollution and aesthetic values. Though, lots of capital would not be involved.

## 10. CONCLUSION

India is an agriculture based country, and we should aim to feed the ever-increasing population. To fill the belly we need grains and not just coins; at the same time industries can not generate the grains. Still there are many roads which need repairing. Self reliance in the power sector would leave the other states behind in development. It is a plea, there are many other paths of development, involving huge capital, so why not to think positively.

### *References*

- [1] Dwivedi, A. K., An Express Issue, *Down to Earth*, **16**(22) (2008) 4-6.
- [2] Dwivedi, A. K. and Shashi, Species Erosion, the Shrinking Biodiversity-An Approach, *Indian Science Cruiser*, **20**(5) (2007) 8-14.
- [3] Dwivedi, A. K., Shashi and J. Singh, Water Pollution and Groundwater Recharging, *Current Science*, **91**(4) (2006) 407-408.
- [4] Dwivedi, A. K., Prajapati, U. B. and Shashi, Waste Water and its Management, *Indian Science Cruiser*, **21**(4) (2007) 36-40.
- [5] Shashi and A. K. Dwivedi, Ganga Express Way—A Path of Wetland Destruction, *Current Science*, **94**(7) (2008) 840-841.
- [6] [www.boloji.com/writers/vijayjoshi.htm](http://www.boloji.com/writers/vijayjoshi.htm).
- [7] [www.upgov.nic.in](http://www.upgov.nic.in)