

COGNITATE

“Unveil the esoteric solutions to complex situations!”

Problem Statement

Introduction

1. Ganga is India's largest river basin: it covers 26 per cent of the country's landmass and supports 43 per cent of its population. A 2006 measurement of pollution in the Ganges revealed that river water monitoring over the previous 12 years had demonstrated fecal coliform counts up to 100,000,000 MPN (most probable number) per 100 ml and biological oxygen demand levels averaging over 40 mg/l in the most polluted part of the river in Varanasi. The leather industry in Kanpur which employs around 50,000 people in more than 400 tanneries uses chemicals such as toxic chromium compounds. Effectively, chromium levels have not decreased in the Ganges even after a common treatment plant was established in 1995. It now stands at more than 70 times the recommended maximum level. The treatment for all types of pollutants of the river are present in developed countries. Still there is no hardcore result seen in the situation.

What according to you could be a feasible and appropriate solution for a country like India in this situation of pollution of Ganga. Plan a method to eradicate the problem for this issue. Provide necessary information on the algorithmic plan of your solution.

2. India is an agricultural country. India has the 10th-largest arable land resources in the world. With 20 agro-climatic regions, all 15 major climates in the world exist in India. The country also possesses 46 of the 60 soil types in the world. India is the largest producer of spices, pulses, milk, tea, cashew and jute; and the second largest producer of wheat, rice, fruits and vegetables, sugarcane, cotton and oilseeds. Further, India is second in global production of fruits and vegetables, and is the largest producer of mango and banana. In spite of being one of the leading producers of agro-products, agro-based industry in India is the most unorganised industry. Indian Agricultural industry evaluation reaches more than 100 Billion US\$. Still the farmers committing suicide is all over the news. Noticing all the problems of Indian Agricultural Industry, what feasible solution can be provided, according to you, for the welfare of this huge industry.

Provide a well-organised idea and method to eradicate this problem. What can be the steps taken in association with government to prevent this issue and basically save lives.

3. India is a country with the second largest road network in the world. Out of the total stretch of 5.4 million km of road network, almost 97,991 km is covered by national highways. For an average Indian youth owning a two-wheeler, driving on any of the major Indian cities, is equivalent to waging a daily war. The everyday struggle and effort of dodging traffic, pollution and rash drivers is the biggest cause of chronic stress and many physiological problems. On an average, a person spends anywhere between 30 minutes to two hours of their day driving or say almost 360 hours, in a year. In a country already full of numerous lifestyle-related diseases, the kind of stress and unnecessary burden the person is putting on their body due to the driving and traffic problems.

What do you think what are the causes of this traffic problem and what actions can be taken to solve this problem, so that we can improve traffic management and save people's precious time and their health.

INSTRUCTIONS FOR THE EVENT:

You can choose any one of the given problem statements and give your solution to the problem.

Abstract should be of 25 lines, on the choice of your problem, in IEEE format that means left aligned, Font-Times New Roman, Size-16- Title, 14-Subtitle, 12- text, it has to contain complete problem solving method. And Presentation will be given in the PPT format with 8-12 slides. If you present any Working Model or Report sources in hard copy than you will get a Bonus.

NOTE- The only teams that are selected in first round, will enter in second round.

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