Date: 14 Sep 2024

The shock of crumbling infrastructure and the solution

(The Hindu, 14-09-24)

What are the main issues highlighted in India's infrastructure sector?

- Collapse of under-construction bridges in Bihar, raising concerns about quality control
- Time delays and cost overruns in government-sponsored projects.
- As of December 2023, 431 projects suffered a cost overrun of ₹4.82 lakh crore
- 36% of delayed projects were running behind schedule by 25 to 60 months

What are the key challenges in project implementation?

- Multiple clearances required from conception to commissioning
- Gaps in project management practices, especially in urban infrastructure
- Lack of comprehensive planning and management by urban local bodies
- Insufficient attention, time, and expertise devoted during the project planning stage

What initiatives has the government taken to address these issues?

- Launch of PM Gati Shakti National Master Plan to break silos in government departments
- Introduction of a GIS-based ERP portal for real-time progress monitoring
- Increased capital expenditure allocation to ₹11.11 lakh crore (3.4% of GDP) in Budget 2024
- Implementation of National Logistics Policy and Smart Cities Mission

How can project management practices be improved?

- Integrating modern tools and techniques involving real-time data management
- Adopting global best standards on project management
- Implementing a holistic "Program Management Approach"
- Setting up an agency to conduct professional courses in project management

Can you answer the following question?

Critically examine the challenges faced by India's infrastructure sector and evaluate the effectiveness of government initiatives to address these issues. Suggest measures to improve project management practices and ensure timely completion of infrastructure projects in the country.

Mission Mausam

(The Hindu, 14-09-24)

What is Mission Mausam and its primary objective?

- A ₹2,000 crore initiative cleared by the Union Cabinet
- Aims to upgrade instruments used by weather forecasting organizations
- Involves procuring and installing 60 weather radars, 15 wind profilers, and 15 radiosondes
- Seeks to improve weather and climate forecasting on multiple time-scales

How does Mission Mausam differ from the National Monsoon Mission?

- Goes beyond improving forecasting accuracy
- Aims to explore weather control and modification
- Proposes setting up a 'cloud-simulation chamber' at IITM
- Plans to test various "weather interventions" such as cloud seeding

What are some of the ambitious goals of Mission Mausam?

- Controlling rainfall through cloud seeding and manipulation
- Attempting to control lightning strikes
- Tweaking the electrical characteristics of clouds to reduce lethal lightning
- Investing in fundamental research in atmospheric sciences

What challenges and uncertainties does the article highlight regarding weather modification?

- Experiments have been done in other countries, but feasibility is still uncertain
- Weather modification is not seen as a panacea for climate change effects
- The complexity of climate change requires multiple approaches for mitigation
- The article suggests a need for comprehensive understanding before implementation

Can you answer the following question?

Evaluate the potential benefits and ethical implications of weather modification technologies as proposed in India's Mission Mausam.

