

**UPSC Syllabus Topic : GS Paper 2 Social Justice – Issues relating to development and management of Social Sector/Services relating to Education.**

**Odisha's Public Education Model: Fostering Inclusive Education**

The Odisha government has introduced transformative reforms in the public education sector through initiatives such as the Odisha Adarsha Vidyalayas (OAV), the 'Mo School' Abhiyan, and the 5T-High School Transformation Programme. These programs aim to elevate government schools to surpass private schools in infrastructure, affordability, and quality.

This proactive approach has resulted in an unprecedented shift in enrollment patterns, with 81% of students in the state currently attending government schools.

**Odisha's OAV Model:** The OAV model in Odisha seeks to bridge the rural-urban education gap by providing accessible, qualitative, and affordable English-medium education. Key features include:

1. **Inclusive Education:** Ensuring representation for Scheduled Caste, Scheduled Tribe, and female students through reservations.
2. **Education for the Vulnerable:** Rescuing and preparing children who were victims of child abuse, trafficking, child labor, and child marriage for OAV entrance.
3. **Coaching Facilities:** Providing coaching to enable students to excel in national-level tests.
4. **Teacher Training:** Addressing pedagogical gaps through continuous teacher education programs and maintaining a teacher-pupil ratio of 1:25.
5. **Leveraging Technology:** Using digital tools to track each child's progress, monitor school performance, and enable timely strategic interventions, ensuring transparency and accountability.

**Mo School Abhiyan:** The Mo School Abhiyan is a unique initiative that aims to motivate and mobilize the alumni community to contribute to the revitalization of government schools in Odisha. It is founded on five pillars: connect, collaborate, contribute, create, and celebrate. Key components include:

1. Facilitating exposure to exchange programs, sports, and cultural events for students.
2. Strengthening infrastructure through the School Adoption Programme (SAP), allowing alumni to make financial contributions to adopted schools.
3. Over 5.5 lakh contributors, including ministers, MPs, MLAs, bureaucrats, professionals, and judges, have participated in this initiative.

**High School Transformation Programme (5T):** Rooted in the 5T concept of transparency, technology, teamwork, and timeliness, the High School Transformation Programme includes:

1. **Leveraging Education Technology:** Adoption of smart and digital classrooms, e-libraries, and modern science laboratories in all high schools.
2. **Meeting the Needs of Specially-abled Children:** Providing assistive devices and tailored teaching-learning materials for students with autism, cerebral palsy, and intellectual disabilities.
3. **Holistic Development Focus:** Initiatives like 'Mo School Hockey Clubs' and 'Football for All' to enable the holistic development of students' personalities.

**UPSC Syllabus Topic : GS GS Paper 2 Governance– Government policies and interventions for development in various sectors and issues arising out of their design and implementation.**

**India's Pharmaceutical Industry: Revolutionizing Drug Oversight with Digital Upgrades and Regulatory Enhancements**

**Indian Pharmaceuticals Industry Overview:**

- **Global Standing:** India ranks 3rd worldwide in production volume and 14th by value in the pharmaceutical industry.
- **Generic Medicines:** India is the largest provider of generic medicines globally, constituting 20% of the global supply by volume and offering around 60,000 generic brands across 60 therapeutic categories.
- **Vaccine Manufacturing:** India is a global leader in vaccine manufacturing, contributing 60% of the world's vaccines.

**Foreign Direct Investment (FDI):**

- **Greenfield Pharmaceuticals:** 100% FDI is permitted under the automatic route.
- **Brownfield Pharmaceuticals:** Allows 100% FDI, with 74% under the automatic route and the remaining through government approval.
- **Market Size and Growth:** The current value of the industry is \$50 billion, projected to reach \$65 billion by 2024 and \$120 billion by 2030.
- **Exports:** India is a significant exporter, supplying over 50% of Africa's generics, about 40% of the generic demand in the US, and 25% of all medicines in the UK. The industry has seen a 103% growth from 2014 to 2022, reaching \$24.6 billion.
- **Potential:** The Indian Economic Survey 2021 anticipates the pharmaceutical industry reaching \$120-130 billion by 2030. Related sectors, including biopharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics, are projected to reach \$150 billion by 2025.

**What are the issues with India's pharmaceutical industry?**

Drug Type	Incident Summary
Anaesthetic	In Sri Lanka, two fatalities occurred due to Indian-made anaesthetic drugs.
Eye Drops	Eye drops from India caused infections in 30 patients and blindness in 10 in Sri Lanka. A separate incident in the U.S. involved eye drops leading to infections and blindness, linked to a drug-resistant bacteria.
Cough Syrups	In 2022, WHO associated Indian cough syrups with over 70 child fatalities in Gambia due to kidney injury. Similar products caused 18 child deaths in Uzbekistan in December 2022.

**Government Initiatives:**

- **Adherence to WHO Standards:** The Indian government has directed medicine

manufacturers to adhere to World Health Organization standards to enhance drug quality.

- **Monitoring Portal for the Pharmaceutical Industry:** The government is launching a monitoring portal to oversee the pharmaceutical industry, ensuring transparency by tracking the entire drug-making process. Manufacturers and distributors must submit detailed information on raw materials and invoices, and the portal lists drugs identified as substandard.
- **National Policy on Research and Development and Innovation in Pharma-MedTech Sector:** Focused on fostering academia-industry collaboration to establish India as a leader in drug discovery and medical device innovation.
- **Scheme for Promotion of Research and Innovation in Pharma MedTech Sector (PRIP):** With a budget of Rs. 5000 crores, the PRIP scheme aims to drive innovation in the sector. It includes setting up Centers of Excellence and emphasizing research areas like New Chemical Entities to enhance India's global competitiveness in pharmaceuticals.

**Recommendations:**

- **Enhance Regulatory Enforcement:** Strengthen the enforcement of existing regulations and standards set by bodies like the WHO and US FDA to ensure drug quality.
- **Improve Transparency:** Fully implement the proposed portal for tracking drug-making processes, raw material sourcing, and distribution, thereby increasing supply chain transparency.
- **Increase Trust in Generics:** Address distrust among physicians towards unbranded drugs through better quality assurance and education.
- **Enhance Monitoring Systems:** Adopt and implement the Mashelkar committee's recommendations, including maintaining an appropriate ratio of drug inspectors to production and retail units for more effective monitoring.