

4. Industry 4.0

Prelims: Economics- Industry

Mains: GS-III- Effects of liberalization on the Economy, Changes in Industrial Policy and their effects on Industrial Growth.

Why in News?

- ▶▶ A Pilot Project for ushering in 'Industry 4.0' in the country, is launched for implementation at the Modern Coach Factory (MCF), Raebareli.

Industry 4.0:

- ▶▶ 'Industry 4.0' commonly referred to as the fourth industrial revolution, is a name given to the current trend of automation, interconnectivity and data exchange in manufacturing technologies to increase productivity.
- ▶▶ Industry 4.0 is a complex Cyber-Physical Systems which synergizes production with digital technologies, the Internet of Things, Artificial Intelligence, Big Data & Analytics, Machine Learning and Cloud Computing.
- ▶▶ Therefore, the architecture to be conceptualized and formulated in MCF initially would be gradually expanded in a phased manner to encompass all complexities that constitute Industry 4.0 in all manufacturing spheres in the country.
- ▶▶ Full transition to the digital factory using 'Industry 4.0' across entire value chain from design to production will help enhance productivity hugely by providing insight into production process and also make the decisions in real-time basis.
- ▶▶ This will also help in minimizing human errors by effective monitoring to ensure that resources are put to the best utilization measured by, what is called the Overall Equipment Effectiveness (OEE).
- ▶▶ Such a National Policy for Advanced Manufacturing envisages that manufacturing sector should contribute at least 25% to GDP.
- ▶▶ All over the world, countries who have been able to achieve phenomenal growth, could do that with the advent of rapid strides in manufacturing sector. This initiative in Railways may have wider ramifications to spur growth in defence production as well as in private manufacturing sector also.