

The CSIR has undertaken its mission effectively since independence. Explain.

Introduction:

CSIR has been founded in 1942 starting from a poor country in 1947, with its GDP of ₹ 2.7 lakh crore & food grain production meagre so many times, challenges of educating people, feeding population, implementing democracy, promoting industry & trade remained daunting.

It is against this backdrop responsibility of developing science & tech & innovation ecosystem fell upon CSIR.

CSIR mission:

1) CSIR made several innovations like innovation in voting ink used in elections. In order to prevent frauds, double voting etc and to ~~promote~~ save democracy CSIR made indelible ink made of silver nitrate to address this concern.

2) CSIR also made innovation in leather industry. Leather industry employed less than 25,000 people at the time of independence. In 1970s govt took decision of banning exports of hides & skins and also now more than 50 years since independence leather industry has now workforce of more than 4.5 million jobs and Exports close to \$6 billion. This all because of CSIR - CLRI establishment.

It developed technologies for finished leather products by invention of leather chemicals making transition from semi finished to finished leather.

1) CSIR footprint could be seen in the development of agrochemicals & mechanisation of agriculture.

2) Two public sector companies founded post independent based on technologies developed in CSIR laboratories. For to make agrochemicals & MHI HIV drugs

3) The mechanisation of agriculture achieved through indigenous development of Mahindra tractor at CSIR.

(MER) leading to formation of Punjab tractor limited

4) Samba mahuri rice variety - bacterial blight resistance.

Self reliance:

1) A significant impact of CSIR also seen in food & nutrition, aerospace, health and biotechnology in promoting growth for enhancing farmer's income.

2) CSIR developed technologies to convert buffalo milk to powder.

3) The Aroma mission of CSIR has been transforming the lives of 1000s of farmers across the country.

4) Purple Revolution - production of carotenoids etc.

Conclusion:

Recently also CSIR set fine technologies withals for addressing emergency situations due to pandemic. They also made plasma therapy, personal protective equipment etc.

CSIR also made solar tree, oxygen minimum to produce clean power

Challenges:

Main challenge of CSIR is making technologies environment friendly & providing sufficient opportunities.