

## **Research and Innovation Circle of Hyderabad (RICH)**

Launched in 2017 as a first-of-its-kind initiative by the Government of Telangana, RICH aims to solve complex local and national challenges by facilitating collaborative networks between diverse stakeholders of the research and innovation space. RICH is now the nodal agency for the Hyderabad Science and Technology Cluster, an initiative spearheaded by the Office of Principal Scientific Adviser to Government of India. As part of this initiative, RICH has initiated multidisciplinary projects in the areas of agriculture, nutrition, health, and waste management. These projects will leverage the local expertise and strengths of Telangana, and will facilitate ease of access to funding from the relevant central ministries.

RICH operates in 3 major sectors: Food and Agriculture, Lifesciences, and Sustainability.

RICH has supported more than 250+ start-ups, has fostered collaborations with more than 30+ Research and Academic institutions, has partnered with 14+ hospitals, has enabled 15+ collaborations with development agencies/associations/foundations and has listed 1000+ equipment on its website as a resource for use by start-ups and industry, have raised Rs 1700+ lakhs in funding for start-ups and projects.

RICH is working on high-impact projects such as Agri Nutri-connect, Drones for better living, Reagents Consortium, Project Tej, AID-Acceleration Initiative for Diagnostics, ICGA-India Cancer Genome Atlas, Biobanks, Emerging Technology Pilots in Agriculture among others which are aimed at addressing gaps in areas such as malnutrition, accessibility of medicines, personalised medicine, AgriTech, clinical testing assistance for diagnostic start-ups.

The lifesciences sector interventions by RICH included introduction of new technologies to government hospitals, and working with not-for-profit organisations, incubators and international partners. These interventions have led to opening up of channels for the startups for conducting pilot and validation studies, and possibilities of setting up new facilities. During CoVid, RICH helped the TS Government to identify new technology providers to help the state manage the first outbreak of CoVid. Working with partner institutions, RICH helped Indian MSMEs and startups to quickly build capability to produce RT-PCR kits, and to manufacture reagents indigenously. RICH has started Acceleration Initiative for Diagnostics (AID) – a unique cohort-based startup program that aims to identify and nurture the best startups in the diagnostic space in collaboration with AIC-CCMB and I-Venture@ISB. It addresses the challenges that are faced by Lifesciences startups in medical devices sectors. RICH has launched Project Tej in partnership with Cyient and Xynteo to anchor the country's first industry alliance to launch open innovation testbeds for MedTech ecosystem. RICH has also onboarded several prominent hospitals and organisations to provide Medtech startups access to clinician expertise and test bed facilities to test and certify their devices.

The business alliances facilitated by RICH for agri startup companies have led to rapid growth for the companies. The intervention by RICH has also led to introduction of nano fertilisers and nano pesticides in Telangana and eight other states. Similarly, RICH facilitated multiple partnerships between input companies and a farmers online input platform. RICH is currently working with PJTSAU, IT Department's Emerging Technologies cell and Agriculture department to evaluate the suitability of new AgriTech technologies to increase farmer incomes. On behalf of the State, it has partnered with organisations like UNDP and NASSCOM to provide a strong digital infrastructure in the state to help maximise benefits to farmers. RICH is also working with international organisations such as World Economic Forum and IFC (World Bank) to contribute to the development of policies for the better recognition and application of emerging technologies in the agriculture space. RICH has partnered with Agri Collaboratory to create a national movement for building common digital infrastructure for agriculture. RICH is also managing the KisanMitr Portal - National platform for farmers, National Agricultural Research System and Startups to promote products/technologies and services – in collaboration with Indian CST.

In Sustainability/Smart Manufacturing sector, RICH has been working with the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) on an ongoing basis to help commercialize its technology. RICH is helping the national C-MET Institute to develop and commercialise its technologies to recover wealth from waste. RICH helps technology innovations, particularly in the areas of Energy, E-Mobility and Waste Management, through the value chain, with an intent to accelerate the pace of the innovation and market adoption by the ecosystem players. Other key projects in Sustainability are Demand Response Driven Energy Advancements and Moderation of Services, Green Hydrogen Valley and Green Hydrogen Technology Accelerator.