

"There lies a more sustainable future in biomanufacturing as we head into 2025 and beyond"

02 January 2025 | Analysis

Global biomanufacturing ecosystem is the need of the hour that can serve all low- and middle-income countries



Asia has, indeed, become the new hub for growth and innovation, with no signs of losing steam. To recognise the Asian companies and individuals for their commendable performance and achievements during 2023 and 2024, BioSpectrum Asia Excellence Awards 2024 ceremony was held at Hotel Fort Canning in Singapore on December 6, 2024.

An important aspect of the event was an engaging panel discussion with industry experts, on the topic- 'Biomanufacturing- A step forward toward Sustainable Bioeconomy in Asia'. The session was moderated by Dr Satya Dash, Founding & Former Head Strategy; Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology (DBT), Government of India; and panelists included Damian Cher, Director of Manufacturing Capacity Solution in Asia Pacific, Cytiva; Lew Fei-Chuin, Biopharma Market Manager, Agilent Technologies; Franco So, Head of Bioprocess, Sales, Asia Pacific China, Eppendorf; Dr Saket Jhajharia, Chief Operating Officer, ID Capital; and Dr Dario Heymann, Chief Research Officer, Galen Growth.

A global biomanufacturing ecosystem is the need of the hour that can serve all low- and middle-income countries, in particular, wishing to produce biologicals, such as vaccines, insulin, monoclonal antibodies and cancer treatments. As more biopharma companies are emerging, and existing companies are expanding their product pipelines, there is a growing demand for technologically advanced biomanufacturing processes to develop innovative therapies.

However, a few hurdles remain, such as lack of a skilled workforce and weak regulatory systems. In addition, setting up biomanufacturing facilities or upgrading existing infrastructure requires substantial capital investment.

Talking about these challenges, Dr Saket Jhajharia emphasised on the current role of biomanufacturing in the food sector stating, "Biomanufacturing is currently only working for very high value ingredients, that sell over \$100-200 per kilo. The whole challenge lies in implementing biomanufacturing for producing healthier alternatives like soya, which sells for \$2-3 per kilogramme. The industry is now trying to make more economical choices in both their upstream and downstream processes. Likewise, in the pharma sector, the industry is looking out for alternative cultured media for the biomanufacturing processes, to bring down the costs. Simultaneously, the industry is also looking for ways to reduce energy and water consumption, to

ensure sustainable practices."

Laying an equal emphasis on biomanufacturing and sustainability, Damian Cher said "There lies a more sustainable future in biomanufacturing as we head into 2025 and beyond. There are significant opportunities for growth in sustainability. According to Cytiva's Global Biopharma Sustainability Review, which surveyed 800 pharma and biopharma leaders across 18 countries, only 39 per cent of respondents believe they're effectively incorporating sustainability throughout the product life cycle. However, 63 per cent of respondents see sustainability as imperative to business growth and innovation."

Adding more towards the challenges surrounding the biomanufacturing space, Dr Dario Heymann pointed out, "One of the key factors that affects the profitability of a manufacturing business is the amount of capital that is required to produce a unit of output. And perhaps partnerships with established players can be considered as a potential solution."

Both Lew Fei-Chuin, Biopharma Market Manager, Agilent Technologies, and Franco So, Head of Bioprocess, Sales, Asia Pacific China, Eppendorf agreed upon this aspect of partnerships, particularly between the public-private sector, and the industry and academia, to take the developments within the biomanufacturing sector to a more fruitful stage.

The panel discussion ended on a hopeful note, with experts suggesting the way forward to a sustainable bioeconomy in Asia, with a bright spot on biomanufacturing.

The deliberation was followed by the Awards Ceremony, felicitating the winners of the Industry Segment and Jury Special categories. In the coming pages we have covered the profiles of the Jury Special Award Winners, along with a photo gallery of the BioSpectrum Asia Excellence Awards 2024 event, supported by Cytiva, EcoLab and BioSpectrum Jobs!

Image caption- Ravi Boratkar, Publisher and Managing Editor, BioSpectrum Asia (fourth from left) felicitating the panelists- (L-R)- Dr Saket Jhajharia, Chief Operating Officer, ID Capital; ; Damian Cher, Director of Manufacturing Capacity Solution in Asia Pacific, Cytiva; Dr Satya Dash, President Strategy Bigtec, Founding Head Strategy, BIRAC, Government Of India; Franco So, Head of Bioprocess, Sales, Asia Pacific China, Eppendorf; Lew Fei-Chuin, Biopharma Market Manager, Agilent Technologies; and Dr Dario Heymann, Chief Research Officer, Galen Growth Singapore, AI Office, SingHealth.