

Track 5: Digitalization in cities and villages

Harit Ticker: Digitalization to close the urban-rural nutrient and carbon cycle

Jitendra Manikrao Yadav; Navin Horo; Stephanie Katsir

GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), Germany

The Urban-Rural Nutrient and Carbon Cycle (URNCC) initiative by ProSoil, a project implemented by NABARD, GIZ and State of Maharashtra in India, works on innovations and models for the urban-rural nexus. Presently around 50,000 metric tons of compost are being produced in 384 urban locations and made available to farmers through various farmer collectives, farmers, ULBs and fertilizer distribution networks. It is estimated that the production potential of compost and demand in agriculture sector presents an opportunity to generate businesses of around 20 million euro every year. There are over 10 million farmers, 384 Urban Local Bodies (ULBs) and more than 1000 FPOs in the state of Maharashtra involved in this business. There were many challenges in ensuring supply and demand, transparency and effective monitoring as it involves multiple players to handle for decision makers. To increase the efficiency and transparency of the circularity process blockchain based digital marketplace HARIT Ticker (mobile phone and web based application) is developed. HARIT Ticker on one hand provides the platform to ULBs to register themselves as compost producers/suppliers and on the other hand ensures access to compost for farmer collaboratives, individual farmers and entrepreneurs. Harit ticker is based on Blockchain technology it ensures transactional efficiency and transparency in terms of production, quality, sale, stocks and its usage at end users. The department, by means of budgetary allocations, provides incentives to ULBs for quality production and supply of compost to farmers through Harit Ticker. Based on the needs the plan is to further refine and develop the HARIT Ticker, to integrate the incentive flow to ULBs and also to use it for other administrative functions. Considering the dynamics of players involved monitoring of city compost supply chain became difficult for decision in absence of Harit ticker as it provides real time information and ground for quick interventions to promote the demand and supply of city compost.