Technology Development Board has entered into an agreement on 27th December, 2017 with M/s MSV Laboratories Pvt. Ltd., Medinipur, West Bengal for “Commercialization of cow dung compost as a means of strain delivery by applying electromagnetic radiation emitted from radionuclide’s-\(^{60}\)Co : Alternative of synthetic NPK”.

“India needs 7.2 million tons of Biological NPK to produce 321 MMT food grain in 2020”. To achieve the goal, the company has consolidated its status in the area of Agriculture with specific focus on Biotechnology & Atomic technology to add value to agriculture practices of millennium.

Firstly, to apply a large quantity of Cow Dung Compost (CDC) as effective and solid carrier of Bio-fertilizer. CDC is also source of organic materials effective for correction of soil condition e.g. OC, pH, EC, water holding capacity and aeration etc.

Second, application of effective dose of \(\gamma\) radiation for CDC sterilization to reduce cost of production in large volume with ‘zero’ Carbon emission (at present India is producing only 60 k ton PA).

Third, addition of desired strains of bacteria viz. N/P/K/PGPR with sterilized CDC for final production of ‘BIO-DAP’ – Biological NP, ‘CARBO’ – Biological NPK & ‘HUMAUR’ – PGPR bio-fertilizers. BIO-DAP, CARBO & HUMAUR are the Soil friendly cost-effective alternative plant nutrients which ensures food security and food safety in India.

M/s MSV Laboratories Pvt. Ltd. is basically in the field of organic fertilizer, agriculture research on soil and plant pathology, bio-fertilizer and research in various fields of agriculture bio-technology. The company started production of CARBO+® bio-fertilizer in 2011 after obtaining manufacturing license from Department of Agriculture, Govt. of West Bengal and launched “VISION 2020: Organic Medinipur”.

# TDB financially supports M/s MSV Laboratories Pvt. Ltd., Medinipur for “Commercialization of cow dung compost as a means of strain delivery by applying electromagnetic radiation emitted from radionuclide’s-\(^{60}\)Co: Alternative of synthetic NPK”