



# Technology Development Board

Department of Science & Technology

## Technology Development Board

supports

M/s Sahi Fab Private Limited, New Delhi

for

"Development & Commercialisation of 'Agricultural waste of stem materials like industrial hemp, flax and nettle etc. into Fibre'"



Agreement Signed on 28.03.2023

Technology Development Board (TDB), a statutory body under Department of Science & Technology, Govt. of India penned the agreement with M/s Sahi Fab Private Limited, New Delhi for development & commercialisation of 'Agricultural waste of stem materials like industrial hemp, flax and nettle etc. into Fibre'. The board has pledged a support of ₹1.38 Crores out of the total project cost of ₹2.08 crores.

Industrial Hemp (iHemp) is made up of varieties of Cannabis Sativa that contain less than 0.3% Tetra hydro cannabinol (THC). The small brown seeds (iHemp) contain a rich nutritional food containing protein, fibre, and healthy fatty acids, including omega-3s and omega-6s that help in reducing symptoms of several diseases, improving the health of the heart, skin, and joints.

The company has come up with an innovative solution by manufacturing fiber /fibrous products out of this waste in three steps as follows:

β **Decortication:** The hemp stem is processed through the indigenously developed Decorticator machine.

β **Wet Processing:** The extracted fiber is treated with alkali / enzymes using high temperature high pressure (HTHP) machines.

β **Fiber Processing:** The treated fiber is individualized through carding and can be processed through different routes, one of them being needle punching (non- woven).

The extracted fiber from the stem will not only contribute to circular economy and but also upsurge the income of the farmers by 7 times approx.