

TECHNOLOGY DEVELOPMENT BOARD
[A STATUTORY BODY OF THE DEPARTMENT OF SCIENCE & TECHNOLOGY]

Technology Development Board has entered into an agreement on 6th September 2017 with M/s AkshayaAgribiomedPvt. Ltd., Hyderabad for financial assistance for the project “Defibrinated Sheep Blood”.

In developed country, Sheep/Horse blood is used for the identification and antibiotic susceptibility testing of many pathogens but in developing countries like India, Microbiologists use human blood agar plates due to non-availability of Sheep/Horse blood in an organised way. Many pathogens either fail to grow entirely or exhibit morphologies and haemolytic patterns on human blood agar plates that confound colony recognition. Furthermore, human blood can be hazardous to use due to Hepatitis & HIV. Hence, it is not practical to use human blood for making blood agar plates, thus the ultimate choice remains technically on the use of Sheep blood which provides best results. Moreover, it is not practical and not acceptable also to kill the animals for collecting the blood in sterile form.

AkshayaAgribiomed has been incorporated with an objective to generate, develop and trade all kinds of biomedical and agricultural value-added products for the human & veterinary use. Now, they are supplying whole blood for clinical sector and de-fibrinated blood in pharma sector. Sheep, with its multi-facet utility for meat, milk, skins, wool and manure, forms an important component of rural economy, particularly, in India, through this agro-based project.

The project being set up in a rural background in a farming sector is unique; and for the first time an attempt is being made to replace the use of human blood for microbiological cultures in the hospitals and diagnostic centers.

The whole blood/de-fibrinated blood from the Sheep was found to be an acceptable alternative in diagnostic industry for commercial preparation of blood agar plates. There is need for developing a strategy to phase out the use of human blood as a culture medium supplement. Any such strategy should come up with an organized sector supplying authentic sheep/horse blood on commercial scale. In India so far there are none available and hence there is need for promoting such indigenous ventures.

The proposed facility once operational at full capacity as projected, it may replace the current un-ethical practice and bring India on par with the developed countries to replace human blood with sheep blood. This facility may also replace the imported products supplied/manufactured by the foreign companies thereby saving a lot of foreign exchange.

**#TDB support # M/s AkshayaAgribiomedPvt. Ltd., Hyderabad for Defibrinated
Sheep Blood**



Exchanging the Loan Agreement with M/s AkshayaAgribiomedPvt. Ltd., Hyderabad



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