

Classical Swine Fever (CSF) Vaccine

February 12, 2020

Source: *PIB*

Department of Agricultural Research and Education (DARE) and Department of Animal Husbandry and Dairying (DAHD) **released the Live attenuated Classical Swine Fever Vaccine (IVRI-CSF-BS) Technology developed by ICAR -Indian Veterinary Research Institute (IVRI), Izatnagar.**

About Classical Swine Fever

Classical swine fever is a **contagious, often fatal, disease of pigs** clinically characterized by high body temperature, lethargy, yellowish diarrhea, vomiting, and purple skin discoloration of the ears, lower abdomen, and legs. **It was first described in the early 19th century in the USA.**

About the Vaccine

- CSF is one of the most important diseases of pigs causing high mortality with an annual loss of approx. Rs.4.299 billion.
- A lapinized CSF vaccine (**Weybridge strain, UK**) **is being used in India since 1964** for controlling the disease.
- The vaccine is **produced by sacrificing large numbers of rabbits** for each batch.
- **In order to do away sacrificing of rabbits and increase productivity, IVRI had earlier developed a cell culture CSF vaccine by adapting the lapinized vaccine virus in cell culture.**
- Since the cell culture vaccine is from a foreign strain (Weybridge Strain, UK), IVRI has further developed a new CSF Cell Culture Vaccine by attenuating an **indigenous virulent CSF virus in cell** culture.

- A live attenuated CSF cell culture vaccine **using an Indian isolate is developed for the first time**
- The yield of this vaccine is 1000 times more than the existing CSF cell culture vaccine
- An improved **Fluorescent Antibody technique** has been developed for virus titration
- The vaccine virus has very high titre and lakhs of doses can be produced very easily in cell culture and the country's requirement can be easily fulfilled using this new vaccine.
- The new vaccine would be the best choice for use in the CSF Control Programme (CSF-CP) already launched by DAHD (CSF-CP).