

Name of Project:-

- **UP-GRADATION OF FACILITIES FOR AUGMENTATION AND PRODUCTION OF BIOLOGICS AT VRI LAHORE**

Gestation Period:-

- **36 Months (2016-17 to 2018-19)**

Total Cost of Project:-

- **357.07 million**

Detail of Allocation & Expenditure:-

<b>Sr. No</b>	<b>Object Head</b>	<b>Allocation</b>	<b>Expenditure</b>
• 1	Revenue Side	263.446	263.446
• 2	Capital Side	93.624	85.657
	<b>Total:-</b>	<b>357.07</b>	<b>348.959</b>

- An amount of Rs.14.062 million has been demanded for completion the remaining civil work under capital side and Civil Work is in progress.

Location:-

- **Veterinary Research Institute, Lahore**

Sponsoring:-

- **Livestock & Dairy Development Department, Government of the Punjab, Lahore**

Execution:

- **Director General (Research), L&DD Lahore**
- **Director, Veterinary Research Institute, Lahore Cantt**

Operation & Maintenance:

- **Director, Veterinary Research Institute, Lahore Cantt**
- **Officer Incharges of the concerned sections Veterinary Research Institute, Lahore Cantt**

Objectives of the Project:

- ❖ Production and augmentation of improved Hemorrhagic Septicemia Oil adjuvant Vaccine for cattle & buffaloes
- **Hemorrhagic Septicemia Vaccine production has been shifted from stationery culture to modern fermentor technology along with aerated cultures (Homemade aspiratory bottles fermentors) due to which media quantity required for preparation of 30.56million doses of vaccine from 1000kg to 500kg.**
- **Hemorrhagic Septicemia Vaccine has been completely shifted from Alum based to Oil based that has a prolonged immunity of one year as compared to former one that had immunity only for four to six months.**
- **Vaccine dose per animal has been reduced from 5ml to 2ml.**
- ❖ Shifting of vaccine production from conventional method to modern Fermentor technology
- **Previously conventional method was being used for preparation of HS vaccine that has now been shifted to modern fermentor technology along with aerated cultures (Homemade aspiratory bottles fermentors).**
- **Complete automation of HS vaccine production (Filling, Capping, Sealing and labeling of vials) has been achieved.**

- ❖ Preparation, evaluation and production of a new bivalent oil vaccine against BQ & HS
- **Combo Vaccine of BQ & HS has been prepared by incorporating the *Clostridium chauveoi* & *Pasturella multocida*. Montanide oil has been used as adjuvant.**
- **Vaccine passed the safety test in lab animals as well as in the host animals.**
- **Sterility of vaccine is clear on different media used for sterility test.**
- **Antibody titers of serum samples were not up to the mark in phase I trials.**
- **However Vaccine has been again injected to the animals and serum samples are being collected at specified intervals for evaluation of antibody titers.**
- **Idea needs to be reevaluated**
- ❖ Enhancement of PPR cell culture vaccine on roller system followed by lyophilization
- **Previously stationary Cell Culture technique was used to prepare PPR vaccine, which had hindrance in achieving target timely. Now institute is able to produce twice of previous production using roller system technology.**
- ❖ To enhance the socio-economic status of livestock owners through increase production of their livestock for milk/meat, that is the ultimate objective of L&DD Department.
- **Provision of 100% HS vaccine coverage to cattle & buffalo population in Punjab province has controlled the HS disease occurrence and no HS case has been reported in last two years that has in turn saved number of calves and enhanced the socio-economic status of livestock owners and milk/meat production has been increased.**