1. Name of the organization: College of Veterinary Sciences & Animal Husbandry, Central Agricultural University, Selesih, Aizawl, Mizoram

2. Area of work with Achievements:

The College of Veterinary Sciences & Animal Husbandry, a constituent college of Central Agricultural University, became functional with the admission of first batch of students to B.V.Sc. & A.H. degree course in the year 1997.

The College is established with the vision to be the Centre of Excellence in teaching, research and extension education in the field of Veterinary and Animal Sciences. The mission of the college is to cater teaching, research and extension need of the North-Eastern Hill region of India; to benefit the animals, people and environment through promotion of animal health, alleviation of animal suffering, efficient and responsible animal production, conservation of animals and broader ecological resources and protection of public health.

Main Achievements

a. Academic Activities:

The College has produced 306 undergraduate students, 46 postgraduate and 27 students have been awarded with JRF from 2005-2013. The Ph.D. programme has also started from 2011-12.

b. Research:

Faculty members of the College are actively engaged in basic and applied location specific research activities.

- 1. Successfully completed 33 University-funded Intramural Research Projects and one Externally-funded research Projects.
- 2. At present, 22 Externally-funded research Projects and 7 University-funded Intramural Research Projects are undergoing.

Few research findings:

- 1. Development of low cost housing system for Quail Farming using locally available material under the DBT funded project, "Studies on the potentials of Quail farming in Mizoram"
- 2. A model on low input loose housing system for local pigs was developed under the university funded project "Studies on performance of Pigs under low input Traditional System".
- 3. A low cost plastination technique was developed for preservation of specimen which can be handled freely without causing any carcinogenic effect and useful alternative for the study of Gross Anatomy. However, histomorphology of these specimens cannot be studied due to harder structure. Further, the plastinated specimens can be stored openly without consuming the space like museum jars and chemical. It was developed under the university project "Formalin preserved versus plastinated technique on biological specimens"
- 4. Department of Veterinary Pathology has recently reported the first outbreak of Porcine Reproductive and Respiratory Syndrome (PRRS) in India from Mizoram. The epidemiological, clinical, pathological studies of the outbreak, molecular detection, genotyping and phylogenetical studies of the PRRSV from the outbreak have been carried out and communicated to the Government of India. The genotype of the PRRSV from the outbreak has been identified as genotype II (North American type).
- 5. Department of Veterinary Microbiology recently reported the association of extended spectrum beta lactamases (ESBLs) producing Shiga Toxigenic *Escherichiacoli* (STEC)

from human patients of Mizoram. This is the first report in India. Similar combination is also recorded from *E. coli* isolated from pigs in Nagaland.Presence of ESBLs and STEC producing genes in same organisms is considered a very lethal combination.

6. Department of Veterinary Microbiology reported the association of Shiga Toxigenic *Escherichiacoli* (STEC) in poultry of Mizoram. This is also the first report in India.

c. Extension Activities:

The College has organized about 40 Animal Health Camps in different parts of Mizoram that benefited about 5000 livestock owners and more than 20,000 animals of different species. The College imparted trainings to about 700 farmers on piggery, dairy, poultry, Quail farming, value addition etc. Trainings for staff of line Departments are also organized time to time.

3. Technologies intervention available for farmers and others:

- Development of low cost eco-friendly bamboo cage housing system for Quail and broiler farming.
- A model on low input stress free cheep loose housing system for local pigs.
- High quality quail birds for meat production
- Crossbred pigs (LWY X Mizo local pigs) with superior litter performance and meat characteristics.
- Vermi-compost technology
- Portable cost effective water filters for use in field.
- Complete feed blocks are regularly prepared with locally available roughage & concentrate feed for cattle.
- Preparation of Urea Mineral Molasses Block (UMMB) for feeding cattle.
- Development of functional meat products by incorporating vegetables in meat products
- Modification of the traditional pork product "Vawk- sarep" of Mizoram to a superior quality product with proper packaging.