Project Snapshot

**Name of the Project**: Conservation and Management of Indigenous Varieties of Live Stocks (Cattle and Sheep) in the wake of Climate Change in Karnataka

**Project Focus**: Agriculture Allied Sector - Livestock

**Location**: 140 Drought affected Taluks of Karnataka

**Project Finance**: Rs. 24.22 Crore (USD 3.64 million). 1 USD = INR 66.52

**Duration**: 5 Years (2016-2021)

**Name of Executing Entity**: Department of Animal Husbandry and Veterinary Services, Govt. of Karnataka

**Project Beneficiaries**: 3,304 Nos. of Livestock bearing Farmers

Karnataka, the South Western State of India is a climatically vulnerable drought prone region with 24.3% of the net sown area lying in a medium rainfall region and 66.3% in low rainfall regions. Climate change is projected to negatively affect livestock mainly arising from impact of climate change on availability of fodder & feed; potable water; heat distress suffered by animals; increased incidences of vector borne and parasitic diseases and loss of resources. It has been reported that the cattle population has declined by 9.43% from 2007 to 2012 in Karnataka due to insufficient availability of fodder in the State.

It is projected that temperatures in Karnataka may rise in the range of 1.0 – 3.0 °C by the 2030s compared to pre-industrial period (1880). Exotic breeds of livestock (cattle and sheep) are more prone to impact of climate change impacts like heat distress and parasitic infection etc. To address the above vulnerabilities, the given project proposes to conserve and popularise indigenous varieties of livestock (Cattle and Sheep), as they are more tolerant to climatic changes and ensure fodder and water security for the livestock.
Project Approach:
This project aims at conserving and revitalising the native cattle breeds of the state through propagating pure semen and their selective breeding. The local cattle breeds (Malnad gidda, Deoni and Hallikar) and sheep breeds (Bandur, Bellary, and Deccani) would be promoted. In the project, pure elite animals will be identified based on performance recording and modern genomics approach. About 200 best cows per breed would be selected and procured from the farmers. Project will facilitate farmers in efficient utilization of fodder. Project would also include integrating climate smart practices in the existing livestock government farms such as water conservation practices e.g., setting up rain water harvesting, farm ponds etc. which will conserve both surface and ground water resources of the selected areas in the state. Further, practices for harnessing solar energy; waste management practices such as establishing vermicomposting in farmland and bio-gas plants would also be undertaken.

Project Impacts:
- Development of 23 nos. of cattle sheds for breeding and maintenance of the cattle.
- Establishment of 3 units of RWH plant per farm having capacity of 10,000 liters each.
- Setting up of 3 nos. of Vermi-composting Units.
- Identification and procurement of 624 nos. of pure sheep breeds including 200 females(ewe)/farm and 8 males(ram)/farm.
- Promotion of renewable energy through the installation of 3 solar units of 10 KW each.

- Organization of 3 nos. of workshops for Inception, mid-term and final evaluation of project progress.
- Knowledge building through developing 2 films (bilingual), 4-5 manuals for various activities, posters for workshops and 6 research papers.