# Mapping of villages and dairy infrastructure in the Internet based Dairy Geographical Information System (IDGIS); Use of remote sensing in dairy sector

## i-DGIS

i-DGIS (Internet based Dairy Geographical Information System) is a strong visualization tool, which incorporates GIS and database and which is made available on the internet platform by NDDB for interested Milk Unions/Federations.

Milk Unions/Federations operate in large geographical areas with multiple activities, which is spread across many village locations.

i-DGIS can help in proper identification of these villages on digital map with village census code. It can be used as a readily available platform on the internet, for showing proposed and active villages in the milkshed area covered by Milk Union/Federation.

Most importantly, it can be used for monitoring & planning of field level activities of the Milk Union/Federation, as human census, livestock census and land use/land cover of the village is integrated and provided in ONE place on the digital map.

## Remote Sensing

Space Application Centre (SAC), Indian Space Research Organisation (ISRO) has developed an application for crop production forecasts (FASAL) which includes nearly all crops whose residues or by-products, directly or indirectly, constitute the bulk of the bovine feed in all forms viz. dry fodder, green fodder and concentrates.

Further, ISRO has already done a desk study on methane emissions by bovine livestock in India.

Feed and fodder availability has now become the most crucial constraint for development of the dairy sector.

In the above context, NDDB & ISRO will now work together for the following objectives,

- Identify suitable areas for increasing area under green fodder
- Effect of climate change and mapping vulnerable areas in the major dairying states.
- Build a village level dynamic geo-database for the major milk producing states, which will include biomass indicators, LULC and precipitation.