## Programme I

Screening of prevailing hemoglobinopathy in our society, preferably, Sickle cell Anaemia, and to conduct mass awareness programme to prevent its further spread. Under this extension service we have already established one Sickle cell unit in our department which is serving people without any cost.

In 2017-2018 we have targeted Rajnandgaon district for the programme.



Fig. showing Sickle Cell Anaemia Screening Programme organized at Government H.S. School Rajnandgaon district of Chhattisgarh.



Fig. Showing sickle-shaped RBCs.

## Programme II

Our second extension programme was screening of Glucose-6-phoshphate deficiency and its genetic variance from the society. Under this programme we have first time reported three new genetic variants (Mahidol, Chinese and Union) from human population of Chhattisgarh.

In 2017-2018 we considered Rajnandgan district for the study.



Fig. showing sample collection at Government H.S. School Kanharpuri, Rajnandgan district Chhattisgarh.



Fig. Showing sickle-shaped RBCs.

## Programme III

We are working under our extension programme for detection of heavy metals in our soil and water of the society and its adverse health hazard impact on human population. Under this programme we have detected Arsenic contamination from Ambagharh Chowki of Rajnandgaon district and have correlated its impact on human population. We are also expecting Fluoride contamination from near Odisa- Chhattisgarh border and presently analysing for that.



Fig. showing Keratinosis in human populations of Kaurikasa Village of Chhattisgarh.

## Programme IV

Our next extension programme was environmental analysis and under this, we have analysed physiochemical and biological status of water bodies (Rivers); and their related biodiversity.

In 2017-2018, we selected River Shankani-Dankini from Dantewada District of Bastar. The area selected for the study was Kodnar of Sankhini- Dankini river.



Fig. Showing Study area for Shankini-Dankani River in Dantewada District of



Fig. Showing Insect Biodiversity from study station-Kodnar of Shankini-Dankini River.



