PROBLEM STATEMENT :

Prevention, prediction, forecasting and post-incident damage assessment are key com- ponents of the fight against forest fires; however, this work will focus essentially on detection and ongoing incident damage assessment. In particular, the methods exploit-ing neural networks will be given special attention since these families of algorithms have been known to show state-of-the-art performances at many tasks including detection and assessment. To detect and assess forest fires efficiently, multiple methods that leverage machine learning have been suggested in the past few years. They can first be distinguished in terms of the infrastructure that enables them to gather data to base their predictions on; e.g. satellite, [98,51,54,60,24,111,104,68,6,95,63,2,62,112] Unmanned Aerial Vehicle (UAV), [19,57,25] closed-circuit television (CCTV)[118,116,4] or Wireless Sensor Net-work (WSN). [1,5,90,79,7,45,46,26,115,85] Each of them has its own strengths and weaknesses which will be reviewed in the following subsections.