

PRELIMINARY REPORT ON SOIL EROSION IN BARSAT ON KAIMLA ROAD

A committee constituted by the director visited the soil erosion sites in Barsat village on Kaimla Road near Ghraunda. A cursory look at the damaged sites revealed that it is not a case of land subsidence but a case of bank erosion adjoining sand mined area. Since the sand mined area has steep almost vertical slope and profile being sandy, the stability of such a steep slope is quite doubtful (Fig. 1). It appears that water pressure in rice fields towards the bank was so high due to rainfall or rainfall following irrigation by the farmer that the upper layer got eroded and then it took no time for the sand in the profile to flow with the water. The area affected was no more than 50 sq. m. in the first case (Fig. 2). It seems that the affected farmer constructed a temporary embankment and it helped to control further damage (Fig. 3). Although currently it seems all right but the same needs strengthening as heavy downpours during August/September cannot be discounted.



Fig. 1. A view of the steep slopes of the mined fields



Fig. 2. The damaged area in the non-mined field (About 50 sq. m.)



Fig. 3. A temporary embankment to control soil erosion

Mr. Ram Niwas, a worker with Chaudhary Ram Singh also approached the team and showed his field on the other side of the embankment having the same problem. Although the team could not reach the other side, the problem was almost similar and could be captured by the camera. Only difference between the fields was that in the first case seen by the committee damage was restricted to the farmer with non-mined land as the material settled on the pathway constructed by the farmer with mined land. On the other hand the eroded soil mass settled in the paddy field of the farmer down below causing damage to his paddy along with the damage to the paddy of the farmer with non-mined fields (Fig. 4).

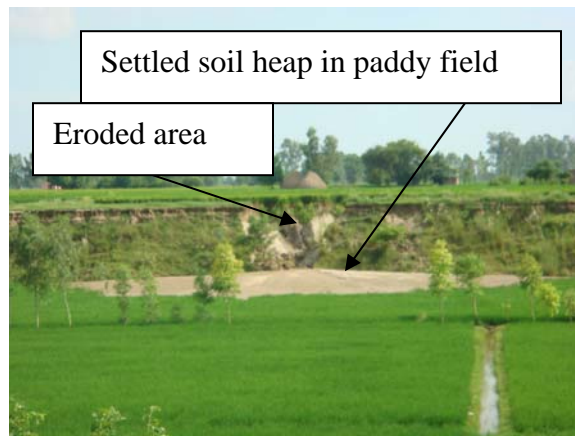


Fig. 4. The eroded area on the other side embankment of the mined land

We could also contact a farmer whose land is also in the vicinity of the mined land. He told the team that some of them went to the court requesting that a minimum of 40' of space be left between mined and non-mined fields. However the court allowed only 10' of space that is too less. As such, these mishaps would happen occasionally. It was decided that the team would sit and see how this issue could be scientifically tackled, as farmers would not like to leave much land to earn more and more profit.

In conclusion, the team is of the view that it is not a case of land subsidence and is a clear case of bank/soil erosion. As such it has lesser implications and can be tackled with relatively easier interventions than land subsidence. The area damaged is not very large and other farmers need not worry provided they strengthen the dykes of their fields along the mined land.

The team would submit the final report in a few days time.