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There is a risk that we may over-simplify our models with respect to both natural and, man-made slopes. I have also encountered the situation where high intensity rainfall suddenly cause a large increase in the number of landslides, and the change may come towards the end of prolonged periods of rainfall.

With regard to the role of suction, in some of the areas mentioned in the discussion, suction may be an effect. Generally it appears likely that the suctions will be removed by natural conditions of relatively small rainfall, over a continuous series of days, and therefore it is not a triggering factor. A further possible triggering factor is what one may call cleft water pressures in the macropores and cracks of the soil.

Our studies have shown that it is not merely rainfall which is significant, but that the infiltration into the ground may matter. Infiltration is the difference between rainfall and run-off. The second point is that when a certain degree of infiltration is exceeded, the conventional flow net is no longer a satisfactory model. Since the material is more brittle on the tensile state, cracks and micropores open, and hydrostatic water pressures will be developed in them. The entire flow net changes and may lead to the sudden triggering of numerous failures in localised areas. I think that it is the over-simplification of the mental model of the D'Arcy flow net which is the culprit at the present time in most of the analysis of natural slope failures.