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Comments on Two Papers by Z. Prusza et al. On Problems of the Guri Embankment Dam (vol. I, p. 169 and p. 185)

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The authors are commended for offering to the geotechnicians preoccupied with the problems of tropical saprolites and laterites,some interesting additional data from this challenging project. One paper in the Panam. Conf., Lima 1979, summarized the typical geology of borrow pits, and compaction test fill with routine control tests: the erratic profiles of index properties and widely erratic test results are salient, coincident with repeated experience elsewhere. The second paper summarizes laboratory tests on compacted specimens, field vs. laboratory, emphasizing that compaction is a very effective homogenizer (cf. de Mello, Rankine Lecture 1977). In the ICOLD Conf., New Delhi 1979, the subsoil profile tests are repeated, and the problem of collapse compressibility on soaking under static pressures is shown in its extreme magnitudes as per various lab tests: it may be recalled that the double-oedometer test independently proposed by Jennings (1957) and de Mello (1957 , 58) has proven to be over-pessimistic due to illusive lateral confinement in such brittle materials. Again 3 excellent papers in ICOLD, Rio de Janeiro 1982, are recalled for the special points, besides the repetitive background data. The first (Vol.II), besides emphasizing the erratic index tests supplies detailed compressibility and shear test data. The second (vol.II) furnishes pioneer data on chemical and mineralogical test profiles, and concludes that "unpredictable" geomechanical behaviors "were not going to occur": for our specialists it would be of interest to follow an expatiation of the reasons and reasonings, even though we intuitively accept the conclusion a priori. The third paper (vol.III)offers once again the best pioneer published data on sprinkling irrigation of tropical slopes of more than 10% (many reach 25 to 40%) and achieving satisfactory controlled wetting to great depths.The problem,always conjured,regarded erraticity,and although the data were not directed toward this point, its evidence is clear.The present (1983) two papers re-present much of the published data but unfortunately, for lack of space,are scant on the pioneer aspects: a) sprinkling rates (for steeper slopes)and the heterogeneity of results in soils differentiated by natural infiltrations;b) the erraticity of collapsing pressure,which is suggested to follow a regular equation-law function of depth.Our experience is that laterites and saprolites are hopelessly erratic in small scale (tests etc.) but behave very dutifully in large masses.It is requested that the authors kindly detail further the novel soil specialized aspects brought out in the many papers that this project has justly merited.