FARS RIVER SEDIMENT CHARACTERISTICS

TALEBBEYDOKHTI, N., HOSSEINIAN ROUDSARY, A. M. CIVIL ENGINEERING, SHIRAZ UNIVERSITY, SHIRAZ, IRAN

AGRICULTURE IS THE KEY INDICATOR OF IRAN DEVELOPMENTS. IN THE REGARDS, THE DEVELOPMENT OF WATER RESOURCES OF THE COUNTRY IS VITAL. STORAGE DAM CONSTRUCTION ACTIVITIES TO CONTROL THE FLOODS DURING RAINY SEASONS OF FALL AND WINTER AND STORE WATER FOR AGRICULTURE, MUNICIPAL, INDUSTRIAL AND HYDROPOWER DURING ESPECIALLY SUMMER MONTHS IS ESSENTIAL. DURING HIGH FLOODS, A VAST AMOUNT OF SEDIMENT WILL BE ERODED AND WILL BE TRANSPORTED THROUGH RIVER SYSTEMS. THE SEDIMENT WILL BE ACCUMULATED BEHIND RESERVOIRS AND DIMINISHED ITS USEFUL CAPACITY OF RESERVOIRS.THE MAIN OBJECTIVE OF THIS PAPER IS TO DETERMINE BED-LOAD AND SUSPENDED LOAD SEDIMENT OF FAHLIAN, KHOSHK, AND HELLEH RIVERS (LOCATED IN SOUTH PART OF IRAN) BY COMPUTER MODELS SUCH AS HEC-6 AND MOBED. THE BED-LOAD CALCULATION IS MADE THROUGH MEASUREMENT OF SUSPENDED LOAD USING PRACTICAL RESULTS AND APPLIED MODELS. APPLICATION OF THESE MODELS IN RIVERS HAS BEEN EVALUATED AND THE SUITABLE MODEL HAS BEEN PRESENTED IN ORDER TO DETERMINE SUSPENDED - LOAD, BED-LOAD AND TOTAL LOAD.THE PRIMARY RESULTS SHOW THAT THE HEC-6 MODEL COULD BE APPLIED TO THESE RIVER SYSTEMS WITH SPECIAL CONSIDERATION TO ACTUAL FIELD DATA. UNFORTUNATELY THE MOBED MODEL GIVES UNSATISFACTORY RESULTS FOR FAHLIAN AND KOSHAK RIVER SYSTEMS AND GIVE ALMOST SUITABLE RESULTS FOR HELLEH RIVER FOR SAND BED CHARACTERISTICS.