JOURNAL OF ENVIRONMENTAL AND EARTH SCIENCE VOL. 5, No. 15, (2015) ISSN 2224-3216

INTRODUCING A MANIPULATED SYSTEM OF DRAINAGE BASINS OF A DEVELOPING COUNTRIES

M.B. YUNUSA, A.S. ABUBAKAR, Z.A.T. SULIEMAN, M. JIBRIL, N. ABDULKADIR

Department Of Geography, Federal University of Technology, Minna, Niger State

ABSTRACT

As a natural open system, in a drainage basin, there is water flow and balanced channel characteristics. In a manipulated channel system, However, according to Mrowka (1974 and Schumm (1977), the water flow is made under control that induces dynamics in channel characteristics. In this paper, attempt is made to uncover how channel project is caused, nature of the new forms of channel cross-sectional area, shape, sinuosity and gradient as well as flood plain characteristics. It also covers the peculiar transformation evolved as drainage basin system is changed to channel project. Consequently in the paper two task involved were explained. These are significant channel re-construction, and the direction of stream flow as relates to developing water terrace in the savannah zone of Nigeria with the increased channel project dated back 1970s (olofin, 1980). Specifically the paper drew considered the physical characteristics of the natural channel of river suka in North central Nigeria and the manipulated system or the new face of the drainage basin project of the Kano river, Nigeria used to structure the Tiga Dam that involved downstream channel adjustments.

Keywords: Drainage basin, Channel, River, Dam, Downstream