

Raising process of river bed in southern Yamashiro region

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Raised bed river should be a typical artificial landforms which became necessary the environmental changes in the upstream region of rivers. Typical raised bed rivers have developed in the western part of Japan, especially Kyoto, Osaka, Nara, Shiga region, induced by artificial fixing of alluvial river channels and increasing of bed load in floods. Inter-disciplinary approach of archaeological and geological investigations in southern Kyoto region, Kizu River, revealed that the raising of river bed started from the 14th century and accelerated the raising rate from the 17th century. The development of upstream mountainous area, deforestation and keeping grass field in long term period, led to increasing landslides and topsoil erosion in the mountainous slope, so that the bare mountains were common scenery around the advanced developed region in Japan during the ages of raised bed rivers from the 14th to the 19th century. The backgrounds of the beginning of these exhaustive developments in mountainous slope surrounding of urban region are reflected in the social changes going on the 14th century. Social confusion continues to demise of ancient order forced to take the regional social and economic integration and generated the new integrated villages that they interested to increasing food production by cultivation needed to large quantity of grass supplied from surrounding grass (bare) mountains. The classic landscape of raised bed rivers in Japan which started in the mediaeval ages shows the history of interaction between environmental changes and ancient society.

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