We imaged the crustal resistivity structure around the central part of Hanaori Fault in Kinki district, which is located near the urban areas. We carried out 10 magnetotelluric soundings along WNW-ESE profile with 20km traversing the Hanaori Fault in 2003 and 2004. Since we had fortunately large magnetic disturbance in both years, we obtained relatively good quality sounding curves. In this paper, we will present the preliminary result derived using the 2D inversion code of Ogawa and Uchida [1996], based on TM mode apparent resistivity and phase, and plan to discuss relationship between the resistivity structure and seismicity.