

3. MICROTREMORS

3.1 MICROTREMOR MEASUREMENTS

Microtremors were measured at some villages including Abdarreh and Tablaskin in the affected area. Continuously lasting tremors were measured for discussing predominant periods and amplification factors of the sites, which might be affected by local site conditions. In Abdareh, where almost 100% of adobe dwellings were completely flattened, ground tremors at 7 stations were measured (**Fig. 3.1**). In Tablashkin, tremors were measured not only on grounds but also at adobe and masonry houses by intentionally giving small shakes to them to sound their predominant frequencies.

In every measurement, two horizontal and a vertical components of the tremor are recorded in silence (**Fig. 3.2**). **Figs. 3.3** shows how an adobe house was shaken to measure its tremors for obtaining its natural period. Two horizontal components of tremors were measured on both its roof and the ground with their directions oriented with each other (**Fig. 3.4**).



Figure 3.1. Microtremor measurement points taken in Abdareh



Figure 3.2. Microtremor measurement in Abdareh



Figure 3.3 Giving a shake to a dwelling

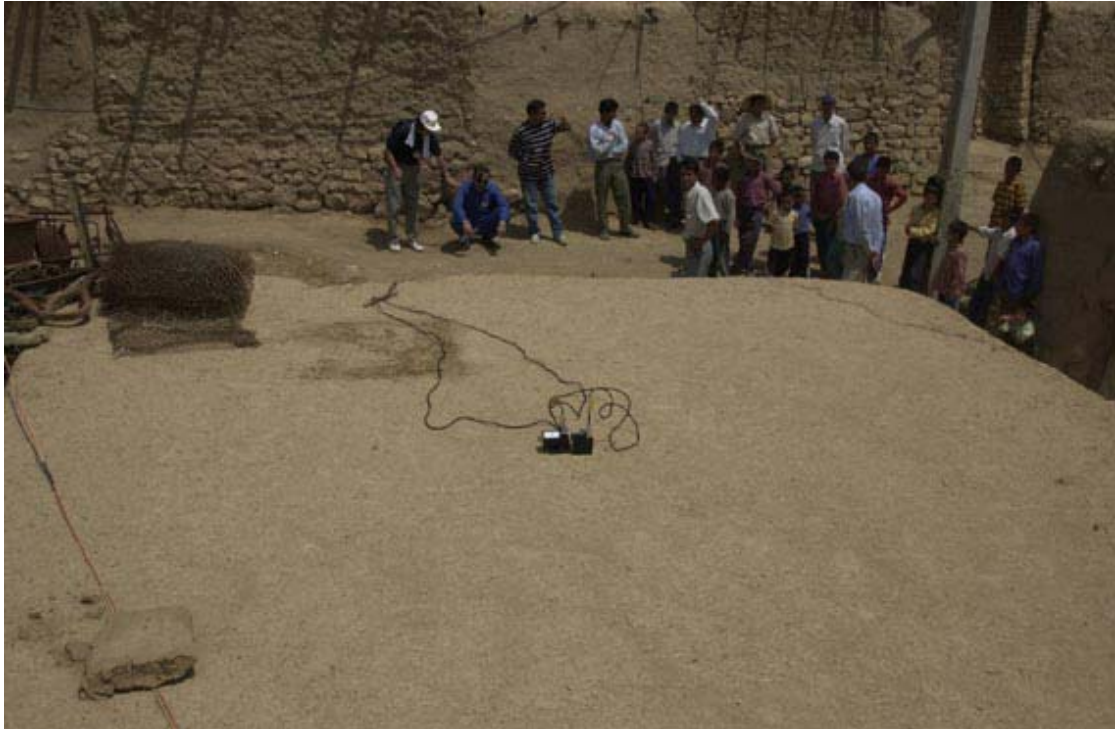


Figure 3.4. Microtremor measurement on the roof of an adobe house



Figure 3.5: Measuring two components of microtremor on the roof of the house

(3.1/ Masakatsu MIYAJIMA and Abdolhossein FALLAHI, Faculty of Engineering, Kanazawa University)