

Irrigation Canals in the Kikuchi River Basin

The fertile plains around the city of Kikuchi have been used to grow vast amounts of rice for two millennia, but the efficiency and extent of this cultivation improved dramatically from the seventeenth century onward, when local authorities began constructing irrigation canals called *ide*. The main purpose of these canals was to carry water from the Kikuchi and Hazama Rivers to dry parts of the plain in order to turn more land into paddy fields. Intakes were built in the uppermost reaches of the rivers, from which the water would flow downhill at just the right speed—slow enough to allow easy rerouting into paddies along the way, but fast enough that water would reach even the most distant downstream fields. Building the *ide* required both advanced engineering expertise and intimate knowledge of the local topography.

The oldest canal in the area is Tsuiji Ide, which courses westward from the Kikuchi River toward the city for about 1 kilometer before splitting into several branches that now flow underneath paved streets. One of these branches is visible in front of Kikuchi City Hall, where a waterwheel adds to the view. Local residents traditionally used the water from Tsuiji Ide for household chores, firefighting, and recreation, and the path alongside the canal remains popular for walking and cycling. A statue of Kato Kiyomasa (1562–1611), the daimyo lord on whose orders Tsuiji Ide was built, stands next to the upper part of the canal's main section.

Haru Ide is the longest and historically most important of the canals, drawing water from the uppermost stretch of the Kikuchi River and carrying it across mountainous terrain for a total of 11 kilometers, including around 500 meters of tunnels. This *ide* was built between 1698 and 1701 at the initiative of a local village headman. It made rice farming possible on terraced fields throughout the hilly eastern part of Kikuchi. Haru Ide is still used today to irrigate approximately 200 hectares of farmland.