

Traditional technique :

Kasumitei (discontinuous levees) with flood protection forest

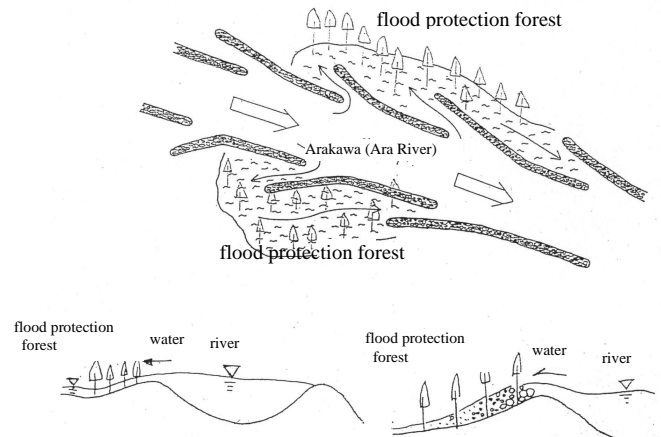
Category : Kasumitei (discontinuous levees) with flood protection forest

River : Arakawa (Ara River) Sicle : 17th century

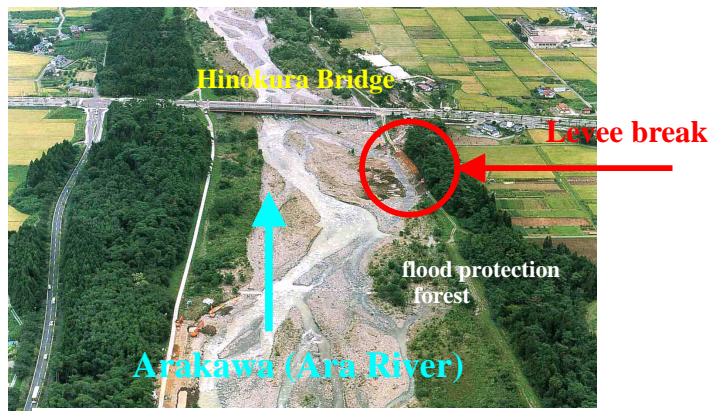
Site : Fukushima City (Fukushima Pref.)



The Arakawa (Ara River) and flood protection forest
(Source: Nikkei Construction, Nov. 28, 1997)



Concept of kasumitei with flood protection forest
(Source: Fukushima Work Office, Ministry of Construction)



Flood protection forest that proved effective at the time of a levee
break during the August 1998 flood
(Source: Fukushima Work Office, Ministry of Construction)

Description:

The oldest kasumitei (discontinuous levees) were built in the early years of the Edo Period. Flood protection forests are effective when used in conjunction with discontinuous levees. Though the origin of flood protection forests is unknown, it is generally said that they came into existence naturally and planting and conservation of trees began to be used as a means of flood control by the end of the Edo Period. The discontinuous levees and flood protection forests shown above extend along the right and left banks over a distance of about 7 km from Jizobara downstream to the Sakura Bridge. The forests consist mainly of red pine. Still effective as a means of flood control, the levees, together with the waterside forest park, residential area and the Azuma Sports Park, provide spaces for recreation and relaxation.

The August 1998 flood caused a levee break of the right bank just upstream of the Hinokura Bridge, but the flood protection forest proved effective in preventing spreading of flood water. Effectiveness of flood protection forests is being rediscovered.