

A simplified decision tree for weeding.

Research identified a series of 21 different decision criteria. These included biophysical and climatic variables (toposequence, water depth) as well as socio-economic variables such as the availability of cash or labor.

Late first weeding on intermediate and high land was primarily the result of soil and climatic factors beyond farmers' control. Farmers were prevented from weeding by delayed rainfall that left the soil too hard for weeding. Unless they chose to irrigate, they had to wait for rain to soften the soil. Small farmers may be more likely to irrigate under these circumstances because household food security based on own production is more critical for such farmers. First weeding may also be delayed by excessive rainfall that makes the soil too soft for using the rotary weeder. This forces farmers to weed by hand, which is slower and usually requires hired labor.

On low-lying land or land with a water depth exceeding 70 mm, farmers could not use the rice weeder and relied entirely on hand-weeding. Farmers did not normally use the rice weeder for second weeding for fear of damaging the roots of the rice plants.

Fig. 1. Simplified decision-tree for weeding of T. Aman, Comilla

