In 4 trials in 1975-6, beans [Phaseolus vulgaris] intercropped with maize did not decrease maize grain yields significantly compared with pure stands at sites in W. Kenya, but in 1 of 3 trials in E. Kenya intercropped maize yields showed some decrease. When beans were intersown at the same time as maize, mixed cropping showed an advantage in land use over pure stands, with relative yield totals (RYT) of 1.22-1.78 in W. Kenya and 1.06-1.25 in E. Kenya. Seed yields of intercropped beans were 14-73% of those of pure stands. Sowing beans > 1 wk after maize greatly decreased bean yields. When maize was grown according to recommendations, beans could be intersown in single alternate rows with plants spaced at 10-15 cm within the row.