The production and use of agricultural machinery in Kenya is examined against the background of the country's basic problem, i.e. that, despite a determined effort to modernize and industrialize through import substitution and development of export crops, only about 20% of Kenyans have really benefited. A more appropriate technology must be chosen for the rural areas to reduce heavy reliance on the urban sector, which in turn depends heavily on imported technology. Past efforts to mechanize have apparently been misdirected, and the real need for tools and agricultural power has not been met, mainly because the effect of mechanization on production and employment has not been well understood. It is recommended that (1) the needs of farmers be analyzed and then (2) appropriate equipment based on world-wide experience be chosen. The equipment should be evaluated and, if necessary, further tested under controlled field conditions before it is introduced to farmers. A multi-disciplinary team should carry out the analysis of needs and put together the package of inputs.