A research to assess the maize production practices and dynamics in open field cultivation was carried out in Gweru City. One hundred and eighty-three interviewer administered questionnaires to active open field cultivators were used to collect data over three consecutive seasons 2011/2012, 2012/2013 and 2013/2014. Results show that manual power is used by 73% of the respondents in land preparation, 25 and 2% use motorized and draft animal power respectively. Trend analysis on power used for land preparation indicates an increase of 5% in motorized power whilst manual power use, decreased by 9% for the same period. Planting is carried out manually by all open field cultivators; 97% using family labour and 7% using hired labour. Sixty-five percent, of cultivators use the basal fertilizer, 7% use ammonium nitrate, and 28% do not use any type of fertilizer on their maize crop. Crop maintenance is limited to weeding; all cultivators weed their fields mechanically using hoes. Only 3% indicated using agro-chemicals for pest control, and 17% used scarecrows to deal with bird and animal problems. Average maize yields from open field cultivation vary between 0.8–4 t/ha. Seventy-six percent of cultivators consume all their produce, 20% sell part thereof to fellow residents and only 3% sell to outside and official markets such as the Grain Marketing Board (GMB). It can be concluded that the maize production practices of urban open field cultivators are dynamic and they follow some trends in relation to power sources and utilisation of their produce.