Project Update: March 2018

I am already at field site, almost 1 week now. I have manged to move around and looked at encroached site in Maswa Game Reserve and peripheral sites of Serengeti National Park, I have talked to some of the local community/livestock keepers around Maswa Game Reserve. Yesterday I made preliminary field survey and start observing interesting things on *Acacia drepanolobium* seedlings. I am still continuing with the field work here at Maswa Game Reserve.

Figure 1: Mbuga tatu area, the area is known as mbuga tatu which Swahili name are meaning three grassland areas. The area has been encroached by Acacia drepanolobium

Figure 2: Some of the remained open grassland in Mbuga tatu area.

Figure 3A: Encroached sites within Mbuga tatu area

Figure 3B: Encroached sites within Mbuga tatu area

Figure 4A: Encroached sites within Mbuga tatu area

Figure 4B: Encroached sites within Mbuga tatu area

Figure 5A, B & C; The old air strip in Maswa Game Reserve, the area used to be an open grassland area. Currently have been invaded by Acacia drepanolobium as shown in figure one above.

Figure 6: The road passing close to old air strip, on roadside is Acacia drepanolobium encroachment.

Figure 7: Encroached grassland area in Semu area, the area has been named after a seasonal river close to this grassland area which has been encroached by Acacia drepanolobium.

Figure 8: Road passing close to Semu area, roadside habitat has been encroached by Acacia drepanolobium

Figure 9A: Accommodation in Maswa Game Reserve, A tented camp in Mbono camp site.

Figure 9B: Accommodation in Maswa Game Reserve, A tented camp in Mbono camp site.

Figure 10: Soon after our vehicle arrived at the Mbono camp site from Arusha (on day one i.e. 13th /03/2018.

Figure 11A & B: Our vehicle got stack in a mud site of Sakasaka short plains/grassland due to rainfall, as we were travelling from Maswa Game Reserve to villages to talk with livestock keepers. 16th /03/2018

Figure 12: A tractor had to come, so as to pull our vehicle out of the mud site.

Figure 13: Armed ranger, escorting my research team during field survey.

Figure14A, B &C; Normal woodland vegetation structure of Maswa Game Reserve before Encroachment of Acacia drepanolobium.

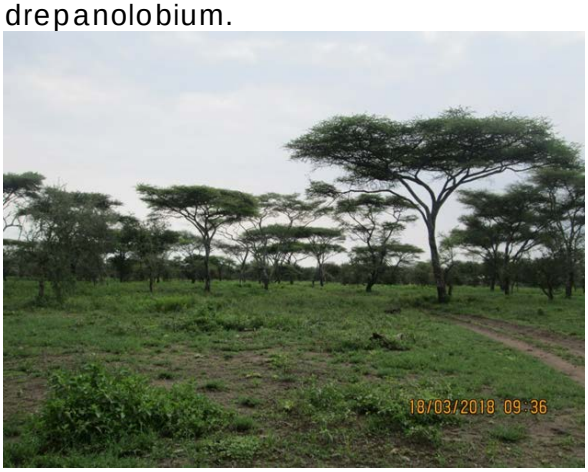

Figure 15: Acacia abyssinica debarked by Loxodonta Africana (African elephant)

Figure 16A & B: Normal woodland of Maswa Game Reserve

Figure17: Sign post of Maswa Game reserve, located at the boundary between Maswa Game Reserve and Serengeti National Park.

Figure 18: Encroached grassland at the border of Serengeti National Park and Maswa Game Reserve.

Figure 19A & B: Encroached grassland at the border area between Maswa Game Reserve and Serengeti National Park.

Figure 20A & B: Encroached grassland at the border area between Maswa Game Reserve and Serengeti National Park.

Figure 21: Acacia drepanolobium seedlings, found below the stem of Acacia tree during preliminary survey. This marks a very important stage of the research project, as before this survey no one observed Acacia drepanolobium seedlings below stem on encroached sites.

Figure 22: We found 72 seedlings of Acacia drepanolobium below a stem of single Acacia drepanolobium tree, in plot of diameter of three meters (3m).

Figure 23: The tallest seedling at a site, having 16 cm tall.

However we did not find seedlings of Acacia drepanolobium in other shrubs/trees of Acacia drepanolobium.

Figure 24: The shortest seedlings found at the site (the one on right hand side) having 3cm tall.