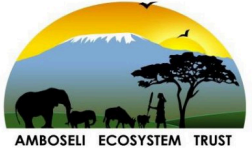




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CO-MANAGEMENT FOR LIVESTOCK AND WILDLIFE IN AMBOSELI, KENYA:

WEBINAR on Restoration and Sustainable Management of Rangelands

16th February 2021

Presented by: Lucy WARUINGI, lucy.waruingi@acc.or.ke

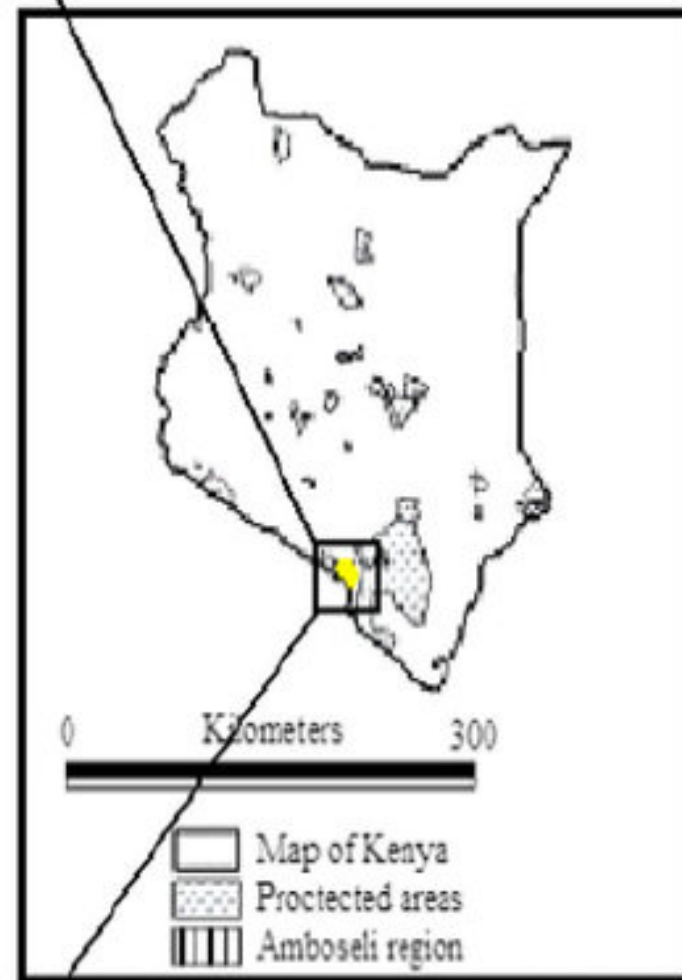
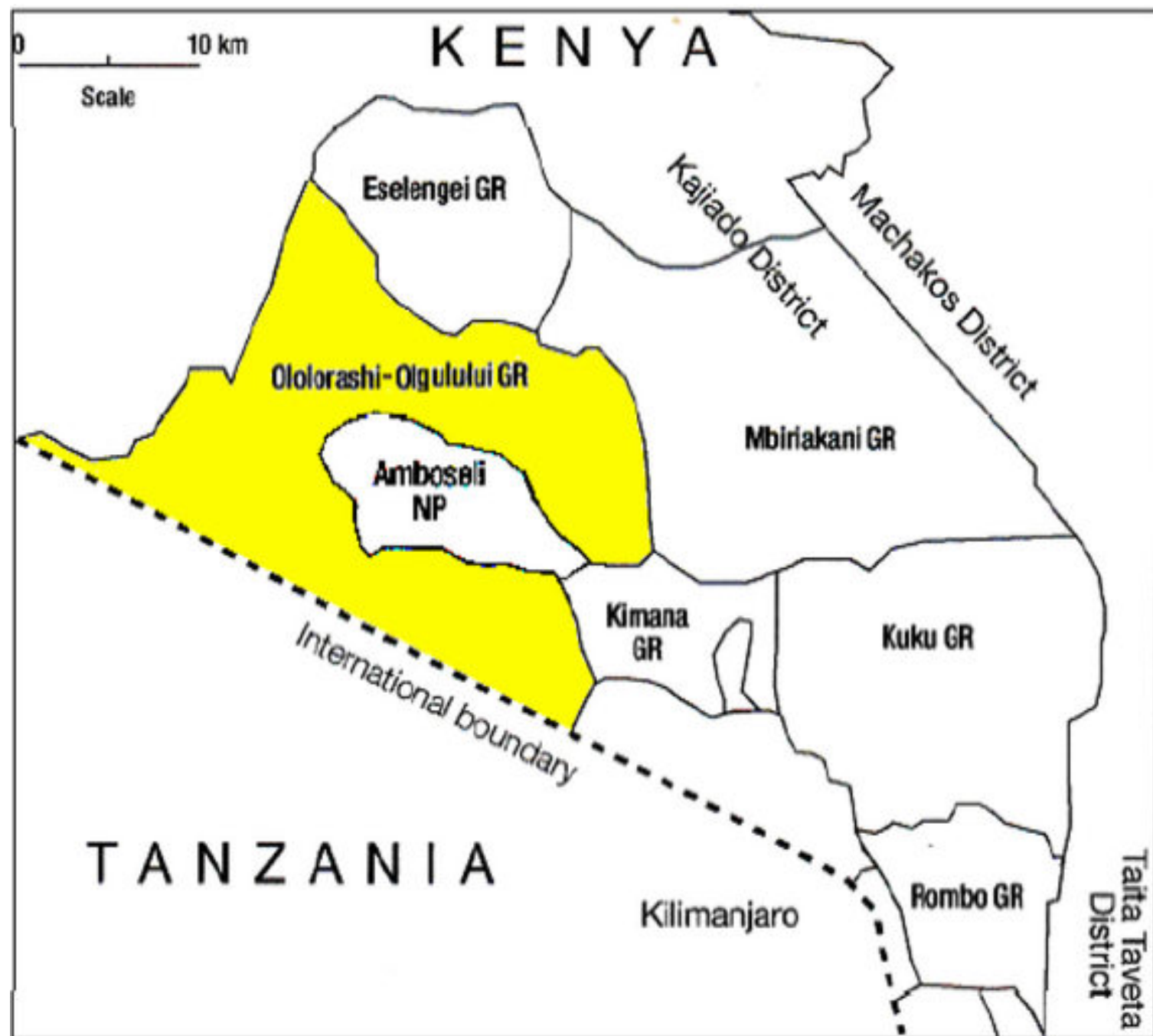
Executive Director, African Conservation Centre

Prepared by: *Lucy WARUINGI (ACC), Julius Muriuki (ACC), Jackson MWATO (AET), Victor Mose (ACP), Fridah Mueni (ACC).*



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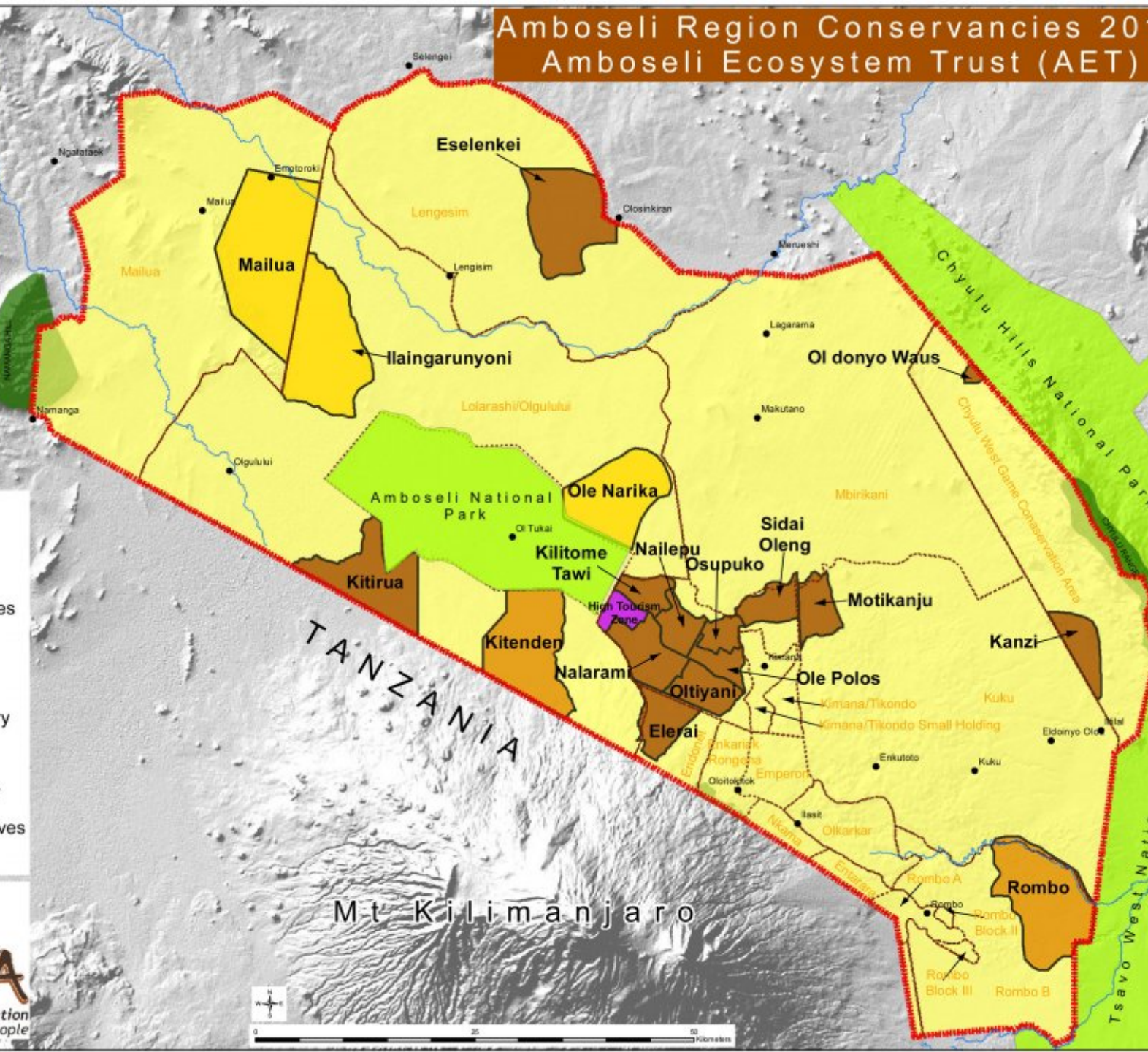


FACTS: KENYAN RANGELANDS

- In Kenya, 70% of wildlife lives outside protected areas and shares grazing lands and water sources with livestock. Kenya's population has also increased from 8 million in the 1960s to 47.2 million in 2016.
- The country's rangelands are currently home to almost one-third of its population, most of which consists of pastoral communities that practise extensive grazing.
- The livestock sector contributes around 12% to national Gross Domestic Product; tourism contributes about 10%.
- In the last 20 to 30 years, the privatisation of pastoral and communal lands has increased, which has led to changes in land use from grazing to agriculture or urban development.
- These changes, along with climate variability, are piling enormous pressure on both pastoralists, livestock and wildlife and the productivity of the rangelands.



Amboseli Region Conservancies 201 Amboseli Ecosystem Trust (AET)



AMBOSELI ECOSYSTEM

- Community-owned ranches serve as a critical connectivity and dispersal areas for wildlife movement to and from the Tsavo, the South Rift and Northern Tanzania conservation areas.
- Pressure from increased population, urbanization, overgrazing and competing land use options necessitates a sustainability strategy
- Threats are habitat loss, sedenterization, that affects mobility and increases grazing pressure



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AMBOSELI ECOSYSTEM

IMBIRIKANI AND OLUGULULUI OLOORASHI GROUP RANCHES

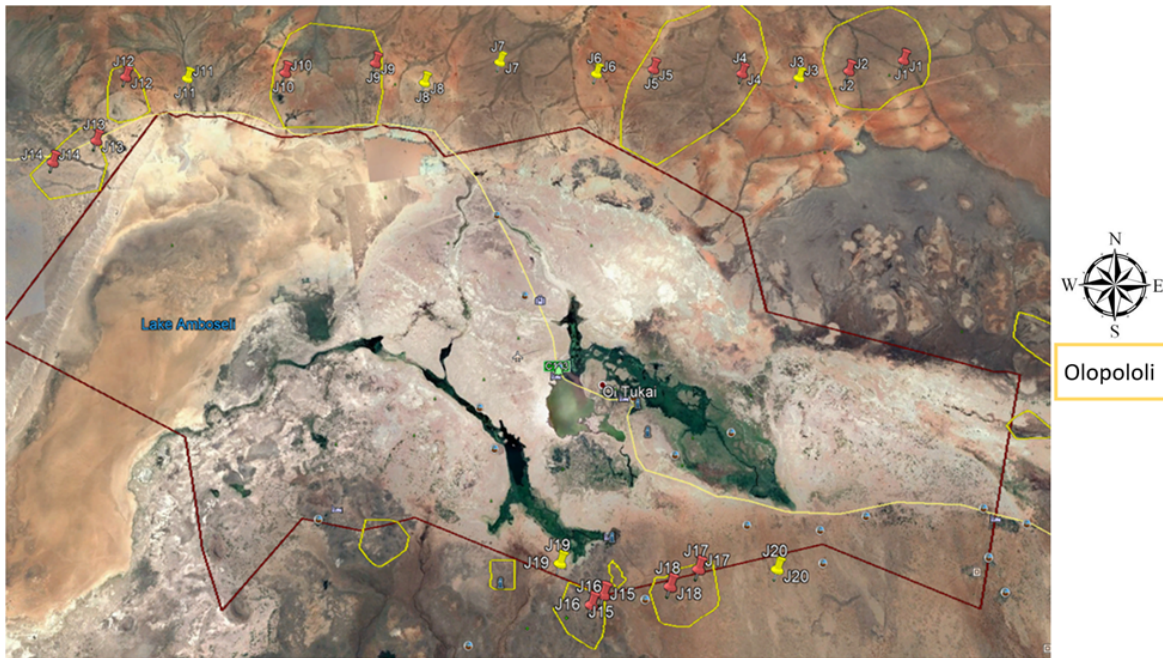
- The African Conservation Centre (ACC), Amboseli Ecosystem Trust (AET), Amboseli Conservation Program (ACP) with support initially from UNDP and recently from JUSTDIGGIT Foundation (JUSTDIGGIT) have been working together since 2015 to pilot restoration activities in the Amboseli Ecosystem
- ACC has been working in the Amboseli ecosystem for the last 3 decades promoting scientific research, conservation and livelihood programs by leveraging on cutting edge ecological research and community-based conservation practices that bring together the people and resources needed to sustain biodiversity.
- The pastoralist communities depend on what had become a degraded ecosystem to sustain their livelihoods, thus ecological restoration critically needed to address four elements, namely;
improve biodiversity conservation, improve human livelihoods, empower the local community and improve ecosystem productivity.





**PASTORAL COMMUNITIES DEPEND
ON THE LAND FOR THE LIVESTOCK**

ESTABLISHING RESTORATION PLOTS



4 plots in Amboseli National Park

11 Plots in OOCR

7 Plots in Imbirikani group ranch

All these cover over 15,000 hectares of restoration sites



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INTERVENTIONS / METHODS

- Olopololis /dry season exclosures
- Grass seed banks
- Vallerani
- Halfmoons/water bunds



MONITORING OF RESTORATION PLOTS

- Measuring grass productivity

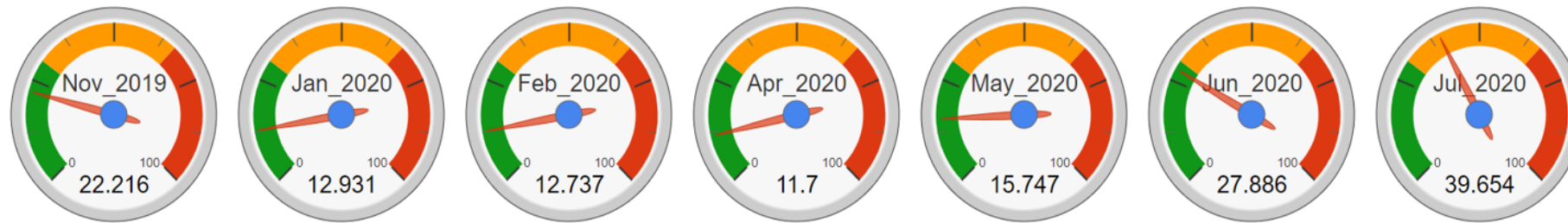


- Local Community Resource Assessors (RA's) are trained to undertake the vegetation monitoring on a monthly basis.
- They measure
 - Grass species composition
 - Grazing pressure
 - Milk yields from livestock
- The data is analysed by the ACC and the Amboseli conservation programme (ACP) provides graphic results used for feedback and to inform planning

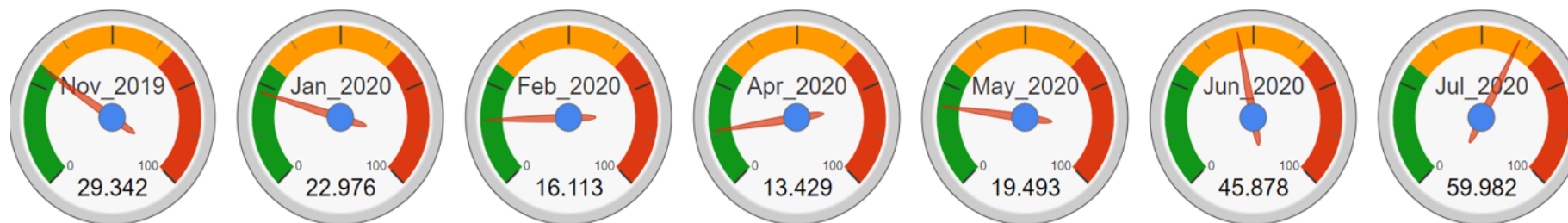


MEASURED IMPACT FROM RESTORATION — REDUCED GRAZING PRESSURE

Average grazing pressure (percentages) inside the grazing reserves



Average grazing pressure (percentages) outside the grazing reserves

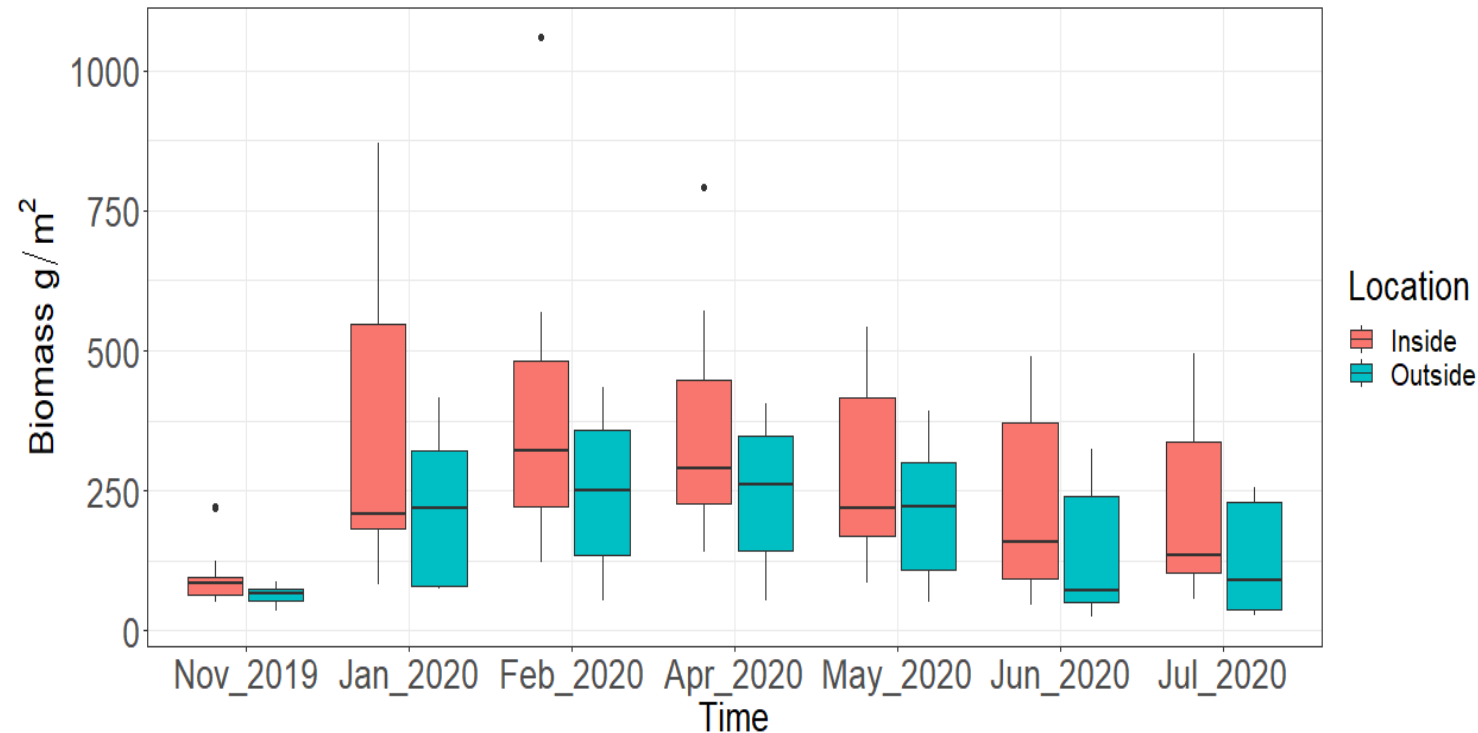


Estimated percentage cover for most plots inside the grass banks rose steadily from November 2019 to 100% in April. The cover for the inside and outside plots has now reduced by 20% and 30% respectively (Figure 3). The grazing pressure outside the olopololi documents the background levels across OGR.

Source: Amboseli Conservation Programme, 2020



MEASURED IMPACT FROM RESTORATION — IMPROVED BIOMASS



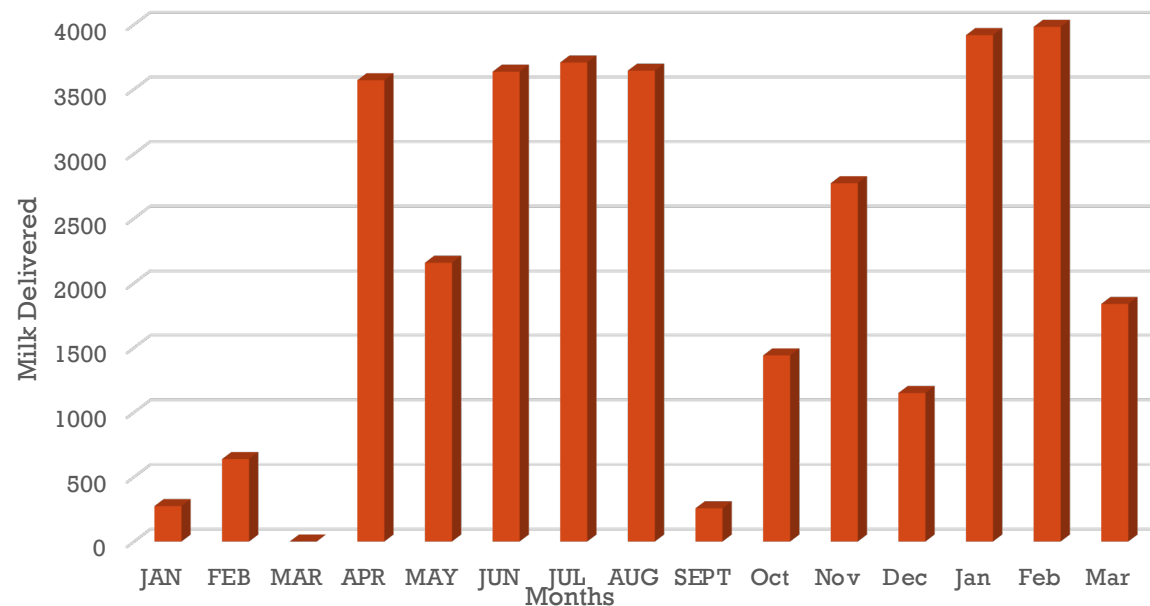
Boxplots for biomass estimates for inside and outside the selected grazing reserves (olopololi).

Source: Amboseli Conservation Programme, 2020



MEASURED IMPACT FROM RESTORATION — IMPROVED LIVELIHOODS/FOOD

Milk Delivery at Naropil Coop, Kimana



- Higher gross productivity led to increased milk sales (Data 2019/2020)
- The COVID outbreak negatively affected customers turn over in many hotels and restaurants all over Kenya, Kimana included, leading to less demand for milk from the cooperative ATM.

About 38 women and 26 men benefited from the sale of milk in the quarter with a liter buying at Kshs 45 , translating to a total of Kshs 438,210 in sales

Source: ACC, 2020



SUSTAINABILITY OF ACTIONS

- **RESTORATION** – ensures there are dry season grazing refuge areas for livestock and wildlife established around local cultural practices
- **MOBILITY** – The mobility of livestock and wildlife enables that grazing pressure on the grassland is reduced. Governance for managing grazing through grazing committees should be strengthened
- **PLANS** - The grazing plans developed by the group ranches are by far the most important strategy for restoring and sustaining healthy pastures. The subdivision of the group ranches considers all the aspirations of the local community namely: Settlement, grazing and wildlife conservation (through Conservancies)
- **LIVESTOCK VALUE CHAIN** - This should also be matched with a livestock sales program to keep stocking rates within bounds that maintain high weight gains and good body condition in livestock thus ensuring high market prices during the rains and early dry season, rather than the paltry prices from animals sold in poor condition late in the season.
- **SCALING UP** – establishment of thorn-fenced olopololi around the heavy grazed clusters of permanent settlements will provide the same value of improving rangeland condition and productivity.



THE TEAM



The team

- ☐ ACC
- ☐ AET

Partners

- ☐ KWS
- ☐ Community
- ☐ UNDP
- ☐ Justdiggit

THANK YOU



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