

Gendered and age – related priorities for food tree species to address food security, nutrition and livelihoods: participatory research in Kitui County, Kenya

Agnes Gachuiri, Ana Maria Paez-Valencia, Marlene Elias, Stepha McMullin

1. Background

- Food trees provide variety of nutrient dense foods and can be available year-round contributing to food and nutrition security
- Men, women & youth relate to trees differently hence difference in local knowledge and priority of food tree species for cultivation and use- This matters in research in development project
- Gender & generation differences are often neglected in research-in-development projects-hence less relevant results and low uptake
- To better understand the importance and adoption of these trees in local food systems, gendered and age-related farmer preferences and priorities for species were investigated in Kitui County , Kenya (Fig.1).

3. Results and Discussion

3.1 Food tree species diversity & knowledge

- A total of 49 food trees species were listed by participants, Fig.3.
- Knowledge on food tree species differed by **gender** and **age**,
 - Older women listed the greatest number of species with higher preference for indigenous food trees compared to male counterparts

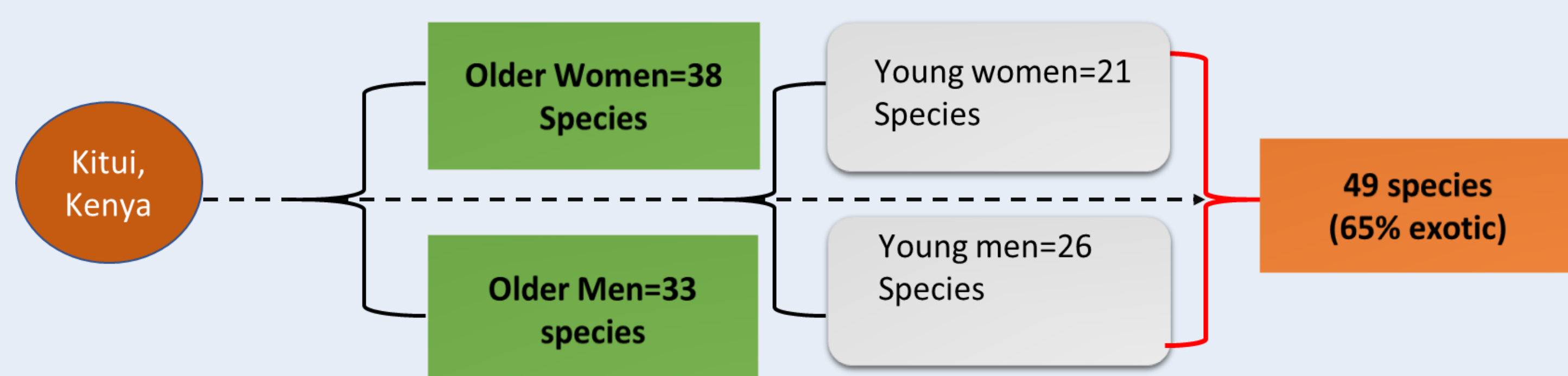


Figure 3: Food tree species diversity & knowledge.

3.2 Food tree species preference

- Older women preferred species such as *Syzygium cumini*, *Ximenia americana* *M. indica* & *C. papaya* which are sold for income only in small quantities (Table 1). Preference of indigenous trees by older women were by species use such as food, firewood and medicinal value, however, with little market value.
- Men prioritized food tree species such as *M. indica*, *P. americana*, *C. sinensis* because of their potential economic value and other uses (Table 1).
- Young women preferred species like *C. papaya* and *Passiflora edulis* due to ease of species establishment, fast growing and good market

2. Materials and Methods

Participatory research was conducted in four villages in Kitui (Fig. 1), with 80 community representatives, 40 women and men each in eight Focus group discussions (FGDs) Fig. 2(a).

- Seasonality calendars, Fig. 2(b) were used for interactive mapping of tree foods availability, and a pebble game was introduced to facilitate gendered and age-related discussions for preferences and priorities of food tree species and their functional uses.

Figure 1: Map showing the research areas in Kitui, Kenya and the agro-ecological zones.

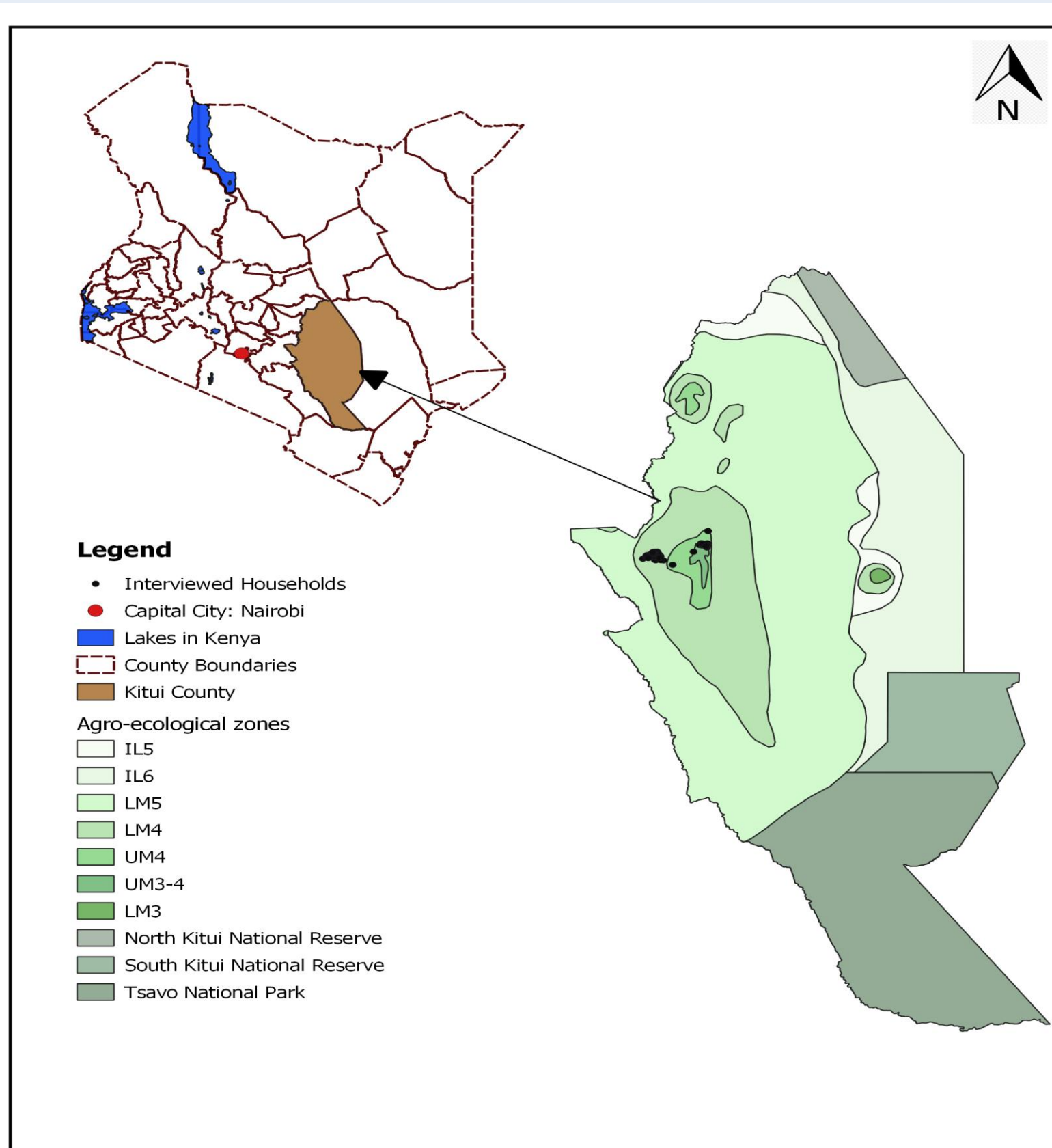


Figure 2: (a) Focus group discussions , (b) Interactive Seasonality calendar discussion.

Figure 4: Preference exotic species by both m in Kitui, Kenya.



3.3 Challenges

- Challenges faced by farmers in Kitui differed by **gender** and **age** (Fig.5)

Figure 5: Map showing the research areas in Kitui, Kenya and the agro-ecological zones.

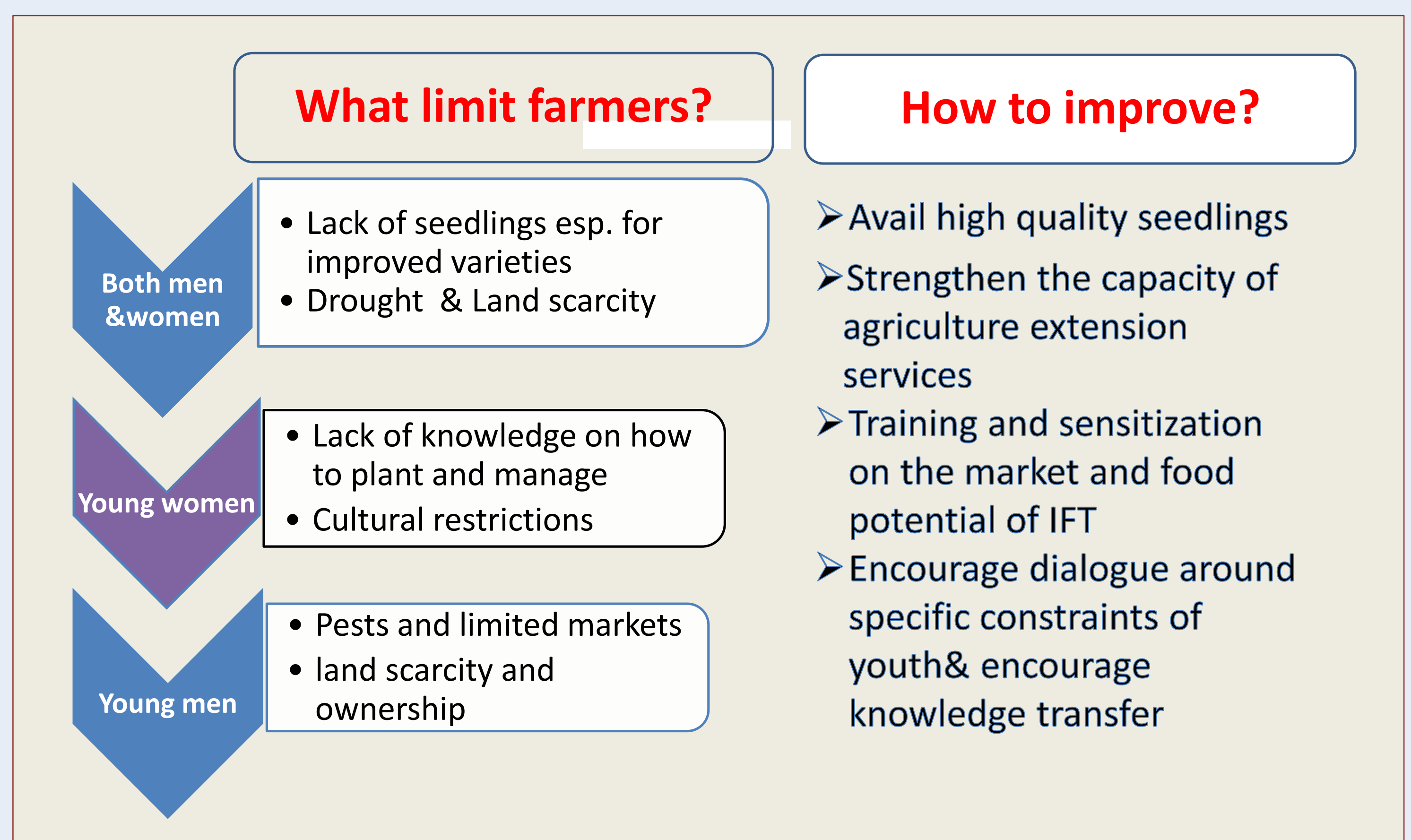


Table 1: Food tree species prioritization in Kitui, Kenya.

Scientific name	Common name	Old		Youth		Grand Total
		Female	Male	Female	Male	
<i>Mangifera indica</i>	Mango	7.9(2)	8.7 (1)	7.4(4)	7.8 (1)	7.8 (1)
<i>Persea americana</i>	Avocado	7.6(4)	7.9 (2)	6.9 (5)	7.3 (2)	7.4 (2)
<i>Citrus sinensis</i>	Orange	6.7(7)	6.7 (3)	5.9 (7)	7.0 (3)	6.6 (3)
<i>Carica papaya</i>	Pawpaw	7.8(3)	3.1 (18)	9.2(2)	6.6 (4)	6.4 (4)
<i>Citrus limon</i>	Lemon	6.1(10)	5.3 (7)	9.3(1)	6.3 (6)	6.4(4)
<i>Musa spp</i>	Banana	5.4(12)	5.4 (6)	6.9 (5)	6.1 (7)	5.9(5)
<i>Citrus tangerine</i>	Tangerine	5.1(15)		4.2 (14)	6.6 (4)	5.4(6)
<i>Casimiroa edulis</i>	White Sapote	6.5(9)	4.4 (11)	4.8 (10)	5.7 (9)	5.2(7)
<i>Ximenia americana*</i>	Ndula	7.9(2)	4.4 (11)		4.9 (12)	5.1(8)
<i>Azanza garckeana*</i>	Matoo	5.9(11)	4.6 (10)	5.2 (9)	4.8 (13)	5.0(9)
<i>Passiflora edulis</i>	Passion	3.3(19)		8.8(3)	4.4 (15)	5.0(9)
<i>Syzygium cumini*</i>	Zambarau	8.3(1)		2.9 (19)	5.7 (9)	5.0(9)

>>>>>Both men & women preferred; *M. indica*, *P.americana*, *C.sinensis*

4. Conclusions and Recommendations

- Diversity of fruits consumed by all group was high, however dominated by exotic fruit species.
 - Differences in knowledge and preferences are distinct not only across gender lines but also generational lines. Often determined by other gender and generational constraints, like cultural barriers to access land and gender roles related to children rearing and food provision
- Understanding men, women & youth preferences for food tree species and constraints is a prerequisite for the adoptability of any agroforestry approach and benefit all farmers .