

Project Update: November 2022

Activities conducted between September and November 2022 at project area, Zanzibar

1. Assessing local perception and knowledge of surrounding communities towards conservation of *P. kirkii* in Vundwe

To determine how local communities surrounding Vundwe island perceive *P. kirkii*, a total number of 100 respondents (50 from Uzi village and 50 from Uzi ng'ambwa village) were interviewed using the pre-tested structured questionnaire after obtaining their informed consent. Villagers from the communities around, local fishermen, tree loggers, farmers and students from secondary schools were interviewed face-to-face at the island and adjacent to it to assess the level of awareness regarding the conservation status of *P. kirkii* and threats affecting its conservation in Vundwe island and adjacent areas.



Figures 1-4: Enumerators interviewing villagers surrounding the Vundwe island.

Preliminary key findings

Table 1: Respondents occupation.

Village name	Respondents' occupations				Total
	fisherman	Farmers	Government employees	Others (informal)	
Uzi	20	18	7	5	50
Uzi ng'ambwa	25	21	3	1	50
Column total	45	39	10	6	100

The results showed that a high number of villagers from the adjacent villages (Uzi and Uzi ng'ambwa) are engaging in fishing (45%) and farming (39%). About 10% are employed by the government while 6% are engaging in informal economic activities and few were students (Table 1). Farming activities are taking place outside Vundwe while fishing activities are done along the shoreline of the island.

The results also showed that many villagers from Uzi and Uzi ng'ambwa were aware about *P. kirkii* which is locally known as "punju" (Fig 5). About 94% of from all villages responded that they know *P. kirkii* while a small number of villagers about 6% were not aware. Also, the respondents stated that they know *P. kirkii* as a vermin animal as they destroy crops such as cassava, banana and mangoes.

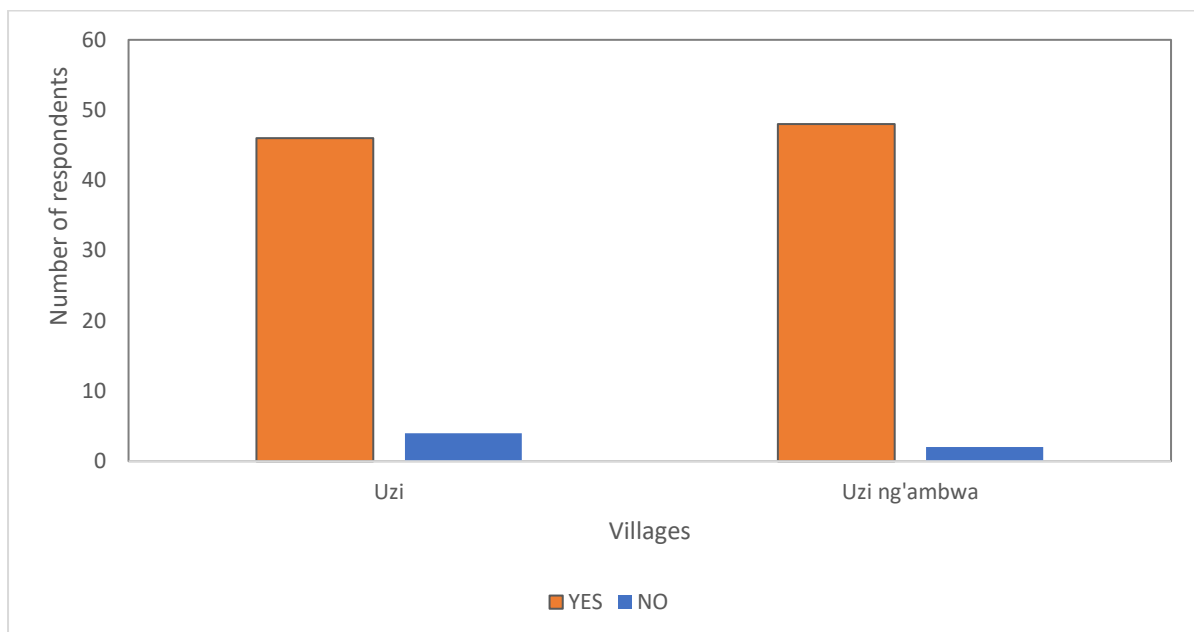


Figure 5: Awareness of respondents on *P. kirkii*.

It was also found that majority of villagers did not receive any conservation education either from government or private organizations (Fig 6). About 92% and 96% of respondents from Uzi and Uzi ng'ambwa respectively have not received any education or training on conservation and protection of *P. kirkii* while 8% and 4% of the respondents from Uzi and Uzi ng'ambwa respectively have at least received a conservation education. This could have contributed to the increase in anthropogenic activities which degrade natural habitat and affect conservation status of *P. kirkii* in the project area.

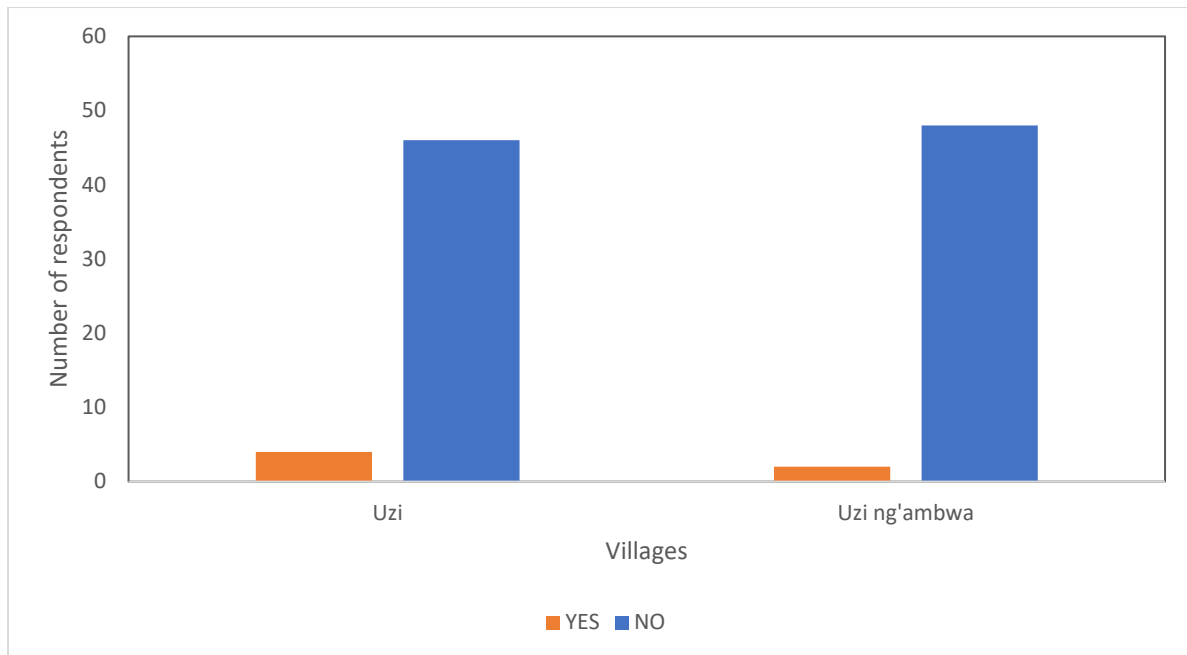


Figure 6: Respondents who received conservation education.

2. Human activities threatening the conservation of *P. kirkii* in Vundwe island and adjacent areas

During forest survey, walking transects, and circular plots were established in Vundwe island to assess the magnitude of deforestation in both thicket and mangrove forests (Fig 7 & 8).



Figures 7-8: The project team surveying the Vundwe island forest.

Preliminary key findings

The current situation in Vundwe and the adjacent Uzi Island regarding conservation of *P. kirkii* is becoming worse. So far, the team has observed very few groups of monkeys visiting Vundwe forest. The island which used to be a refuge for *P. kirkii* continue to be degraded due to increased human activities by the adjacent communities. The preliminary results show that deforestation for firewood, timber, logs and poles are major human activities threatening the existence of this species in Vundwe. It was observed that Mkole, Mjoma, Mtundu tundu, Mti wa vundwe and Mlapaa which are mainly used for furniture making, firewood, herbal medicine and

charcoal making are the most destructive (Table 2). Fresh stumps of various species were found in almost all areas with thickets and mangrove forests implying that villagers continue to cut down trees everyday as there is no control and management activities in the area.

Table 2: List of plant species mostly cut by villagers in Vundwe island.

S/N	Plant species name (local/Swahili)	Number of cutdown trees in each circular plot				Uses
		Plot 1	Plot 2	Plot 3	Plot 4	
1	Mkole	9	10	6	7	Furniture and hoes' hands
2	Mikururu	0	6	0	8	Timber
3	Mkaraga	0	11	0	7	Tea flavor
4	Mjoma	10	7	8	12	Firewood
5	Mtundu tundu	10	15	12	9	Herbal medicine
6	Mlapaa	5	10	7	12	Firewood
7	Majiti meupe	5	0	0	8	Firewood
8	Mnusi	0	12	0	12	Firewood
9	Mchengele dume	0	5	0	3	Firewood
10	Mnyuu	0	0	5	7	Furniture and firewood
11	Gorowezi	6	0	0	9	Firewood and herbal medicine
12	Mchokoo	10	0	0	10	Octopus fishing
13	Muumbuzi	0	2	0	4	Firewood
14	Mti wa vundwe	8	10	5	15	Firewood
15	Mchofu	8	0	9	0	Herbal medicine
16	Mgongo	7	0	9	8	Firewood and charcoal making
17	Mti miba	7	0	7	0	Firewood
18	Mdimu msitu	0	5	3	0	Herbal medicine
19	Mngombe	2	8	0	4	Furniture

NB: The trees are in local/Swahili names, but they will be changed to English or scientific names and reported in the final report.

Apart from other human activities that affects population size of *P. kirkii* in Vundwe island, the project also found that the population size of this species is affected by hunting activities. According to villagers who were interviewed on the hunting aspect, there are high number of *P. kirkii* which are killed using traps such as nets, snares as well as poison. They clearly pointed out that they contaminate banana and papaya which are exposed outside of the fields and in the forests so as to be raided by a group of *P. kirkii*. The commonly used poison materials go by the local names "lalawi" and "bomu" (we are still figuring out to see what the content of the poison is and how it is made). During survey, the team observed a dead body of *P. kirkii* (Figure 9) and according to local assistants the death was due to poison or thirst because Vundwe island doesn't have any source of fresh water to be used by the monkeys.

According to farmers, *P. kirkii* are hunted because they raid crops, mainly cassava, banana, coconut and pawpaw grown in Uzi and Uzi ng'ambwa villages located adjacent to Vundwe island. *P. kirkii* is also hunted by the surrounding communities it's because they source of food for the dogs. The team also observed that the level of raiding is high in fields located few meters from Vundwe and the reason being that

they are established within natural forests which are dwelling sites for *P. kirkii*. This has been contributed by uncontrolled expansion of crop fields to the forests and has forced farmers to use nets which interferes the movement of *P. kirkii* (Figure 10).



Figure 9: A carcass of *P. kirkii* encountered during survey in Vundwe island. **Figure 10:** & A field fence made by net which interferes the movement of by *P. kirkii* in Uzi village forest.

Conclusion

Due to severe deforestation and uncontrolled villagers' activities, the size of forest which has been used by *P. kirkii* as habitat and source of foods continue to shrink. To protect this endemic and flag ship species of Zanzibar from disappearing in their natural habitats, there should be an immediate effort to restore and conserve both the thickets and mangrove forests in Vundwe island. Also, the awareness and perception of local community surrounding the island need to be enhanced and positively changed through conservation education (this activity will be carried out by the project early January 2023).

Ongoing project activities

1. The team continue to assess the population size and distribution of *P. kirkii* in the project site as we aim at collecting information for both dry and rainy seasons.
2. Continue with detailed analysis of already collected data on awareness and perception of local communities surrounding Vundwe island on *P. kirkii* and its importance in tourism industry of Zanzibar.
3. Continue with analysis of already collected data on population size and distribution of *P. kirkii* as well as on possible human activities threatening conservation of *P. kirkii* in the project site.