

Project Update: March 2019

In 26 November 2018 I managed to get a research clearance from the Zvimba District Administrator. The second step was to develop a map of the district with the different farming activities, so as to guide the project data collection process.

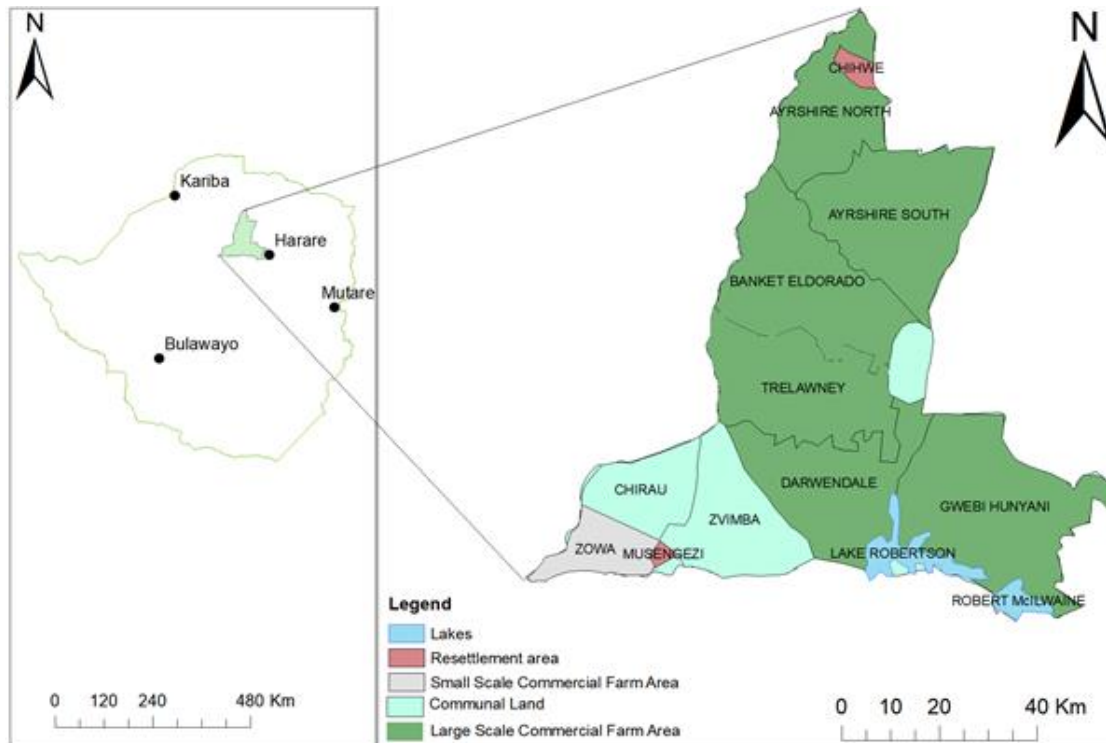


Figure 1: Study Map of Zvimba District Zimbabwe

I then established working relationships with 21 agricultural extension officers (agritex) and their supervisors to assist in collection of data throughout the project. I used a questionnaire survey to understand farming activities in the area, perceptions towards bees and establish levels of knowledge of people concerning pollinators. A total of 300 communal farmers in the district were interviewed.





Figure 2: Pictures of the questionnaire surveys.

Results from the survey

Table 1: Dominant crops, vegetables and fruit trees in Murombedzi district

Crops	Fruit trees	Vegetables
Maize	Mango	Green Leaf Vegetables
Sunflower	Guava	Onion
Groundnuts	Oranges	Tomatoes
Cowpeas	Apples	
Bottlegourd	Avocadoes	
Pumpkin	Mulberry	
Peanuts	Lemon	
Sweetrid	Bananas	

Most of the crops are insect pollinated.

Major cropping systems are monoculture and mixed farming. Monocultures were mainly for groundnuts, pea nuts and field beans which they reported did not perform well when mixed. Mixed farming was mainly maize combined with cow peas, sweet rid, pumpkin, bottlegourd and sometimes okra. Vegetables were grown in gardens close to water points and fruit trees were found in gardens and in their yards.

Knowledge of pollination/pollinators

In communal areas, a minimum of 40% of the farmers in each ward did not know about the process of pollination and its importance to their crops, which is a serious concern for the conservation of pollinators. When shown pictures of bee species, most identified the honey bee as the only bee species they knew.

Threats to bees

57% of the farmers were found to be using pesticides and of the 43% not using them, the major reasons were that they had no pest problem or they did not have money to buy the pesticides.

Table 2: Table of pesticides used by farmers

Pesticide	% of farmer using it
Cabaryl	22
Lambda	20
Superdash	13
Rogor	6.5
Belt	5.5
Ambligo	4.4
Malathion	3.3
Dimethoate	2.2
Amitaz	2.2
Acetamac	2.2
Diazinon	2.2
Acetamaprid	2.2
Ecoterex	2.2
Abamectia	2.2
Ridonii	1.1
Chloropyrifos	1.1
Mhemism	1.1
Mytac	1.1
Tetradifon	1.1
Larvin	1.1
Thiodan	1.1

Table of pesticides used by farmers

75% of the farmers sited veld fires, poor honey harvesting methods and deforestation as the major threat to bees in their area.

Greater population expressed fear of bees siting them as dangerous. Most who also sited lack of interest in bee keeping programs, major reason was fear and some women considered the task as a man's task.

Upcoming activities

Using information from baseline survey, we will design workshops to create awareness on pollinators, educate people on their benefits and threats towards them so as to encourage pollinator conservation.

Identify interested farmers to participate in siting bee hives in different landscapes to determine favourable cropping systems and landscapes.