

Project Update: April 2011

THE FACILITIES

Transport, accommodation and food are the main critical logistic factors which can hamper the quality of field research. In these pictures we present our field work facilities. Working with less than 6 volunteers we just use 4WD Isuzu bighorn vehicle. But when a large group of volunteers is present we are required to offer ford ranger double cab, which can either or not be combined with Isuzu. Field walks and data collection are based on GPSmap 76CSx of 3-5 meters resolution.

Lodging is based on tents camping in sites where there is not any local accommodation facility. But for many cases, such as in Gorongosa National Park, local lodging facility is present. The camping site might be a previous prepared location by the villagers or might be in a village leader yard, such you can see on the first picture. We are required to respect the household belongs, including the domestic animals which sometimes can interfere in our lives. In both cases we are required to pay a camping fee and maintain healthy relationship with the household members. During the night we don't use generator because of noise, which can disturb nocturnal wild animals feeding behaviour. Thus, to cross cut this issue we just post small lamps based on vehicle charge. Food is based on traditional plates of the area. You can see our cooker smiling for the fish. Also volunteers are asked to choose what they want to eat in the field and preparations are done before we quit the town. The same for drinking water which it must be purchased before we leave the town. Everyone is also required to wear green colours in the field.



WHAT DO YOU EXPECT FROM THE FIELD

This field research activity is raised up on the matter of elephant habitat loss and elephant numbers decrease. We hypothesized that integrated geodatabase can makes difference on conservation of elephant and its habitats. You will have to apologize us, we would like to make your field research beyond this field of view but limited time might constrain us. When you manage to come you will enjoy hinterland facts such as to understand elephant and habitat relationship. Sometimes is difficult and dangerous to map African elephant but using dung piles and other feeding signals-picture 1 you will be capable to understand the issue of elephant habitat preference. Habitat selection is mainly based on *Acacia* sp. *Colophospermum mopane*, *Adansonia digitata*, *Tamarindus indica*, *Dalbergia melanoxylon*, *Sclerocarya birrea*. Learning from villagers and Professional ecologists you will identify and map these range types using participatory approaches. We refer to this big mammal once it's key for the survivor of other small species such as *Aepyceros melampus* and numerous threatened and endangered species including wattled crane as it's shown on pictures 3 and 2. Wild animal's habitat preference in semi-arid rangelands is hampered by water availability particularly in dry season. This factor shape animal's home range and organization structure. On picture 1 African elephant prefers to browse and on picture 3 *Aepyceros melampus* prefer to graze on moistly areas. Soil water also influences on land use distribution which affects animal's habitat loss and feeding preference. Although we recognize that water is critical for wildlife and human we continue to ignore it giving more priority to money, which will never be eaten or drunk during the time of crises. Recognizing this conservation weakness we expose the volunteers to soil catena experiences as the best theory for land management expertise. Volunteers will learn soil sampling, mapping and differentiation accordingly to topography see the sequence of pictures 1,2,3,4. What these photos mean? The sequence of these pictures represents topography and soil relationship which determine water availability, plants- animals-land uses distribution and land management tools. In high lands we find black or brown soils of less water availability and these areas are of trees browsed by elephant and human practice cassava agriculture. When down leveling we find marsh areas of high water table grazed by *Aepyceros melampus* and human do horticulture. Much profound topography water availability is not any issue so that areas are used for snorkelling. The pictures question YOU to which ecological threshold range forage varies in response to water availability. Given that variability what are the responses of different animal species, including elephant. Known the justification, to which extent our project can contributes to development and conservation of semi-arid rangelands of Mozambique and Africa. We are now answering these questions by activities below.

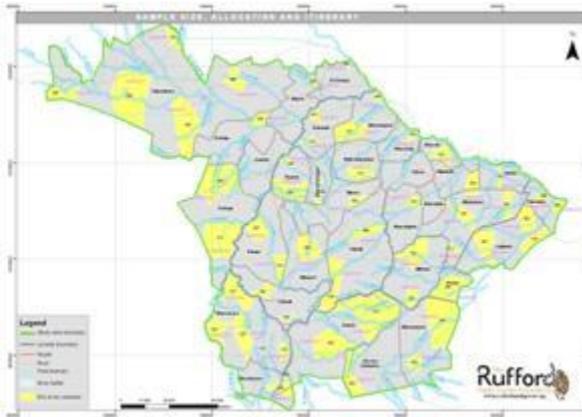




ON GOING ACTIVITIES

In a participatory mapping village leaders are contacted 2 days before the research team reaches the site. The village leader, first picture and the first man from right -Mr Sassequiza makes sure to contact villagers for the participatory meeting where man, women and children are present. In the participatory meeting the villagers are first explained on the objectives of the meeting. Second are explained on what the map drawn on flip chart represents. During this process also the facilitator ask the villagers if they know some of the references represented on the base map. Then each villager is requested to plot on the map the distribution of wild animals, elephant range land, land uses and land based livelihoods. In order to avoid misunderstanding of elephant range land type illustrative pictures on catalogue are shown to the villagers. After participatory mapping each household is given a kg of sugar to acknowledge the effort and stimulate next participations. Then they are registered including their names and main activities ranging from poachers, farmers, beekeepers, livestock keepers. Among the group the guiders are elected and correspond to someone who well knows the village. Due to time constrains, not all sites are visited to confirm the information. We visit the selected Enumeration Areas-EAs-yellow polygons on the sample map below, which are located using GPS. The EAs were delineated during the 2007 Census and are used basically for surveys. Enumeration Areas are of 80-100 households in rural areas and 100-150 households in urban areas. Because from 2007 to 2011 four years past and demographic changes are in the place, there is a need of updating the sample.





Thus, in each EA we first list all households, including their activities. Then, on below picture the enumerators are harmonizing the lists of households for randomly selection of 5 households for the interview. Each interview can later be located using the coordinates taken during the listing activity. After the interview, the interviewed person is requested to show his/her 2 main land uses from where the coordinates are taken and the soil samples are collected for laboratory analyses. Soil samples are also collected along different elephant range forage types within the enumeration area. We Acknowledge Rufford Small Grants by Funding this Project.