SITE SELECTION FOR AFRICA RISING: A SUMMARY OF ACTIVITIES AND OUTCOMES IN TANZANIA

Excerpt from the site selection report prepared for the International Food Policy Research Institute Christopher Legg

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Second Phase Site Selection- Action and Counterfactual Communities based on field work

In Babati District, wards were stratified by elevation and rainfall, then wards were selected in each ecozone based on cropping and population density. As many villages as possible in selected wards were visited by the project team, including the Consultant, the Project Manager and officials of the Ministry of Agriculture familiar with the District. Following field work, it was agreed that ward centre villages should be eliminated because they had unusually high concentrations of non-farming households. From the remaining villages, action sites chosen randomly based on the name of the village starting with the last letter of the alphabet in each ward. Potential counterfactual sites were selected randomly in wards adjacent to and with similar characteristics to the action sites

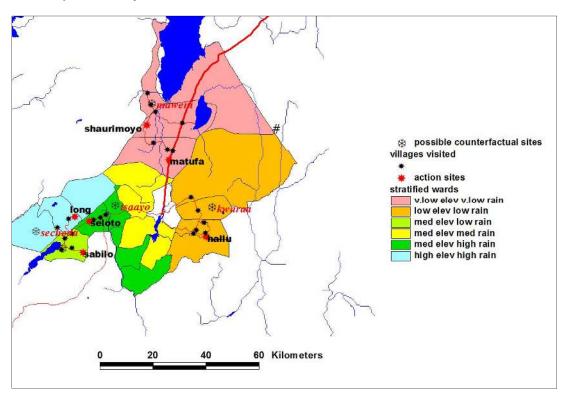


Figure 5.11. Selected Action and Counterfactual Sites in Babati District after fieldwork

As in Babati, wards in Kongwa and Kiteto District were stratified initially based on elevation and rainfall. At the request of USAID, action sites in these districts must correspond with villages targeted by the NAFAKA project. Villages within target wards in Kongwa District coinciding with NAFAKA sites were visited and action sites selected randomly where possible. Time did not permit visits to villages in Kiteto District, which were relatively remote with poor road access. Potential counterfactual sites were identified in wards adjacent and with similar characteristics to the action sites

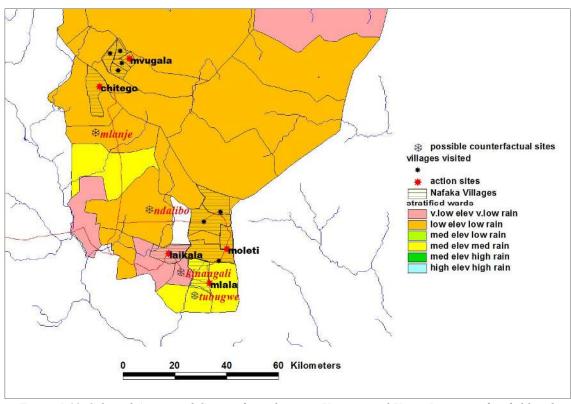


Figure 5.12. Selected Action and Counterfactual sites in Kongwa and Kiteto Districts after fieldwork

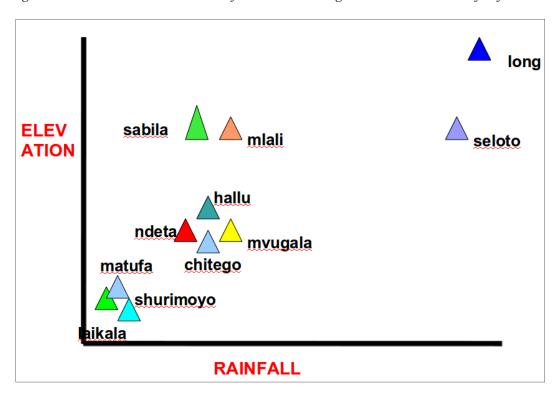


Figure 5.13. Elevation and Rainfall distribution of selected Action Sites in East Africa Maize-Legume-Livestock project area

Table 5.1. Classification Criteria for Stratification Parameters

Class	Population	Rainfall	Elevation	Slope	Access		
1	> 500	500-650	700 - 1000	< 1	< 300		
2	200 - 500	650 - 800	1000 - 1400	1 to 2	300 - 600		
3	100 - 200	800 - 950	1400 - 1800	2 to 5	> 600		
4	50 - 100	950 - 1100	1800 - 2200	> 5			
5	10 to 50						

Community	Ward	Ecozone	Cropsys	Elev	Rain	HH	PopD	TLU
shaurimoyo	mwada	v.low elev v.low rainfall	maize-rice	1018	786	698	68	7.11
matufa	magugu	v.low elev v.low rainfall	maize	1019	788	968	248	4.32
hallu	gallapo	low elev low rainfall	maize-legumes	1233	769	553	123	2.32
long	bashnet	high elev high rainfall	maize-legumes	2185	851	635	332	6.85
seloto	dareda	med elev high rainfall	maize-legumes	1644	845	1144	329	2.59
sabilo	dabil	med elev low rainfall	maize-legumes	1648	763	876	178	5.01
chitego	zoissa	low elev low rainfall	maize	1332	708	821	53	1.14
moleti	pandambili	low elev low rainfall	maize	1278	776	1489	107	0.42
mlali	mlali	med elev med rainfall	maize	1322	765	1624	283	1.54
laikala	sagala	low elev v.low rainfall	maize-sorghum	1176	722	984	97	0.02
mvugala	engusero	low elev low rainfall	maize	1523	673	830	63	0.06

Table 5.2. Selected Action communities in Babati, Kongwa and Kiteto Districts

Additional Phase Site Selection. Revision of Counterfactuals and Action Communities

Concern was expressed that suggested counterfactual (control) communities in the Tanzania project area, particularly in Babati District, were often too close to action communities, introducing danger of "contamination" of and "spill-over" into counterfactuals from work carried out in action sites. This problem could be partially addressed by locating control sites in wards further away from action sites, but still within Babati district, and partly by using communities in wards outside the district but with similar characteristics to the action sites.

Ideally, control sites should be as physically isolated as possible from action sites, with little interaction between the inhabitants of the two types of sites. If possible, the inhabitants should use different markets to minimise the sharing of agricultural produce, seeds and ideas. Since comparison of control and action sites forms the basis for evaluation of impact, lack of developmental progress in control sites will maximise apparent impact. In order for the M&E process to be credible, it is extremely important that insistence on physical isolation between action and control sites does not result in the selection of control sites with relatively poorer market access than action sites. This is the dilemma that we face in trying to select new and more isolated control sites in the Tanzania maize-legume-livestock project area.

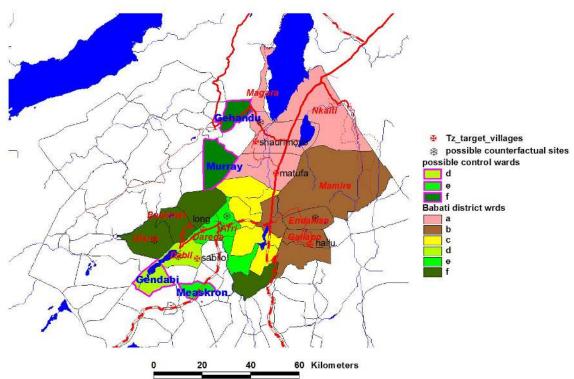


Figure 5.14. Revised action and counterfactual sites, Babati District

The map (Figure 5.14)shows the location of proposed action sites in Babati district, together with colour coding of the different agro-ecozones. The proposed action sites in Dabil and Derada wards represent two distinctly different zones. Both are at medium elevation, at elevated portions within the Rift Valley resulting from volcanic activity within the Rift. Rainfall is significantly higher in Dareda and some adjoining wards than in Dabil. The latter is in a "rain-shadow" created by the huge mass of Mt. Hanang, while the former has enhanced rainfall on the windward side of the mountain. The available rainfall maps do not capture this feature. Rainfall maps are interpolations between relatively sparse long-term weather stations, and while the interpolation procedures incorporate models to allow for some orographic modification to rainfall, they do not model the very complex effects of the relationship between topography and prevailing rain-bearing wind direction. Field observations during recent visits to the area revealed these local differences, and suggest that the relatively high rainfall in Dareda continues along the main road southward from Dareda around the eastern flank of Hanang. The ward of Measkron (Hanang District), on the main road east of Mt. Hanang, is suggested as a possible analogue to Dareda, suitable for a control site. Even though this is some distance from Dareda, the main regional market will still be Babati town. It seems likely that the Ward Gendabi (Hanang District), west of Hanang and on the southern shores of Lake Balangida, has similar characteristics to Dabil, except that market access is poorer. A village in this ward could be a suitable control for the Sabilo action site in Dabil, since contact between the two wards is very restricted by the extreme topography along the Balangida lake-shore.

The proposed action community of Long in Bashinet ward, represents a very specific agro-ecology in the highland plateau west of the main Rift Valley. The wards of Murray and Gehandu in Mbulu district have similar agro-ecological characteristics as well as similar cropping systems, although the current access status is not clear. A control site could be located here, but access would have to be checked by a field visit.

Three other action sites could probably be monitored by counterfactual sites within Babati district, but more physically separated from them than the originally suggested sites. Hallu village in Gallapo ward has analogues in Mamire ward further north than the originally suggested control site. Mamire village itself is probably not suitable, but other villages further east in this ward might be better. They still use Babati town market, but otherwise physical contact between the communities is probably rare, since both use different roads to get to market. The two action communities in the northern part of Babati district, Shaurimoyo and Matufa, could probably be covered by a single

control community. In place of the community suggested in Magera ward, a village close to the main road could be selected in Nkaiti ward, where access would be similar to the action sites, and climate and soils comparable.

In Kongwa and Kiteto districts, selection of counterfactual communities is not as constrained as in Babati. The topography and climate is more uniform, and large areas show very similar characteristics. It is suggested that sites should be selected randomly, constrained only by market access to ensure similar development possibilities.