RESEARCH PROGRAM ON Livestock

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More meat, milk and eggs by and for the poor

2020 Report

Summary of Data on Community-based Breeding Programs (CBBP) Compiled in GeOC4SLiM

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ILRI INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

ICARDA Science for resilient livelihoods in dry areas

CIAT International Center for Tropical Agriculture Since 1967 Science to cultivate change

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

SLU

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1 General introduction of data structure

In Geoinformatics Options by Context for Sustainable Livestock Management (GeOC4SLiM), each Sustainable Livestock Management (SLiM) data have *two interrelated components*:

- The data stored in the format of Online Template for Sustainable Livestock Management Option-by-Context (SLiM OxC) (https://mel.cgiar.org/geoc/slim) (Le and Rischkowsky, 2019), which has six main parts: (1) data generators and sources (2) description of the implemented SLiM option, (3) perceived purposes and SLiM type, (4) geographic location and geo-referenced socio-ecological context, (5) specification of inputs and costs, (6) adoption and impacts.
- The GIS shape file of the SLiM implementation site

2 Overview of CBBP data on Ethiopian sites in this first version (version 1)

Sources used for CBBP data encoded using SLiM template (Excel):

- Descriptive information grasped from related literatures (reports, research articles). Citations and URLs of the used documents, as well as contact details of resource persons are presented in the multi-sheet data.
- Socio-ecological contextual variables (section 4.2) and land productivity indicators (section 4.3) retrieved from GeOC4SLiM's WebGIS database

Summary of data on Ethiopian CBBP sites compiled in GeOC4SLiM is shown in Table 1. Besides the data being accessible with URL links provided in the Table, the data can be queried in the GeOC4SLiM's WebGIS (https://mel.cgiar.org/geoc/webgis[1]).

[1] [1] When this link is not working it means that the domain is being under maintenance/improvement, and the temporary alternative link is https://mel.cgiar.org/slm/visualization

Table 2. Summary with URLs of data on Ethiopian CBBP sites, compiled in GeOC4SLiM (status in December 2020).

fCSET [1]	*CBBP site*	*District*	*Region*	*Targeted animal*	*Data complied using SLiM template*[2]	*GIS shape files of implementing site*[3]
RFC1	Alikozu	Sekota	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Azoliku_Setoka_Ethiopia_v1.xlsx	CBBP_Goats_Alikozu_Sekota.zip
	Baide	Konso	SNNP	Goats	GeOC4SLiM_CBBP_Goats_Baide_Konso_Ethiopia_v1.xlsx	CBBP_Goats_Baide_Konso.zip
	Bilagu	Sekota	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Bilagu_Sekota_Ethiopia_v1.xlsx	CBBP_Goats_Bilagu_Sekota.zip
	Dingur	Enderta	Tigray	Goats	GeOC4SLiM_CBBP_Goats_Dingur_Enderta_Ethiopia_v1.xlsx	CBBP_Goats_Dingur_CentralTigray.zip
RFC2	Arfaide	Konso	SNNP	Goats	GeOC4SLiM_CBBP_Goats_Arfaide_Konso_Ethiopia_v1.xlsx	CBBP_Goats_Arfaide_Konso.zip
	Mehal-Meda	Gera Midima Keya Gabriel	Amhara	Sheep	GeOC4SLiM_CBBP_Sheep_MehalMeda_GeraMidimaKeyaGabriel_Ethiopia_v1.xlsx	CBBP_Sheep_MehalMeda_GeraMidimaKeyaGabriel.zip
	Molale	Mama Midima Lalo	Amhara	Sheep	GeOC4SLiM_CBBP_Sheep_Molale_Mama Midima Lalo_Ethiopia_v1.xlsx	CBBP_Sheep_Molale_MamaMidimaLalo.zip
RFC3	Blaku	Zikuala	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Blaku_Zikuala_Ethiopia_v1.xlsx	CBBP_Goats_Blaku_NorthWollo.zip
	Masoya	Konso	SNNP	Goats	GeOC4SLiM_CBBP_Goats_Masoya_Konso_Ethiopia_v1.xlsx	CBBP_Goats_Masoya_Konso.zip
	Saziba	Sekota	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Saziba_Setoka_Ethiopia_v1.xlsx	CBBP_Goats_Saziba_Sekota.zip
	Workadivno	Sekota	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Workadivno_Setoka_Ethiopia_v1.xlsx	CBBP_Goats_Workadivno_Sekota.zip
RFC4	Bonta	Amibara	Afar	Sheep	GeOC4SLiM_CBBP_Sheep_Bonta_Amibara_Ethiopia_v1.xlsx	CBBP_Sheep_Bonta_Amibara.zip
	Addis-Mender	Sekota	Amhara	Goats	GeOC4SLiM_CBBP_Goats_Addis-Mender_Setoka_Ethiopia_v1.xlsx	CBBP_Goats_AddisMender_Sekota.zip
	Tabela-Kuchale	Konso	SNNP	Goats	GeOC4SLiM_CBBP_Goats_Tabela-Kuchale_Konso_Ethiopia_v1.xlsx	CBBP_Goats_TabelaKuchale_Konso.zip

[1] Quantitative characterization of fCSET in Rainfed Cropland can be found in Le and Rischkowsky (2020) (https://hdl.handle.net/20.500.11766/12597). The qualitative descriptions are as below:

RFC1: Rainfed cropland - Humid - High elevation - Good soil - Scattered trees - Medium livestock - Remote - Less populated- Very poor
RFC2: Rainfed cropland - Humid - High elevation - Good soil - Scattered trees - High livestock - Remote - Less populated - Very poor
RFC3: Rainfed cropland - Semi-arid - Medium elevation - Good soil - Scattered trees - Low livestock - Remote - Less populated - Very poor
RFC4: Rainfed cropland - Semi-arid - Low elevation - Medium soil - Sparse trees - Low livestock - Very remote - Sparse population - Very poor
RFC5: Rainfed cropland - Humid - Medium elevation - Medium soil - With trees - Medium livestock - Fairly remote - Populated – Poor
RFC6: Rainfed cropland - Dry sub-humid - High elevation - Good soil - Sparse tree - Medium livestock - Near towns - Highly populated - Very poor

[2] File name syntax: GeOC4SLiM_CBBP_<annimal>_<site name>_<district name>_Ethiopia_v1.xlsx

[3] File name syntax: CBBP_<annimal>_<site name>_<district name>.zip

3 Follow-up improvement

The current version of the reported data is needed to be improve on the following aspects:

- Completion of relevant information in Part 4 (section 4.4) and Part 5 with additional sources from projects/programs implemented in the sites
- Completion of relevant information in Part 6 through expert-based scoring for the multi-criteria impacts
- Adjustment and mapping relevant polygon of the implementation sites.

References

Le, Q.B., Rischkowsky, B.A., 2020. Pilot Application of GeOC4SLiM to Identify Potential Areas for Outscaling Community-based Breeding Programs (CBBP) for Small Ruminants in Ethiopia and Kenya. Progress report. International Center for Agricultural Research in the Dry Areas (ICARDA), Cairo, Egypt.