International census tables and GIS data

## **Zoom Logistics**

- Webinar is being recorded & will be posted
- Close captions are being auto-generated
  - Turn on/off with "CC" button in Zoom controls
- Zoom questions: Direct to host (IPUMS) in chat
- IHGIS questions: Submit in Q&A
- Written Q&A will be posted



# Agenda

- Project background
- Getting data
- Working with IHGIS data



### What is IHGIS?

#### Data collection

- Population and housing and agricultural census data
- Data from published tables
- GIS boundary files

#### Cuadro 2: PARAGUAY. PUEBLOS INDÍGENAS

Población por departamento, según familia lingüística y pueblo indígena, 2012

Familia lingüística	Pueblo Indígena	TOTAL	Concepción	San Pedro	Guairá	Caa
	TOTAL	112.848	3.998	3.572	1.221	
1. GUARANÍ	Guaraní Occidental	2.379	0	167	0	
	Aché	1.942	0	0	0	
	Ava Guaraní	17.697	142	1.524	0	
	Mbya	21.422	1.507	1.273	1.221	
	Paĩ Tavyterã	15.097	1.869	391	0	
	Guaraní Ñandéva	2.393	0	0	0	
2. LENGUA	Toba Maskoy	2.817	0	0	0	
MASKOY	Enlhet Norte	8.632	0	0	0	
	Enxet Sur	5.740	381	0	0	
	Sanapaná	2.833	0	0	0	
	Angaité	6.638	13	0	0	П
	Guaná	86	86	0	0	
3. MATACO	Nivaclé	16.350	0	0	0	
MATAGUAYO	Maká	1.892	0	0	0	
	Manjui	385	0	0	0	
4. ZAMUCO	Ayoreo	2.481	0	0	0	
	Ybytoso	1.824	0	0	0	
	Tomárãho	183	0	0	0	
5. GUAICURU	Qom	2.057	0	217	0	

Fuente: STP/DGEEC. III Censo Nacional de Población y Viviendas para Pueblos Indígenas 2012

#### Table 1.8: Total Population by Broad Age Groups and Ethnicity, Zimbabwe 2012 Census

y Central

		Age Gro	up			
Ethnic Origin	0 - 14	15 - 49	50-64	65+	Not Stated	Total
African	5351019	6239820	848450	522376	18355	12980020
European	4452	10994	6424	6521	341	28732
Asiatic	1857	5330	1865	977	126	10155
Mixed Race	5375	8745	2469	1300	34	17923
Other	222	524	197	134	7	1084
Not Stated	9356	4263	510	396	8800	23325
Total	5372281	6269676	859915	531704	27663	13061239

Table 1.9: Urban Population by Broad Age G

Ethnicity, Z	imbabwe	e 2012 Ce	nsus		
Ethnicity	0 - 14	15 - 49	50-64	65+	
African	34.2	62.3	5.3	2.0	
European	0.1	0.3	0.1	0.1	
Asiatic	*	0.2	*	*	
Mixed Race	0.1	0.2	0.1	*	
Other	*	*	*	*	
Not Stated	0.1	*	*	*	
Total	34.5	63.0	5.5	2.2	

Table 1.10: Rural Population by Broad Age G 2012 Census

Ethnicity	0 - 14	15 - 49	50-64	65+	
African	44.4	50.5	7.1	5	_
European	23	62.2	21.7	14.4	
Asiatic	19.6	76.6	16.3	3.6	
Mixed Race	40.9	52.9	11.2	6.1	
Other	23.5	58.6	16.4	17.2	
Not Stated	42.4	19.1	2.2	1.9	
Total	44.4	50.5	7.1	5	



Paraguay



### What is IHGIS?

### Data access system

- Browse & select available data
- Download customized datasets

**FREE DATA!** 







**Tabular Data** 

Microdata

International





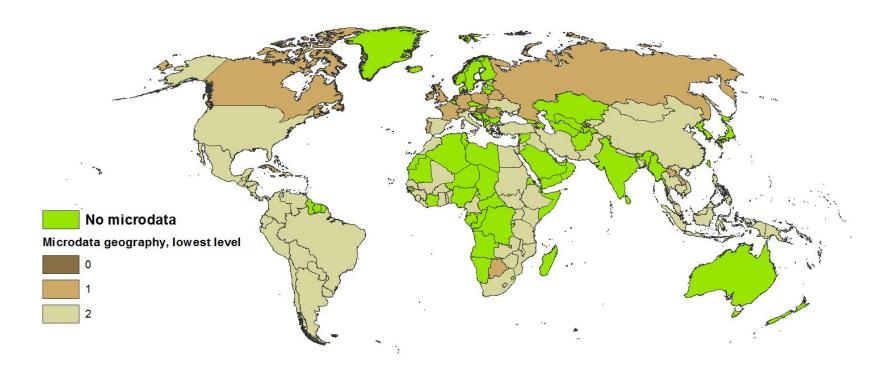
U.S.







# Filling in the map

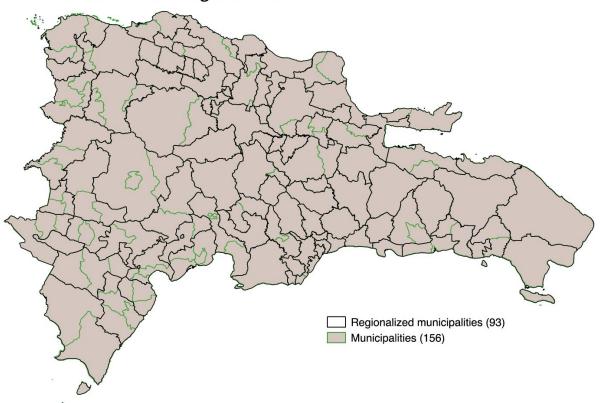




Geographic identifiers provided with microdata restricted to minimum population threshold to maintain confidentiality

Dominican Republic 2010 Second Level Regionalization







# Currently available data

30 datasets - Nearly 1,500 tables

Europe **Africa** Albania Algeria Belgium Angola Estonia Madagascar Finland Mozambique Hungary Namibia Latvia Niger Poland Togo **Tunisia** Uganda

Asia & Middle East

China Japan

Kazakhstan Sri Lanka

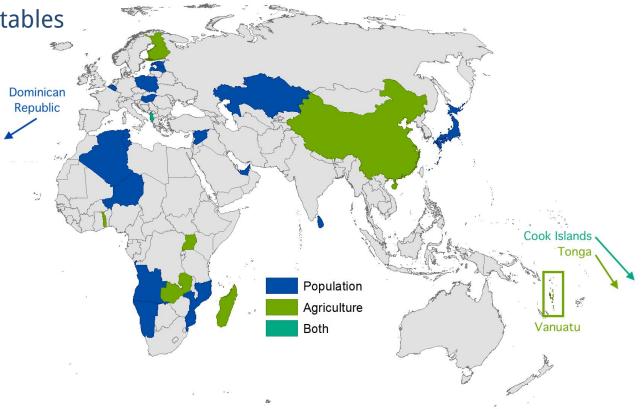
Syria UAE Island Nations

Cook Islands

Dominican Republic

Tonga Vanuatu

Zambia





### **Published Data Tables**

Zimbabwe Chapter 1 Population s

Table 1.8: Total Population by Broad Age Groups and Ethnicity, Zimbabwe 2012 Census

		Age Gro	up			
Ethnic Origin	0 - 14	15 - 49	50-64	65+	Not Stated	
African	5351019	6239820	848450	522376	18355	
European	4452	10994	6424	6521	341	
Asiatic	1857	5330	1865	977	126	
Mixed Race	5375	8745	2469	1300	34	
Other	222	524	197	134		_
Not Stated	9356	4263	510	396	880	
Total	5372281	6269676	859915	531704	2766	

Table 1.9: Urban Population by Broad Age Groups and Ethnicity, Zimbabwe 2012 Census

Ethnicity	0 - 14	15 - 49	50-64	65+	Not Stated	Total
African	34.2	62.3	5.3	2.0	0.1	98.6
European	0.1	0.3	0.1	0.1	*	0.6
Asiatic	*	0.2	*	*	*	0.2
Mixed Race	0.1	0.2	0.1	*		0.4
Other	*		*		*	
Not Stated	0.1	*	*	*	0.1	0.2
Total	34.5	63.0	5.5	2.2	0.2	100.0

Table 1.10: Rural Population by Broad Age Groups and Ethnicity, Z 2012 Census

Ethnicity	0 - 14	15 - 49	50-64	65+	Not Stated	Total	Num
African	44.4	50.5	7.1	5	0.1	100	8752
European	23	62.2	21.7	14.4	0.4	100	4
Asiatic	19.6	76.6	16.3	3.6	0.2	100	
Mixed Race	40.9	52.9	11.2	6.1	0.1	100	2
Other	23.5	58.6	16.4	17.2	0.7	100	
Not Stated	42.4	19.1	2.2	1.9	36.6	100	15
Total	44.4	50.5	7.1	5	0.2	100	8775

Table 4.5 Highest Level of Education Completed by Province ( Aged 6 years and above)

	Population		Basic education	1				
Province/	aged 6+	None	Primary		Lower	secondary	Upper	secondary
Urban/Rural			Completed Not	completed C	ompleted	Not completed	Completed	Not completed
Vientiane Capital	626 952	8.9	15.4	20.1	10.3	10.2	15.1	5.3
Phongsaly	139 245	52.1	8.0	26.6	2.9	4.4	1.3	1.5
Luangnamtha	123 061	44.5	10.6	25.5	4.2	5.3	2.5	2.7
Oudomxay	218 922	41.5	11.0	31.7	3.7	5.2	1.8	1.9
Bokeo	121 699	38.6	12.4	29.9	4.6	5.5	2.6	2.5
Luangprabang	339 260	30.3	13.8	34.4	4.6	6.1	4.1	2.5
Huaphanh	231 778	32.1	13.2	36.5	3.9	7.5	1.2	2.1
Xayabury	293 120	18.1	30.5	26.9	7.2	7.2	2.9	2.8
Xiengkhuang	191 340	25.1	14.8	31.2	7.4	10.2	2.6	3.6
Vientiane	333 471	19.2	18.6	27.2	8.7	9.8	6.6	4.4

Familia lingüística	Pueblo Indigena	TOTAL	Concepción	San Pedro	Guairá	Caaguazú	Caazapá	Itapúa	Alto Paraná	Asunción y Central	Amambay	Canindeyú	Presidente Hayes	Boquerón	Alto Paraguay
	TOTAL	112.848	3.998	3.572	1.221	9.425	3.547	2.370	7.042	2.458	11.852	13.484	25.789	23.950	4.140
1. GUARANÍ	Guaraní Occidental	2.379	0	167	0	0	0	0	0	0	0	0	0	2.212	0
	Aché	1.942	0	0	0	269	450	0	172	0	0	1.051	0	0	0
	Ava Guaraní	17.697	142	1.524	0	946	0	0	5.061	379	197	9.448	0	0	0
	Mbya	21.422	1.507	1.273	1.221	8.210	3.097	2.338	1.642	331	0	1.803	0	0	0
	Paĩ Tavyterã	15.097	1.869	391	0	0	0	0	0	0	11.655	1.182	0	0	0
	Guaraní Ñandéva	2.393	0	0	0	0	0	0	0	0	0	0	0	2.393	0
2. LENGUA	Toba Maskoy	2.817	0	0	0	0	0	0	0	0	0	0	1.406	0	1.411
MASKOY	Enlhet Norte	8.632	0	0	0	0	0	0	0	0	0	0	4.289	4.343	0
	Enxet Sur	5.740	381	0	0	0	0	0	0	0	0	0	5.359	0	0
	Sanapaná	2.833	0	0	0	0	0	0	0	0	0	0	2.833	0	0
	Angaité	6.638	13	0	0	0	0	0	0	0	0	0	6.350	275	0
	Guaná	86	86	0	0	0	0	0	0	0	0	0	0	0	0
3. MATACO	Nivaclé	16.350	0	0	0	0	0	0	0	122	0	0	3.302	12.829	97
MATAGUAYO	Maká	1.892	0	0	0	0	0	32	167	1.283	0	0	410	0	0
	Manjui	385	0	0	0	0	0	0	0	0	0	0	0	385	0
4. ZAMUCO	Ayoreo	2.481	0	0	0	0	0	0	0	0	0	0	0	1.513	968
	Ybytoso	1.824	0	0	0	0	0	0	0	343	0	0	0	0	1.481
	Tomárãho	183	0	0	0	0	0	0	0	0	0	0	0	0	183
5. GUAICURU	Qom	2.057	0	217	0	0	0	0	0	0	0	0	1,840	0	0

STP/DGEEC. III Censo Nacional de Población y Viviendas para Pueblos Indígenas 2012.



### IHGIS Extract: Data Files

5.7

1.1

GISJOIN	g0	g1	AAG001	AAG002	AAG003	AAG004	AAG005	AAG006	AAG007	AAG008	AAG009	AAG010	AAG011	AAG012
LK05	Sri Lanka	Colombo	855142	3.8	7.4	11.6	8.2	10.2	1.8	15.1	10.9	6	19.8	5.3
LK07	Sri Lanka	Gampaha	756186	2	5.2	9	6.7	7.7	4.3	20.4	14.6	6.3	19.3	4.6
LK10	Sri Lanka	Kalutara	356837	1.5	5.7	8.2	5.8	7.7	13.4	16.8	10.3	6.4	19.3	4.9
LK11	Sri Lanka	Kandy	407554	1.5	7.3	7.5	4.5	8	18.3	13.2	7.2	7.2	20.3	5
LK16	Sri Lanka	Matale	156179	1.1	5.1	5.3	2.9	6	37.2	10.7	5.1	5.5	17.6	3.4
LK20	Sri Lanka	Nuwara Eliya	281546	0.7	3.3	2.6	2.2	5	47.7	5.2	3.6	3.5	21	5.2
LK06	Sri Lanka	Galle	318680	1.5	6	6.8	4.2	5.8	25.9	14.6	6.6	5	19.5	4.2
LK17	Sri Lanka	Matara	242175	1.4	6.4	4.9	3.8	5.2	32.8	13.7	6.1	5.9	17	2.8
LK08	Sri Lanka	Hambantota	164923	0.9	5.4	5.5	2.7	3.7	40	15	6	4.6	12.7	3.4
LK01	Sri Lanka	Ampara	162322	0.9	5.9	3.8	3	7.8	35.5	8.5	4.2	6	19.1	5.3
LK14	Sri Lanka	Kurunegala	514553	1.3	5.5	5.4	3.1	4.8	31.2	15.4	6.5	6.1	16.8	3.9
LK22	Sri Lanka	Puttalam	229425	1.2	4	3.9	2.8	5.6	20.9	17.1	6.9	7.2	25.9	4.3
LK02	Sri Lanka	Anuradhapura	285806	0.8	4.5	3.3	2.5	6.4	51.6	7.2	3.5	4	9.3	6.8
LK21	Sri Lanka	Polonnaruwa	137078	0.9	3.6	3	2	5.8	49.8	6.8	3.8	4.1	11.6	8.6
LK03	Sri Lanka	Badulla	294223	1	5	4.1	2.7	4.3	48.8	5.9	3.4	3.7	15.8	5.4
LK18	Sri Lanka	Moneragala	144600	0.7	3.9	3.2	2	3.8	59.1	5.7	3.4	4.1	10.1	4
LK23	Sri Lanka	Ratnapura	375365	0.9	3.9	5.6	2.3	G	ISJOIN g	0 1	g1		g2	AAL

5.3

3.7

Sri Lanka 2001 Percentage of employed population by major groups of occupation

Uganda 2002 Number of agricultural households with coffee by number of coffee plots operated by type of stand

258980

LK12

Sri Lanka Kegalle

<b>GISJOIN</b>	g0	g1	g2	AAL001	AAL002	AAL003	AAL004	AAL005	AAL006	AAL007
UG101	Uganda	uganda central	kalangala	3508	274	7.81	367	195	172	0
UG102	Uganda	uganda central	kampala	17560	293	1.67	681	396	248	37
UG103	Uganda	uganda central	kiboga	42265	2514	5.95	3198	1999	1181	18
UG104	Uganda	uganda central	luwero	82491	4235	5.13	7494	3720	3774	0
UG105	Uganda	uganda central	masaka	131565	23762	18.06	32927	18742	14029	156
UG106	Uganda	uganda central	mpigi	69893	4576	6.55	6445	3188	3245	12
UG107	Uganda	uganda central	mubende	123265	3849	3.12	4908	2904	2004	0
UG108	Uganda	uganda central	mukono	113041	5019	4.44	6532	2800	3714	18
UG109	Uganda	uganda central	nakasongola	22000	352	1.60	1325	501	824	0
UG110	Uganda	uganda central	rakai	72484	11495	15.86	14186	8602	5564	20



### IHGIS Extract: Codebook

### Human-readable summary

- Citation
- Datasets
- Tables

Population and Housing Census (PHC), 2002

Producer Agency:

Variables

Citation and Use of IHGIS Data Steven Manson, Tracy A. Kugler, Jonathan Schroeder, David Van Riper, Steven Ruggles. IPUMS International Historical Geographic Information System: Version 1 [dataset]. Minneapolis, MN: IPUMS, 2020, http://doi.org/10.18128/D120.V1 Datasets (see also ingis0007 tables.csv) Dataset: LK2001pop Country: Sri Lanka Dataset Year: Dataset Type: Population Census Source Publication Title: Census of Population and Housing 2001 Producer Agency: Department of Census and Statistics - Ministry of Finance and Planning Dataset: UG2002popag Country: Uganda Dataset Year: Dataset Type: Combined Population and Agricultural Census

Source Publication Title: Report on the Agricultural Module, Piggy-backed onto the

Uganda Bureau of Statistics

Tables (see also ingis0007 tables.csv and ingis0007 geog.csv) Percentage of employed population by major groups of occupation IHGIS code: LK2001pop.AAG Geog levels: Districts Employed population aged 10 years and over Universe: Number of agricultural households with coffee by number of coffee plots operated by type of stand IHGIS code: UG2002popag.AAL Geog levels: Nation, Regions, Districts Universe: Agricultural households January to June 2002 Footnote: Variables (see also ingis0007 datadict.csv) LK2001popAAG: Percentage of employed population by major groups of occupation GISJOIN: GIS join match code AAG001: Total AAG002: Legislators, senior officials and managers AAG003: Professionals AAG004: Technicians and associate professionals AAG005: Clerks AAG006: Service workers and shop and market sales AAG007: Skilled agricultural and fishery AAG008: Craft and related AAG009: Plant and machine operators and assemblers AAG010: Private business owners AAG011: Elementary occupations AAG012: Armed forces and workers reporting occupations unidentifiable or inadequate UG2002popagAAL: Number of agricultural households with coffee by number of coffee plots operated by type of stand GISJOIN: GIS join match code AAL001: Agricultural households AAL002: Agricultural households with coffee plots AAL003: Agricultural households with coffee plots [percent] AAL004: Coffee plots AAL005: Coffee plots: Pure stand AAL006: Coffee plots: Mixed stand AAL007: Coffee plots: Not specified (difference)



### IHGIS Extract: Metadata CSVs

#### **Tables**

dataset	table	dataset_table	title	table_num	table_universe	geog_levels	geog_level_labels	source_pub_eng	country	footnote_1
LK2001pop	AAG	LK2001pop.AAG	Percentage of employed population by major groups of occupation	7	Employed population aged 10 years and over	g1	Districts	Census of Population and Housing 2001	Sri Lanka	No.
UG2002popag	AAL	UG2002popag.AAL	Number of agricultural households with coffee by number of coffee plots	s 12	Agricultural households	g0; g1; g2	Nation; Regions; Districts	Report on the Agricultural Module, Piggy-b	oa Uganda	January to June 2002

### Geog levels

dataset	geog_level	geog_level_label
LK2001pop	g0	Nation
LK2001pop	g1	Districts
UG2002popag	g0	Nation
UG2002popag	g1	Regions
UG2002popag	g2	Districts

### Data dictionary (variables)

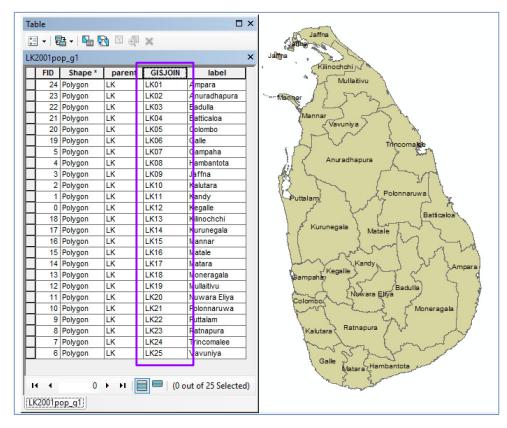
dataset	table	table_var	label	data_year	universe	agg_method
LK2001pop	AAG	GISJOIN	GIS join match code	2001		
LK2001pop	AAG	AAG001	Total	2001	Employed population aged 10 years and over	count
LK2001pop	AAG	AAG002	Legislators, senior officials and managers	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG003	Professionals	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG004	Technicians and associate professionals	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG005	Clerks	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG006	Service workers and shop and market sales	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG007	Skilled agricultural and fishery	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG008	Craft and related	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG009	Plant and machine operators and assemblers	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG010	Private business owners	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG011	Elementary occupations	2001	Employed population aged 10 years and over	percent
LK2001pop	AAG	AAG012	Armed forces and workers reporting occupations unio	2001	Employed population aged 10 years and over	percent
UG2002popag	AAL	GISJOIN	GIS join match code	2002		
UG2002popag	AAL	AAL001	Agricultural households	2002	Agricultural households	count
UG2002popag	AAL	AAL002	Agricultural households with coffee plots	2002	Agricultural households	count
UG2002popag	AAL	AAL003	Agricultural households with coffee plots [percent]	2002	Agricultural households	percent
UG2002popag	AAL	AAL004	Coffee plots	2002	Agricultural households	count
UG2002popag	AAL	AAL005	Coffee plots : Pure stand	2002	Agricultural households	count
UG2002popag	AAL	AAL006	Coffee plots : Mixed stand	2002	Agricultural households	count
UG2002popag	AAL	AAL007	Coffee plots : Not specified (difference)	2002	Agricultural households	count



# **IHGIS Linkable Shapefiles**

# GISJOIN links data table rows to polygons in shapefile

GISJOIN	gO	g1	AAG001	AAG002	AAG003	AAG004
LK01	Sri Lanka	Ampara	162322	0.9	5.9	3.8
LK02	Sri Lanka	Anuradhapur	285806	0.8	4.5	3.3
LK03	Sri Lanka	Badulla	294223	1	5	4.1
LK05	Sri Lanka	Colombo	855142	3.8	7.4	11.6
LK06	Sri Lanka	Galle	318680	1.5	6	6.8
LK07	Sri Lanka	Gampaha	756186	2	5.2	9
LK08	Sri Lanka	Hambantota	164923	0.9	5.4	5.5
LK10	Sri Lanka	Kalutara	356837	1.5	5.7	8.2
LK11	Sri Lanka	Kandy	407554	1.5	7.3	7.5
LK12	Sri Lanka	Kegalle	258980	1.1	5.7	5.3
LK14	Sri Lanka	Kurunegala	514553	1.3	5.5	5.4
LK16	Sri Lanka	Matale	156179	1.1	5.1	5.3
LK17	Sri Lanka	Matara	242175	1.4	6.4	4.9
LK18	Sri Lanka	Moneragala	144600	0.7	3.9	3.2
LK20	Sri Lanka	Nuwara Eliya	281546	0.7	3.3	2.6
LK21	Sri Lanka	Polonnaruwa	137078	0.9	3.6	3
LK22	Sri Lanka	Puttalam	229425	1.2	4	3.9
LK23	Sri Lanka	Ratnapura	375365	0.9	3.9	5.6





https://ihgis.ipums.org ipums@umn.edu

Funding provided by NSF Awards BCS-1738369 and BCS-2121891