



Food and Agriculture Organization  
of the United Nations



# Overview of RuLIS

## Rural Livelihoods Information System

A joint FAO – World Bank – IFAD initiative

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# Motivation

- Information on rural income and livelihoods are sparse and scarce
  - lack of a systematically organized data repository linking different aspects of rural livelihoods in support of decision making for reducing rural poverty
- Increased demand, also with the 2030 Sustainable Development Agenda
  - Need to design and implement policies that pursue the Sustainable Development Goals (SDGs), and monitor progress, notably on SDG indicators 2.3.1 and 2.3.2 (income and productivity of small scale food producers) and targets 5a (women access to land)
  - information required on rural poverty, smallholders (productivity and incomes), social protection, decent employment, migrations, sustainability, resilience; sex-disaggregated
- Household-level data not harmonized across-countries
- Household surveys under-utilized;
  - increases the visibility of available surveys,
  - reduces costs of using detailed data, by providing ready-to-use and customized indicators
  - guide the improvement of data availability and quality at national level

# Building on previous and ongoing projects

A number of projects aimed at gathering information on rural incomes and livelihoods:

- The **Rural Income generating activities** ([RIGA](#)): research on computing comparable income and employment variables from LSMS-type surveys
- The **Smallholder Data Portrait** ([SHDP](#)): research on rural transformation and smallholders and a set of indicators on small holder farmers
- The **Gender and Land Rights Database** ([GLRD](#)): Sex-disaggregated data on land ownership
- The **World Agriculture Watch** ([WAW](#)): documenting structural change; territorial indicators and typologies

# Key partners

## **FAO Strategic Program 3. on “Reducing rural poverty”**

*Data, knowledge and tools provided to promote and evaluate comprehensive, multi-sectoral poverty reduction policies and strategies, including in the context of migration and climate change, and monitor progress on rural poverty reduction*

## **Links to other projects of actual and potential partners**

- The Living Standards Measurement Study (LSMS)
- The Global Rural and Agricultural Integrated Surveys (GRAInS) Partnership

# How will RuLIS look like?

## Data: indicators and variables

- 116 ready-made indicators from household surveys
- 15 ready-made macro indicators from other sources (World Bank, FAO, UNDP)
- A section allowing customized indicators
- Access to bulk-download of indicators and 277 variables, when micro-data are publicly available

## different types of users:

- less experts (mostly indicators);
- intermediate (can use customized indicators)
- more expert (mostly variables)

## Research products – in the pipeline

- FAO, IFAD and World Bank papers and presentations
- A portal linking other projects
- Outlet of technical papers using the data

# Indicators in ten clusters:

- 1) Income and Productivity
- 2) Poverty and Inequality
- 3) Employment and Education
- 4) Social Protection
- 5) Land
- 6) Livestock
- 7) Inputs, Technology and Credit
- 8) Infrastructure and Services
- 9) Shocks and Migration
- 10) Sample Characteristics

# Cross-tabulation of indicators by “qualifiers”

Category	Qualifier	Description
Area	Urban	Based on national definitions
	Rural	
Participation in agriculture	Income from agriculture greater than 30%	Only for hhs involved in agriculture
	Income from agriculture lower than 30%	
	No income from agriculture	
Farm holding size	Small scale ag producers	Based on the definition adopted by the IAEG-SDG
	Non-small scale ag producers	
Sex	Only male adults in the household	Male for the individual-level data
	Only female adults in the household	Female for the individual level data
	Both male and female adults in the household	
Expenditure Quintiles	Quintile 1	Based on consumption expenditure
	Quintile 2	
	Quintile 3	
	Quintile 4	
	Quintile 5	

# Where do we stand?

- A pool of 57 surveys processed jointly by FAO and the World Bank
- Core-team and a technical consultation group
- Expert consultation (November 2016)
- List of indicators and template STATA and R script
- Peer-review (Cornell and Rome “Tor Vergata” Universities)
- Outliers detection and validation, in collaboration with Rome “Tor Vergata” University
- Validation with countries (ongoing)
- First batch of data ready for publication (December 2018)



# 57 Surveys – 38 countries, 28 LSMS, 17 -ISA

Armenia	Integrated Living Conditions Survey	2010	Mali	Enquête Agricole de conjoncture integree aux Conditions de Vie des Me	2014/15
Armenia	Integrated Living Conditions Survey	2013	Mexico	Encuesta Nacional de Ingresos y Gastos de los hogares	2014
Bangladesh	Household Income-Expenditure Survey	2010	Mongolia	Socioeconomic Survey	2014
Bolivia	Encuesta de los Hogares	2008	Mozambique	Inquérito sobre Orçamento Familiar	2008
Bulgaria	Multitopic Household Survey 2007	2007	Nepal	Nepal Living Standards Survey	2011
Burkina Faso	Enquete Multisectorielle Continue	2014/15	Nicaragua	Encuesta Nacional de Hogares sobre Mediación de Nivel de Vida	2014
Cambodia	Cambodia Socio-Economic Survey	2009	Niger	National Survey un Household Living Conditions and Agriculture	2011
Cameroon	Fourth Cameroon Household Survey	2014	Niger	National Survey un Household Living Conditions and Agriculture	2014
Cote d'Ivoire	Enquete Niveau de Vie des Menages 2008	2008	Nigeria	General Household Survey	2011/12
Ecuador	Encuesta sobre Condiciones de Vida	2006	Nigeria	General Household Survey	2015/16
Ecuador	Encuesta sobre Condiciones de Vida	2014	Pakistan	Pakistan Social and Living Standards Measurement Survey	2013-14
Ethiopia	Ethiopia Socioeconomic Survey	2013/14	Panama	Encuesta de Niveles de Vida 2008	2008
Ethiopia	Ethiopia Socioeconomic Survey	2014/15	Perù	Encuesta Nacional de Hogares	2014
Georgia	Integrated Household Survey	2013	Perù	Encuesta Nacional de Hogares	2010
Georgia	Integrated Household Survey	2015	Perù	Encuesta Nacional de Hogares	2015
Georgia	Integrated Household Survey	2014	Rwanda	Integrated Household Living Conditions Survey	2013
Ghana	Ghana Living Standards Survey	2012/13	Senegal	Enquête de Suivi de la Pauvreté au Sénégal	2011
Guatemala	Encuesta Nacional de Condiciones de Vida	2011	Serbia	Living Standards Measurement Survey	2007
Guatemala	Encuesta Nacional de Condiciones de Vida	2014	Sierra Leone	Integrated Household Survey 2011	2011
India	India Human Development Survey	2005	Tanzania	National Panel Survey	2012/13
India	India Human Development Survey	2012	Tanzania	National Panel Survey	2010/11
Iraq	The Iraq household socio-economic survey	2007	Tanzania	National Panel Survey	2008/09
Iraq	The Iraq household socio-economic survey	2012	Timor Leste	Living Standard measurement	2007/08
Kyrgyzstan	Integrated Sample Household Budget and Labor Sur	2013	Uganda	The Uganda National Panel Survey	2009/10
Kenya	Integrated Household Budget Survey	2005/2006	Uganda	The Uganda National Panel Survey	2010/11
Malawi	Second Interated Household Survey,	2004	Uganda	The Uganda National Panel Survey	2011/12
Malawi	Fourth Integrated household Survey	2013	Uganda	The Uganda National Panel Survey	2013/14
			Vietnam	Household Living Standards Survey	2010

# 1) Income and Productivity

- Agricultural income (livestock, crop, fishery, forestry, ag wage), share of total income (%)
- Non-agricultural income, share of total income (%)
- On-farm income (livestock, crop, fishery, forestry), share of total income (%)
- Median income from farm activities, PPP (constant 2011 international \$)
- Agricultural wage, share of total income (%)
- Average daily income per capita, PPP (constant 2011 international \$)
- Transfers (public and private) as a share of total income (%)
- Concentration index (Herfindahl) of total income (real number)
- Agricultural output per labour day, PPP (constant 2011 international \$)
- Value of agricultural production sold at the market, share of total value of agricultural production (%)
- Value of crop used for own consumption, share of total value of crop production (%)
- Value of production per hectare/year, PPP (constant 2011 international \$)
- Average annual income from agriculture, PPP (constant 2011 international \$)
- Average daily wage in agriculture, PPP (constant 2011 international \$)
- Low pay rate in agriculture (%)

## 2) Poverty and Inequality

- Engel's ratio (annual food expenditures over annual total expenditures) (%)
- Gini coefficient for per capita expenditure (real number)
- Working poor, share of total employment, ages 15 and above (%)
- Mean log deviation of income (real number)
- Per capita expenditure disparity between urban and rural areas, urban to rural ratio (real number)
- Per capita income disparity between urban and rural areas, urban to rural ratio (real number)
- Per capita expenditure disparity between households with and without emigrants, ratio of average total expenditure in the two groups (real number)

### 3) Employment and Education

- Employment in agriculture, ages 15+ (% of total employment)
- Employment in agriculture, ages 15-24 (% of total employment)
- Self-employed in agriculture, share of total employment in agriculture (%)
- Employees in agriculture, share of total employment in agriculture (%)
- Own-account and contributing family workers, share of total employment in agriculture (%)
- Children employed in agriculture, 5-11 years old (% of total children in employment, aged 5-11)
- Children employed in agriculture, 12-14 years old (% of total children in employment, aged 12-14)
- Children employed in agriculture, 15-17 years old (% of total children in employment, aged 15-17)
- NEET, youth neither in employment nor in education or vocational training, share of total youth ages 15-24 (%)
- Employment-to-population ratio, ages 15+ (%)
- Share of family labour input in total labour input for cropping activities (%)
- Share of female family labour input in total family labour input for cropping activities, ages 15+ (%)
- Share of hired non-family labour input in total labour input for cropping activities (%)
- Share of children input in total family labour input for cropping activities, ages lower than 15 (%)
- Adult literacy rate, ages 15+ (%)

## 4) Social Protection

- Average per capita transfer - International remittances (PPP constant 2011 int. \$), annual
- Average per capita transfer - Private domestic transfer (PPP constant 2011 int. \$), annual
- Average per capita transfer - Social assistance (PPP constant 2011 int. \$), annual
- Average per capita transfer - Social insurance per capita (PPP constant 2011 int. \$), annual
- Population receiving international remittances, share of total population (%)
- Population receiving domestic private transfers, share of total population (%)
- Population receiving social assistance, share of total population (%)
- Population receiving social insurance, share of total population (%)
- Share of international remittances in total income (%)
- Share of domestic private transfers in total income (%)
- Share of social assistance in total income (%)
- Share of social insurance in total income (%)

## 5) Land

- Average cropland (ha)
- Average arable land (ha)
- Average size of household farm (ha)
- Average cultivated land area (ha)
- Average permanent meadows and pastures (ha)
- Gini coefficient of cultivated land (real number)
- Land area owned, share of total farm area (%)
- Share of landowners in total population (%)
- Household land area owned by men only, share of household owned land (%)
- Household land area owned by women only, share of household owned land (%)
- Household land area owned jointly by women and men, share of household owned land (%)

## 6) Livestock

- Average tropical livestock units owned by farm households (TLU)
- Share of livestock farm households owning large ruminants (%)
- Share of livestock farm households owning equine (%)
- Share of livestock farm households owning small ruminants (%)
- Share of livestock farm households owning poultry (%)
- Share of livestock farm households owning pigs (%)
- Share of livestock farm households with at least one animal vaccinated (%)
- Share of livestock farm households covered by veterinarians or paraprofessionals (%)
- Landless livestock households, share of total livestock households (%)

## 7) Inputs, Technology and Credit

- Households using improved seeds, share of crop farm households (%)
- Households trained in use of improved inputs, share of crop farm households (%)
- Households using chemicals, share of crop farm households (%)
- Households using inorganic fertilizers, share of crop farm households (%)
- Households using agricultural mechanical equipment (owned or rented), share of total farm households (%)
- Households with access to agricultural production training or extension, share of total farm households (%)
- Crop farm households with irrigation systems, share of total crop farm households (%)
- Irrigated crop land, share of total crop land (%)
- Average amount of credit obtained by household over the year, PPP (constant international 2011 \$)



## 8) Infrastructure and Services

- Average annual household expenditures on energy, share of total annual expenditures (%)
- Population that lives more than 5 km from health facilities, share of total population (%)
- Population that lives more than 5 km from primary school, share of total population (%)
- Population that lives more than 5 km from secondary school, share of total population (%)
- Population with access to internet, share of total population (%)
- Population with access to mobile telephone, share of total population (%)
- Average number of rooms per person (real number)
- Percentage of population living in owned dwelling, share of total population (%)
- Percentage of population living in a dwelling with a non-dirt floor, share of total population (%)
- Percentage of population living in a dwelling with a solid roof, share of total population (%)
- Population with piped water access in the dwelling, share of total population (%)

## 9) Shocks and Migration

- Share of total households that experienced market shocks (%)
- Share of total households that experienced weather and geophysical shocks (%)
- Share of total households that experienced crop or livestock disease-related shocks (%)
- Households in which members' dietary patterns changed due to shocks, share of total households affected by shocks (%)
- Households in which members migrated due to shocks, share of total households affected by shocks (%)
- Households in which members took on more farm or non-farm (wage- or self-) employment due to shocks, share of total households affected by shocks (%)
  
- Households with emigrants who moved abroad for work-related reasons, share of total households with international emigrants (%)
- Households with emigrants who moved internally for work-related reasons, share of total households with internal emigrants (%)
- Share of total households with at least one foreign born member (%)
- Share of total households with emigrants who moved abroad (%)
- Share of total households with emigrants who moved internally (%)

## 10) Sample Characteristics

- Total number of households in the country (real number)
- Total number of households in the sample (real number)
- Households with male and female adults, share of total households (%)
- Households with only female adults, share of total households (%)
- Households with only male adults, share of total households (%)
- Females to male ratio in member-based organizations/groups (real number)
- Crop farm households, share of total farm households (%)
- Livestock farm households, share of total farm households (%)
- Small-scale food producers, share of total agricultural households (%)
- Non-small-scale food producers, share of total agricultural households (%)
- Households with no income from agriculture, share of total households (%)
- Households with income from agriculture smaller than 30% of their total income, share of total households (%)
- Households with income from agriculture equal to or greater than 30% of their total income, share of total households (%)
- Total number of individuals in the sample (real number)
- Communities with farm producers organizations, share of total communities (%)
- Communities with savings and credit groups, share of total communities (%)

# Other, non hh-survey based indicators (WDI, PovcalNet, UNDP, FAO)

## Income and Productivity

- Agriculture, forestry, and fishing, value added per worker (constant 2000 US\$)
- Agriculture, value added (percent of GDP)
- Agriculture, value added (annual % growth)

## Employment and Education

- Employment in agriculture (% of total employment)
- Mean years of schooling of adults (years)

## Poverty and Inequality

- Poverty gap at national poverty lines (%)
- Poverty headcount ratio at national poverty lines (% of population)
- Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)
- Poverty gap at \$1.90 a day (2011 PPP) (%)
- Poverty headcount ratio at \$3.20 a day (2011 PPP) (% of population)
- Poverty gap at \$3.20 a day (2011 PPP) (%)

## Land

- Adjusted savings: net forest depletion (% of GNI)

## Infrastructure and Services

- Households with access to electricity, share of total households (%)
- Population with access to improved sanitation, share of total population (%)

## Sample Characteristics

- Population (share of total population): by rural / urban

# Way forward

- A first product, ready to go public with 57 surveys (December 2018)
- Expand on poverty indicators
- Expand coverage (countries, surveys also from the past)
- Strengthen partnerships, especially at country level, to expand and further validate
- Enlarge and enhance the community of users/contributors



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Thank you