

FIS4SDGs: Engaging government and citizens with the SDGs

Linda Peters, Esri



United Nations
World Geospatial
Information Congress
联合国世界地理信息大会





Vision

GIS

Is Enabling a
Sustainable World

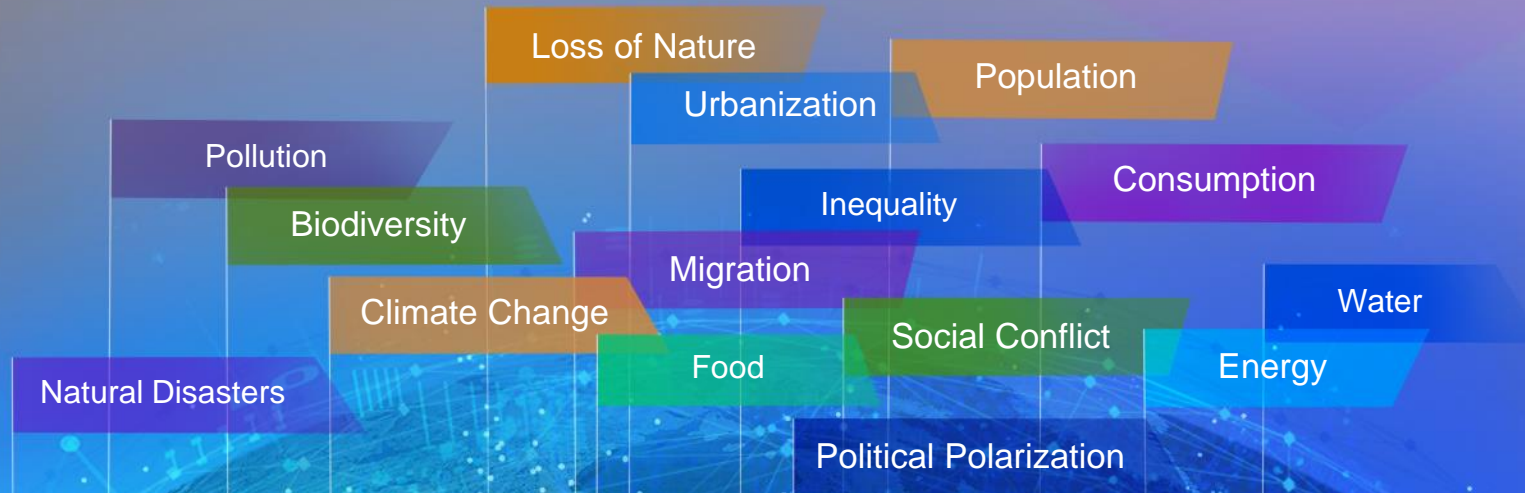
OUR WORLD

Is Increasingly Challenged

The Evidence Is Clear...

We Need *Better Understanding...*
...and More Collaboration

...and Action



OUR WORLD

*Is Undergoing a Massive
Digital Transformation*



GIS Provides a Platform

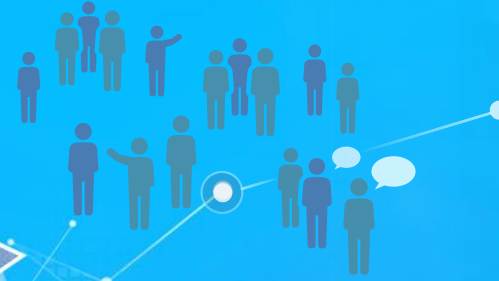
For Managing, Analyzing, and Applying
Geographic, Statistical & Imagery Information

Integrating People,
Processes, Things,
and Data About Them

System of
Record



System of
Engagement



System of
Insight



Using the Power of Where
to Integrate Everything



Information Systems are Becoming Distributed

A New Architecture Is Emerging

Enabling integrated
collaboration and
coordination

Dynamic
Systems-of-Systems



*Enabled by Portals . . .
. . . Abstracting Distributed Data and Analytics*

New Types of Data Collaborations Are Emerging

Connecting Individuals, Organizations and Communities



Individuals

Breaking Down
Barriers

Organizations

Sharing Geo-Statistical
Knowledge

**Networks of
Organizations**

... *Creating a Nervous System for People and Planet
and a Means to Measure and Monitor Progress...*

Web GIS Simplifies Working With All Types of Data

Using Web Maps, Scenes, and Layers

Creating
A Common Language

Apps

Distributed

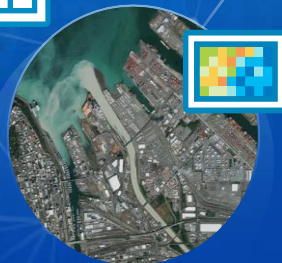
Portal



Map



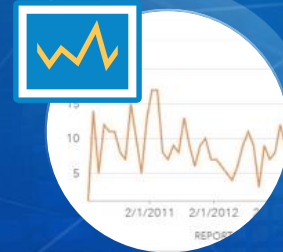
Tabular



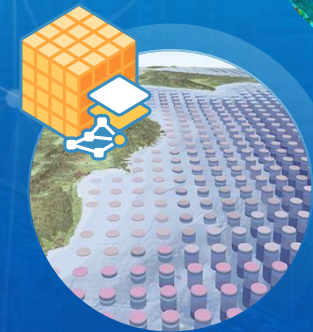
Imagery



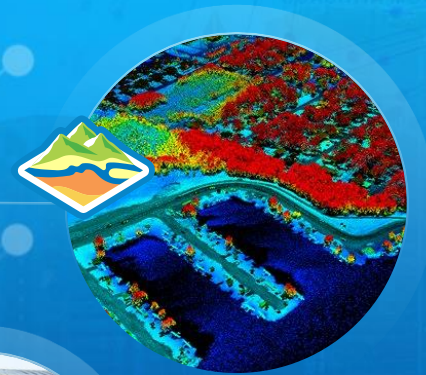
3D



Real-Time
(IoT)



Big Data



Lidar

Providing the Integrating Framework and Processes

For Enabling a Smarter World



Data Collection
and Development

Data Integration,
Sharing and
Management

Geo-Statistical
Analytics
and Modeling

Action and
Outcomes

Stakeholder
Engagement

Planning and
Decision-Making

*Transforming How We Think and Act . . .
. . . Creating a More Sustainable Future*

Delivering

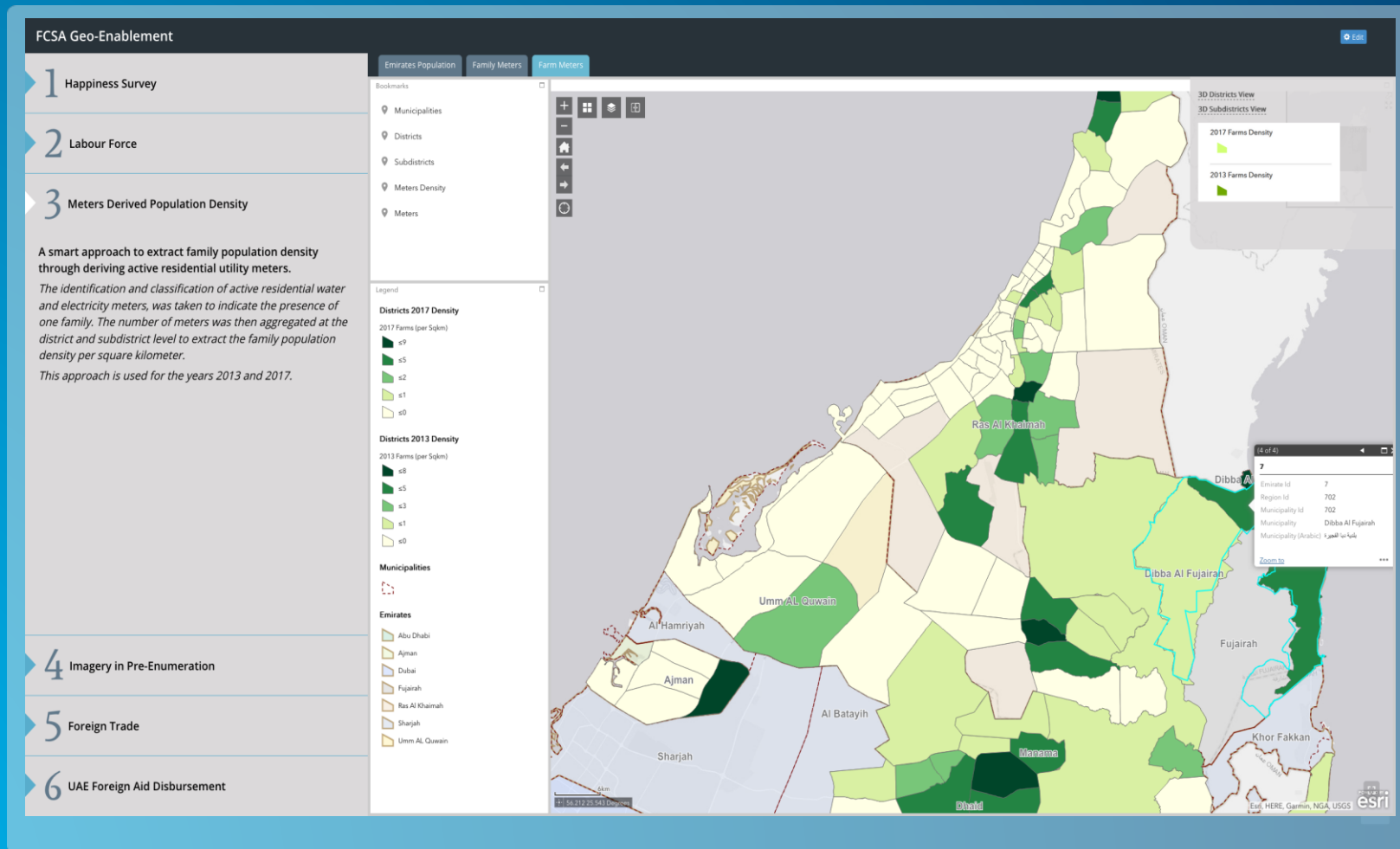
Collaborating

Informing

Understanding

Integrating Geography and Statistics

To understand our society, economy and environment



*GIS Now Provides
the Means . .*



*. . For Creating
Federated Systems*



Web GIS Has Enabled a network of SDG Hubs worldwide

SUSTAINABLE DEVELOPMENT GOALS

About Data Catalog SDG API Contact

UN DataHUB

SDG Report 2017

Number of people living in extreme poverty **767 million** (1.7 billion in 1999)

Proportion of vulnerable populations covered by social protection systems is **40%** (20% in 2013)

Welcome to the Open SDG Data Hub

To fully implement and monitor progress on the Sustainable Development Goals, decision makers everywhere need data and statistics that are accurate, timely, sufficiently disaggregated, relevant, accessible and easy to use. This open data website promotes the exploration, analysis and use of authoritative SDG data sources for evidence-based decision-making and advocacy. Its goal is to enable data providers, managers and users to discover, understand, and communicate patterns and interrelationships in the wealth of SDG data and statistics that are now available.

A Global SDG Hub ...



... and a Network of National SDG Hubs

Ireland

Ireland, Sustainable Development Goals

17 Goals to Transform our World

Governments, businesses and civil society together with the United Nations (UN) have started to mobilise efforts to achieve the Sustainable Development Agenda by 2030. Universal, inclusive and indivisible, the Agenda calls for action by all countries to improve the lives of people everywhere.

Ireland's Life on Land

What is the status of Ireland's Protected Areas?

The Shannon region highlighted above contains a diverse range of habitats and species. Many of the protected sites in this region are water bodies or water dependent habitats. The status of water bodies in this area provide some insight into the condition of the habitats it contains.

The map represents the proportion of rivers that have not achieved at least 'Good status', 2015 at Electoral Division level. The data supports SDG 6.3.2 Proportion of Rivers Achieving at Least Good Ambient Quality. Zoom to the River Shannon region.

% Rivers not achieving at least 'Good status', EPA, OSI, 2015

© Ordnance Survey Ireland | Environmental Protection Agency, Ordnance Su...

The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017

This Story Map illustrates changes in Ireland in relation to unemployment and poverty throughout the last decade. The Story Map has been developed to inform efforts in reporting Ireland's status in relation to achieving United Nations (UN) Sustainable Development Goals.

UN countries have adopted a set of 17 goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to help achieve the goals set out in the agenda by 2030.

Images, interactive maps, charts and text have been combined to highlight trends. Indicators illustrated below highlight

The Status of Ireland's Rivers

A story map

Introduction | Status of Ireland's Rivers, 2015 | Where are the 'High Status' rivers? | Decline in River Status 2012 to 2015 | Threats to Ireland's Rivers | Conclusion

This Story Map explores Ireland's river water quality, threats to river water quality and trends over time. The application has been developed to inform efforts to monitor Ireland's progress in relation to achieving targets set out by the 17 United Nation (UN) Sustainable Development Goals.

UN countries have adopted a set of 17 goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to help achieve the goals set out in the agenda by 2030.

This Story Map relates to UN Sustainable Development Goal 6 which aims to ensure availability and sustainable management of water and sanitation for all.

Interactive maps, images and text have been combined to investigate how Ireland is doing in relation to water quality.

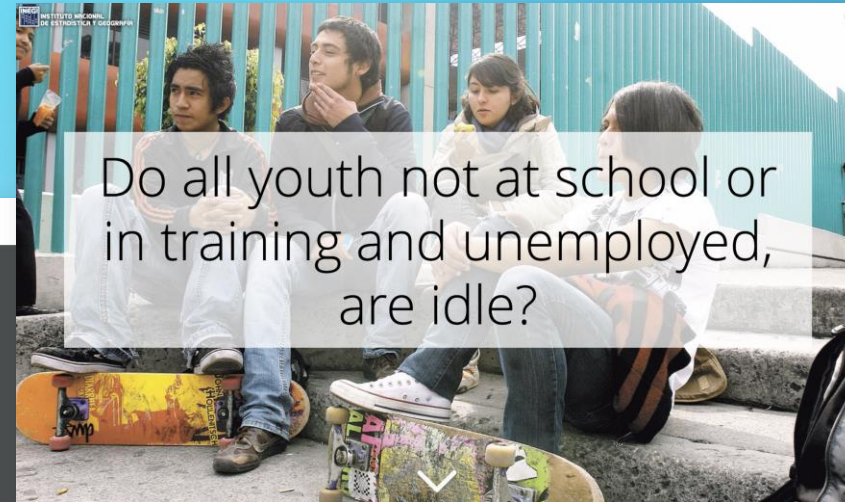
The Environmental Protection Agency (EPA) monitors Ireland's rivers. Continuous sampling is carried out to report annually on river quality and a full survey cycle is completed every three years (EPA, 2017).

6 CLEAN WATER AND SANITATION

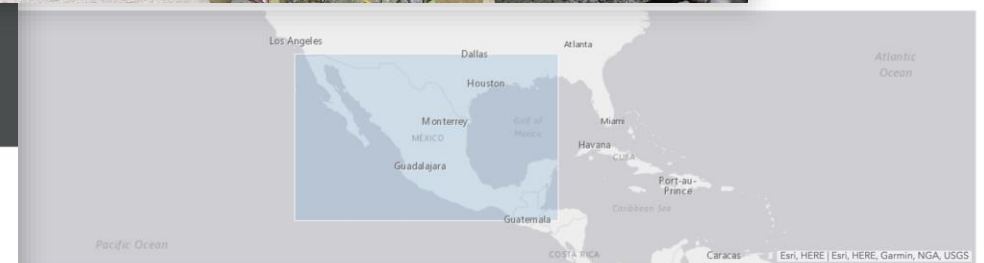
Mexico



On 1 January 2016, the world officially began implementation of the 2030 Agenda for Sustainable Development—the transformative plan of action based on 17 Sustainable Development Goals—to address urgent global challenges over the next 15 years. This agenda is a road map for people and the planet that will build on the success of the Millennium Development Goals and ensure sustainable social and economic progress worldwide. It seeks not only to eradicate extreme poverty, but also to integrate and balance the three dimensions of sustainable development—economic, social and environmental—in a comprehensive global vision. All nations will need to build the Sustainable Development Goals into their national policies and plans if we are to achieve them.



Do all youth not at school or in training and unemployed, are idle?



Views

My Items

Items

Open Data

Filter By

Tags

Indicator_4_1_2_municipal (3)

Source

UNDS-ODS INEGI México (3)

Content Type

spatial dataset (3)

Relevance

Indicator 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

Shared by fco_mendoza_unsd

Source of statistical information used to calculate the indicator: "Instituto Nacional de Estadística y Geografía (INEGI). Módulo de Condiciones Socioeconómicas de la Encuesta de Ingresos y Gastos de los Hogares, 2010 - 2014. Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). Metodología para la

Custom License 10/9/2017 Spatial Dataset 32 Rows



Indicator 1.1.3 Proportion of the population living in households suffering food poverty.

Shared by fco_mendoza_unsd

It is the percentage of the population that lives in households with a per capita income insufficient to buy a basic food basket, even if all available income were used to buy the goods pertaining to said basket. Unit of measure: Percentage. Periodicity: Biennial (1989*-2014); 2005**. *Due to the fact that the ENIGH 1989 does not have

Custom License 10/9/2017 Spatial Dataset 32 Rows



Indicator 1.2.1 Proportion of population living below the national poverty line, by sex and

Palestine

Palestine, Sustainable Development Goals

Sign In

PCBS

Palestine SDG Site

17 Goals to Transform Palestine

Explore our data for Sustainable Development Goals
Click on an icon below to access spatial indicators



Palestine, Sustainable Development Goals

Find My Data Sign In

SDG 1.2.1 Proportion of population living below the national poverty line

Showing 1 to 10 of 16


PCBS_Code	Name1	National_Poverty_Y2009	National_Poverty_Y2010	National_Poverty_Y2011	Shape_Area	Sha
70	Khan Yunis	44.1	40.8	53	0.0103863546735283	0.5011
35	Jericho and Al Aghwar	24.4	22.3	24.4	0.0565625420832703	2.2051
75	Rafah	28.2	34.1	47.2	0.00598066508008964	0.3931
55	North Gaza	32.6	34.6	34.9	0.00578407756449906	0.3351
10	Tulkarm	19.5	10.9	23.3	0.0236031575545894	1.2331
40	Jerusalem	4.9	8	4.6	0.033253238062069	1.5891
60	Gaza	43.5	40	29.8	0.00707893701178364	0.4561

Using Web GIS

...Bringing together community focused on goal-target and indicators

Gender Story Map initiative

Overview Content Members




Collaboration group for the creation of a multi-country "gender story map."
owned by unstats_admin

Description


This group brings together a multi-disciplinary team of experts from National Statistical Offices, United Nations Statistics Division, and Esri to collaborate on the creation of a multi-country "gender story map." The immediate objective is to demonstrate how the geospatial perspective can enrich the analysis of gender indicators and provide additional insights for policy makers. Furthermore, this initiative will contribute to ongoing work to improve the communication of gender indicators using web-GIS technologies, including through the establishment of a dedicated collaborative group, with the possible participation of additional countries, and leveraging the tools and capabilities that become available through the FIS4SDGs initiative.

Latest Content


[View All Group Content](#)




Female representation in p...
by sdgireland_curator
Created: Sep 13, 2018
Updated: Nov 15, 2018



Women's economic emp...
by unstats_admin
Created: Sep 25, 2018
Updated: Nov 15, 2018






Gender Story Map
by unstats_admin
Created: Sep 25, 2018
Updated: Nov 13, 2018



Breaking the poverty chain...
by fco_mendoza_unsd
Created: Nov 8, 2018
Updated: Nov 10, 2018

Details

Created: [September 11, 2018](#)
Viewable by: Only group members
Contributors: Members
17 101
 

Owner
 unstats_admin

Membership [Leave Group](#)
✓ You are a member

Tags
[gender](#), [Story Map](#), [gender statistics](#)

Invited those with interest to join

Bring together community focused on gender statistics

Home Gallery Map Scene Groups Content Organization 3 Linda

Gender Story Map initiative

Overview Content **Members**










Group Role

- Owner and Group Managers
- Member

Date Joined

Search group member

1 - 16 of 17 Sort by: Name ↓

Name	Group Role	Joined
 UN Stat Admin (unstats_admin)	Owner	Sep 12, 2018
 Travis Butcher (tbutcher_undesa)	Member	Sep 12, 2018
 Mehmet Sökeli (sokeli_undesa_dev)	Member	Sep 12, 2018
 Curator Ireland (sdgireland_curator)	Member	Oct 3, 2018
 Rania Abu Ghaboush (mrania_PCBS)	Member	Oct 15, 2018
 Mark Iliffe (mark.iliffe_undesa)	Member	Sep 12, 2018
 Linda Peters (LPeters_NSO)	Member	Nov 6, 2018
 Kevin McCormack (kevin.mccormack_irelandsdg)	Member	Oct 1, 2018
 Helen Cahill (helen.cahill_irelandsdg)	Member	Nov 6, 2018

Country Led - configuring data and apps

The screenshot displays a web application interface for the 'Gender Story Map initiative'. The top navigation bar includes links for Home, Gallery, Map, Scene, Groups, Content, and Organization. A search bar and user profile (Linda) are also visible. The main content area is divided into three tabs: Overview, Content (selected), and Members. On the left, a 'Refine Content' sidebar is shown, with a green circle highlighting the 'Group Categories' section. This section lists three categories: 'Women's voice', 'Women's safety and human rights', and 'Women's economic empowerment'. Below this, there are sections for 'Time', 'Apps' (with sub-options for Web Apps, Mobile Apps, and Desktop Apps), 'Tools', and 'Files'. The main content area features a search bar and a list of story maps. The first item is 'Women's safety and human rights', a Web Mapping Application by unstats_admin, updated on Sep 25, 2018, with 13 views. The second item is 'Non formal Mexican women workers', a Web Mapping Application by fco_mendoza_unsd, updated on Oct 12, 2018, with 6 views. The third item is '1.2.2 Men, women and children in all ages whose live in poverty in all dimensions', a Web Mapping Application by fco_mendoza_unsd, updated on Oct 20, 2018, with 39 views. Each item includes a thumbnail image and a 'View Count'.

Home Gallery Map Scene Groups Content Organization

Gender Story Map initiative

Overview Content Members

Refine Content

Group Categories

- Women's voice
- Women's safety and human rights
- Women's economic empowerment

Time Clear

Maps

Layers

Scenes

Apps

- Web Apps
- Mobile Apps
- Desktop Apps

Registered Apps Only

Tools

Files

Date Modified

Tags

Shared

Search group content

1 - 14 of 14 Filters: Type: Apps X Clear All Sort by: Date Modified

Women's safety and human rights

Web Mapping Application by unstats_admin

Sub-story on women's safety and human rights

Updated: Sep 25, 2018 View Count: 13

Non formal Mexican women workers

Web Mapping Application by fco_mendoza_unsd

Non formal Mexican women workers

Updated: Oct 12, 2018 View Count: 6

1.2.2 Men, women and children in all ages whose live in poverty in all dimensions

Web Mapping Application by fco_mendoza_unsd

1.2.2 Men, women and children in all ages whose live in poverty in all dimensions

Updated: Oct 20, 2018 View Count: 39

Country Led - configuring data and apps

The screenshot displays a web application interface for the 'Gender Story Map initiative'. The top navigation bar includes links for Home, Gallery, Map, Scene, Groups, Content, and Organization. A search bar and user profile (Linda) are also visible. The main content area is divided into a left sidebar for filtering and a main list of items.

Refine Content Sidebar:

- Group Categories:**
 - Women's voice
 - Women's safety and human rights
 - Women's economic empowerment
- Item Type:** Clear
 - Maps
 - Layers
 - Scenes
 - Apps** (circled in green)
 - Web Apps
 - Mobile Apps
 - Desktop Apps
 - Registered Apps Only
 - Tools
 - Files
- Date Modified**
- Tags**
- Shared**

Main Content Area:



Search group content: [Search Bar]

1 - 14 of 14 Filters: [Filters] Sort by: Date Modified [Sort Icon]

- Item 1:** **Women's safety and human rights** (circled in green). Web Mapping Application by unstats_admin. Sub-story on women's safety and human rights. Updated: Sep 25, 2018. View Count: 13.
- Item 2:** **Non formal Mexican women workers**. Web Mapping Application by fco_mendoza_unsd. Non formal Mexican women workers. Updated: Oct 12, 2018. View Count: 6.
- Item 3:** **1.2.2 Men, women and children in all ages whose live in poverty in all dimensions**. Web Mapping Application by fco_mendoza_unsd. 1.2.2 Men, women and children in all ages whose live in poverty in all dimensions. Updated: Oct 20, 2018. View Count: 39.

Story Map Template

Gender Story Map

A Story Map   



Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment

In 2016, all Member States of the United Nations adopted 17 Global Goals to end poverty, protect the planet and ensure prosperity for all as part of a new 2030 Agenda for Sustainable Development.

This **Gender Story Map** showcases how the geospatial perspective can enrich the analysis of gender indicators to follow-up and review progress towards achieving the 2030 Agenda.

It highlights challenges and progress towards the achievement of the Sustainable Development Goals and Targets, providing insights from global, national and sub-national data on three main pillars of gender, namely:

1. Women's economic empowerment
2. Women's voice
3. Women's safety and human rights.



Gender Story Map

- Introduction
- Women's Voice
- Women's safety and human rights
- Women's economic empowerment



A Story Map

Women's Voice





Women's safety and human rights



Gender Story Map

Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment



A Story Map

Women's economic empowerment

A photograph of two women in business attire sitting at a table, laughing and looking at each other. The woman on the left has curly hair and is wearing a white blazer over a dark top. The woman on the right has blonde hair and glasses, also wearing a white blazer. They are in a well-lit, modern setting with a laptop and a notebook on the table. A white chevron icon is visible at the bottom center of the image.

Gender Story Map

Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment



Women's Voice

A Story Map

Women's participation in public discourse has intrinsic value for social change and progress

Established evidence reveals that when at least 25 percent of members of parliament are women, laws that discriminate against women are more likely to be repealed (Hallward-Driemeier, Hasan and Rusu, 2013).

Among developing countries, those with higher shares of women parliamentarians are more likely to pass comprehensive laws on sexual harassment, rape, divorce and domestic violence (Asiedu et al., 2018).

Gender Story Map

Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment



Women's Voice

A Story Map

The global perspective

Despite advances over several decades, women both in developing and developed regions have limited voice and continue to be significantly underrepresented in formal politics and positions of power.

Worldwide, women account for 24.0 percent of parliamentarians as of September 2018, up from 16.8 percent in end-2006 (IPU). Despite incremental gains in ministerial positions, the majority of women ministers holds social portfolios, while defense, finance or economic portfolios are more likely held by men (IPU). Rates, however, vary across countries and regions.


Gender Story Map


Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment

 Women's Voice

A Story Map 

The local perspective

The following storymap has been created by the Republic of Ireland's Central Statistics Office. To explore the narrative, please press the "explore" button on the bottom right.



 Female representation in politics in Ireland

Gender Story Map

- Introduction
- Women's Voice
- Women's safety and human rights
- Women's economic empowerment



Women's Voice

A Story Map



Female representation in politics in Ireland

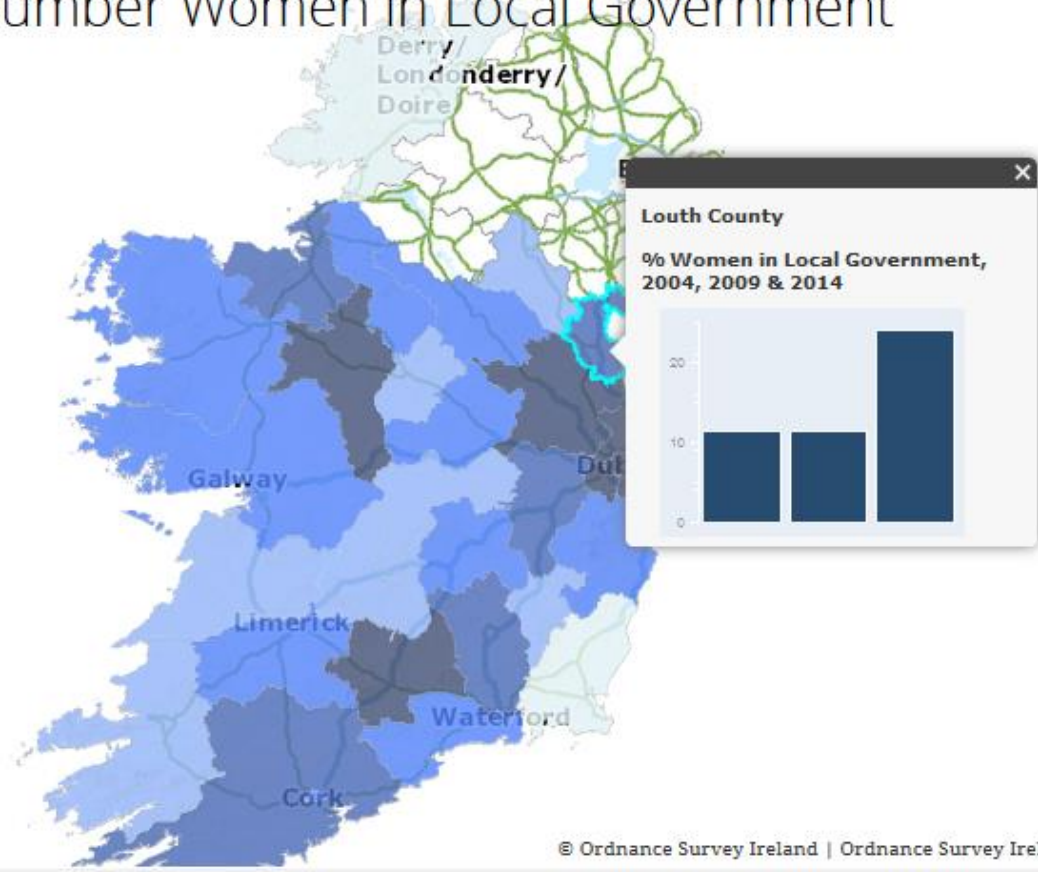
Men Significantly Out-Number Women in Local Government

This map represents the proportion of Women in Local Government at Administrative County level in 2014.

Only two local authorities had less than 10% by 2014.

For example, South Tipperary had just 3.8% of seats held by women in 2004 but this had risen to 27.3% by 2014 while the proportion rose from 6.3% to 10.7% in Clare over the same time period.

However, Donegal and Wexford, which both had more than 10% of seats held by women in 2004, dropped to below 10% in the 2014 elections.



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Gender Story Map

- Introduction
- Women's Voice
- Women's safety and human rights
- Women's economic empowerment



Breaking the poverty chains and bringing out untapped ...

Introduction

Poverty varies significantly among regions

National Council for the Evaluation of Social Development (CONEVAL).

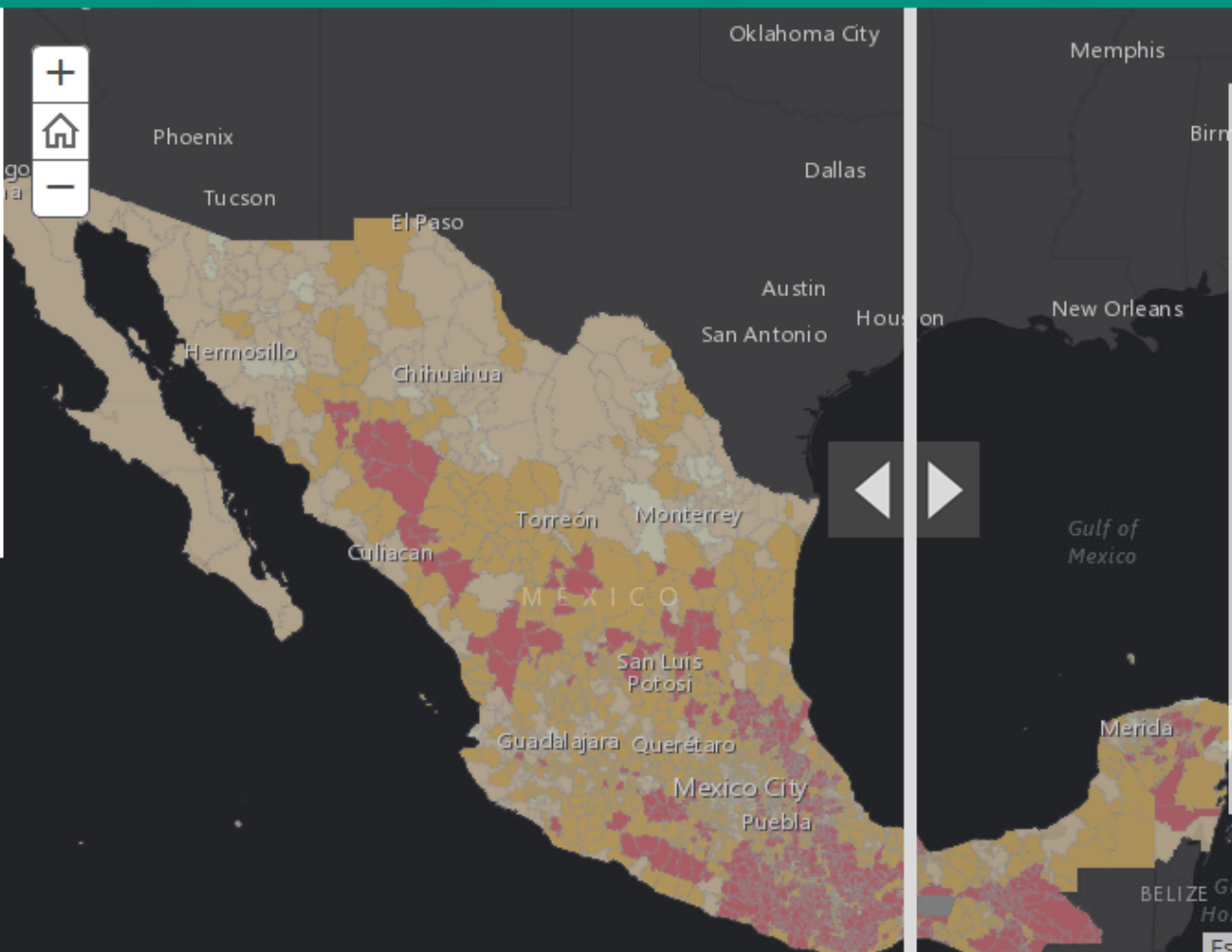


Percentage of population living in poverty by municipality (%) 2010

Rate	Rate
76 - 100	76 - 100
51 - 75	51 - 75
26 - 50	26 - 50
3 - 25	3 - 25
Not available	Not available

Percentage of population living in poverty by municipality (%) 2015

Rate	Rate
76 - 100	76 - 100
51 - 75	51 - 75
26 - 50	26 - 50
3 - 25	3 - 25
Not available	Not available



Having disaggregated data enables the Social Ministry to implement focused policies such as the fund to support rural women and their micro enterprises as a means to empower them economically.

Plataforma Preventiva

Gender Story Map

- Introduction
- Women's Voice
- Women's safety and human rights
- Women's economic empowerment



Breaking the poverty chains and bringing out untapped ...

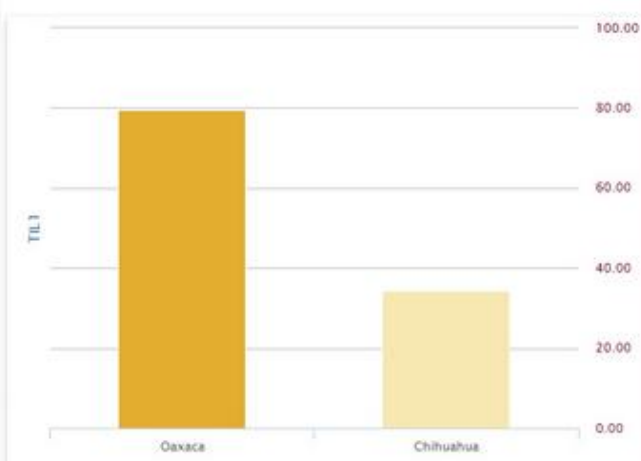
Introduction



Poverty and informality are geographically correlated

Tasa de Informalidad Laboral (TIL) población de 15 años y más, 2018. Primer trimestre

Entidad	Mujeres	Hombres	Dicha
Aguascalientes	44.03	43.40	0.83
Baja California	38.05	41.35	3.30
Baja California Sur	46.38	38.24	8.14
Campeche	62.37	61.84	0.53
Cochula de Zaragoza	40.24	33.64	6.60
Colima	56.99	46.08	10.91
Chiapas	75.80	81.54	5.74
Chihuahua	34.35	36.15	1.80
Ciudad de México	49.12	47.14	1.98
Durango	52.70	54.49	1.79
Guanajuato	56.87	54.22	2.65
Guerrero	75.71	78.10	2.39
Hidalgo	74.93	75.31	0.37
Jalisco	51.09	49.06	2.03
México	58.39	56.49	1.90
Michoacán de Ocampo	70.79	71.22	0.43
Morélos	63.85	66.28	2.42
Nayarit	63.64	64.14	0.49
Nuevo León	39.55	32.87	6.68
Oaxaca	79.59	81.60	2.01
Puebla	73.16	71.36	1.80
Querétaro	47.25	43.18	4.07
Quintana Roo	47.17	45.90	1.27
San Luis Potosí	52.78	56.29	3.51
Sinaloa	51.50	50.55	0.95
Sonora	49.18	41.17	8.01
Tabasco	65.19	65.00	0.20
Tamaulipas	47.81	44.33	3.48
Tlaxcala	73.78	70.02	3.76
Veracruz de Ignacio de la Llave	67.44	69.00	2.20



Gender Story Map

- Introduction
- Women's Voice
- Women's safety and human rights
- Women's economic empowerment



Early Marriage in Palestine

Early Marriage in Palestine



Location

In Urban areas 11.6% of the women in the age 20-24 were married before age 18, 8.0% in the rural areas, and 8.9% in refugee camps in 2017.

Early Marriage in Palestine

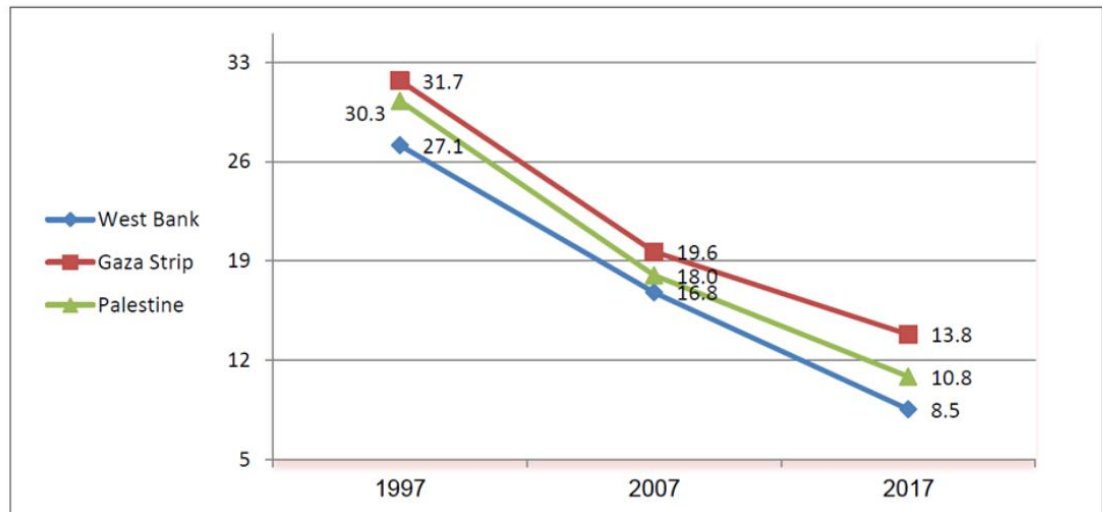
Number of Live Births for the women in the age 20-24 who were married before age 18:

According to the population housing and establishments census 2017, the result showed 54,130 births in Palestine (42.8% of them in the West Bank and 57.2% in Gaza strip) were born to those women, in average 2.3 per women, which is high for this age group.



Early Marriage in Palestine

Early Marriage is Decreasing



The pieces are fitting into place...

Technology

Process

People



...Creating a Platform for Managing our Future

Geospatial Way to a Better Future

Federated Information System for the SDGs





esri

THE
SCIENCE
OF
WHERE