



#### 7<sup>th</sup> Global Forum on Gender Statistics

A Federated System of SDGs

Data Hubs and the use of Geospatial Data to

Monitor Gender Equality

**Linda Peters** 

www.esri.com

# Integration of Statistical and Geospatial Data

Global Statistical Geospatial Framework (GSGF)

Usable

Interoperable

**Common Geographies** 

**Geocoded Units** 

Fundamental Geospatial Infrastructure

Statistical Process Model (GSBPM)

Planning/ Pre Enumeration

> Specify Needs Design Build

Enumeration

Collect
Process
Analyze

Post Enumeration/
Dissemination

Disseminate Evaluate

**Quality / Metadata Management** 

# Shifting Role of GIS in Official Statistics Geographic and Statistical Data Are Foundation

**Areas** 

An Integrated Data Model is Essential



Infrastructure in Support of Census Activities", Department of Economic

and Social Affairs. United Nations Statistics Division





### New Types of Data Collaborations Are Emerging

Connecting Individuals, Organizations and Communities



### Web GIS Simplifies Working With All Types of Data

Using Web Maps, Scenes, and Layers



### Providing the Integrating Framework and Processes

For Enabling a Smarter World



Data Collection and Development



Stakeholder Engagement

Collaborating

Informing

Data Integration, Sharing and Management

> Geo-Statistical Analytics and Modeling

Understanding

Planning and Decision-Making

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

Delivering

### Integrating Geography and Statistics

To understand our society, economy and environment





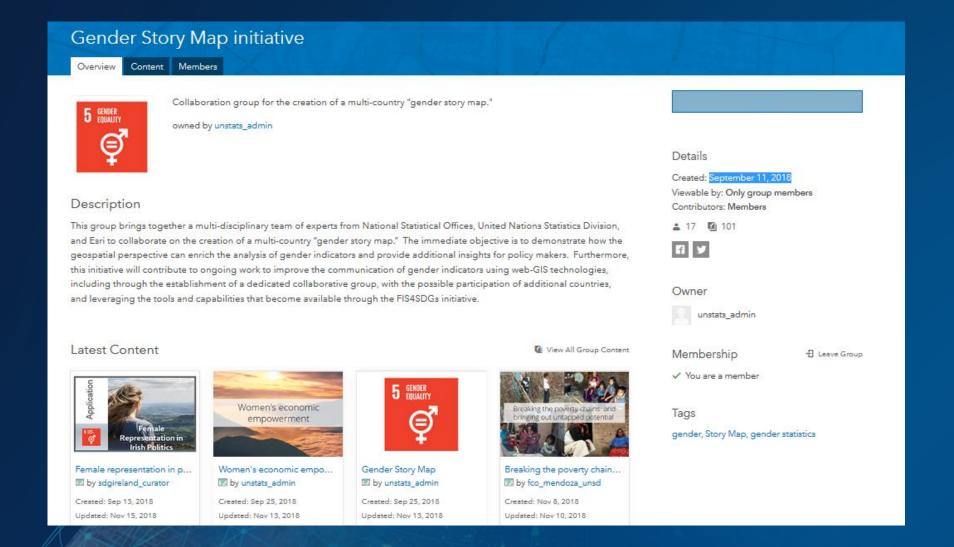
# The UN with Member States have Developed a Federated System for the SDG's

- Country-owned, Country-led
- Global data coverage
- Supporting the Monitoring and Reporting of the SDGs



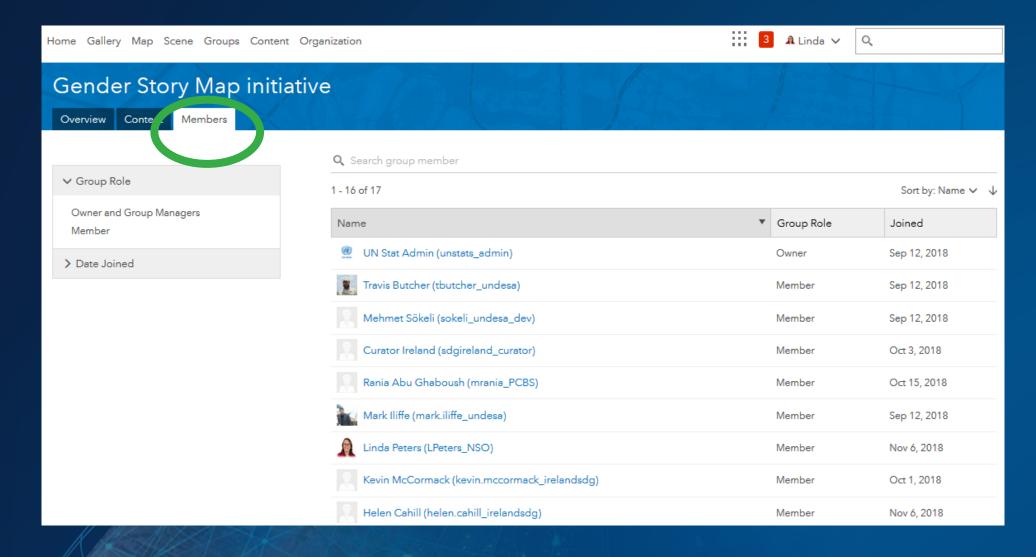
### **UNSD Created Group for Gender Statistics**

Bring together community focused on gender statistics

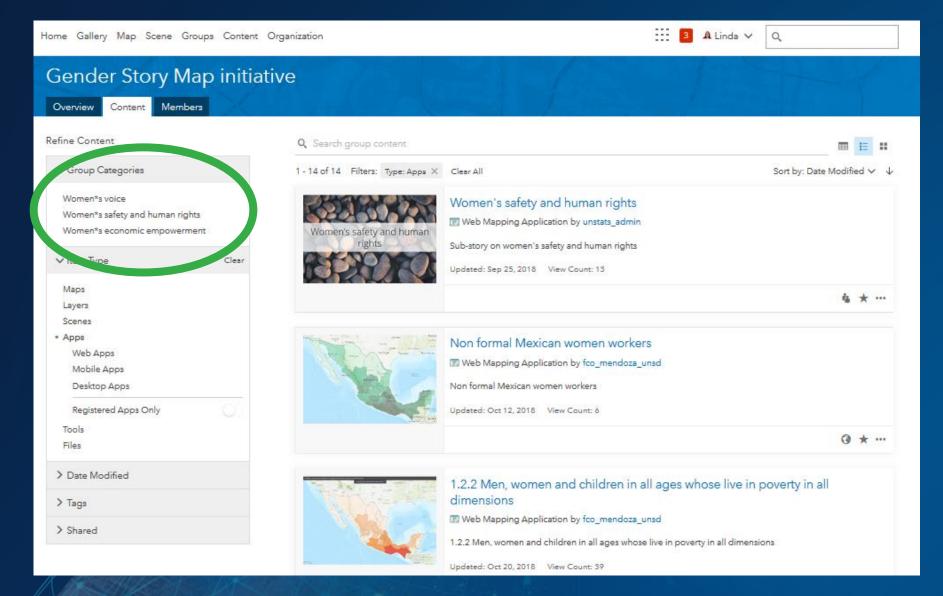


### Invited those with interest to join

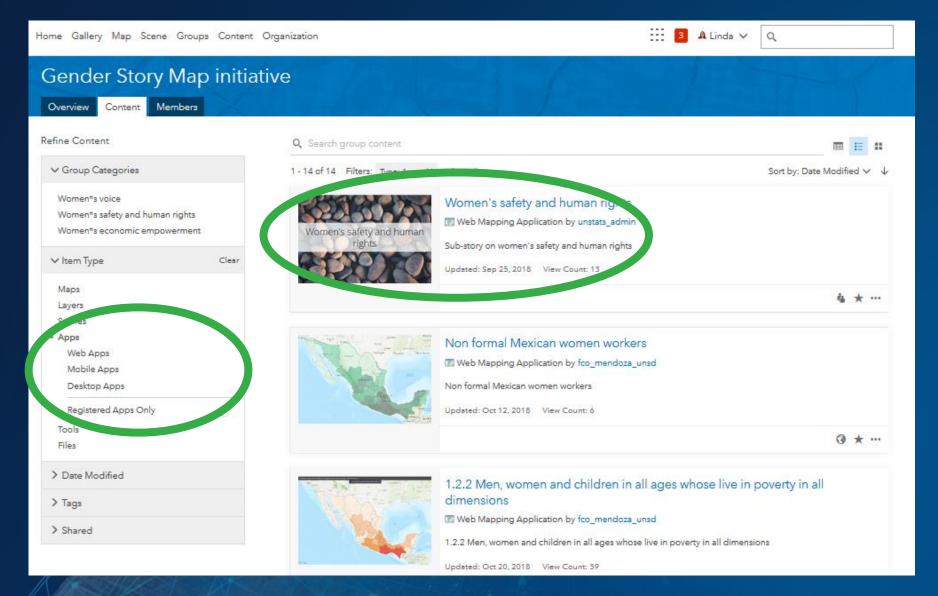
Bring together community focused on gender statistics



## Country Led - configuring data and apps



## Country Led - configuring data and apps



# UNSD Gender Story Map Template

**Gender Story Map** 

A Story Map 🖪 💆





Introduction

Women's Voice

Women's safety and human rights

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.

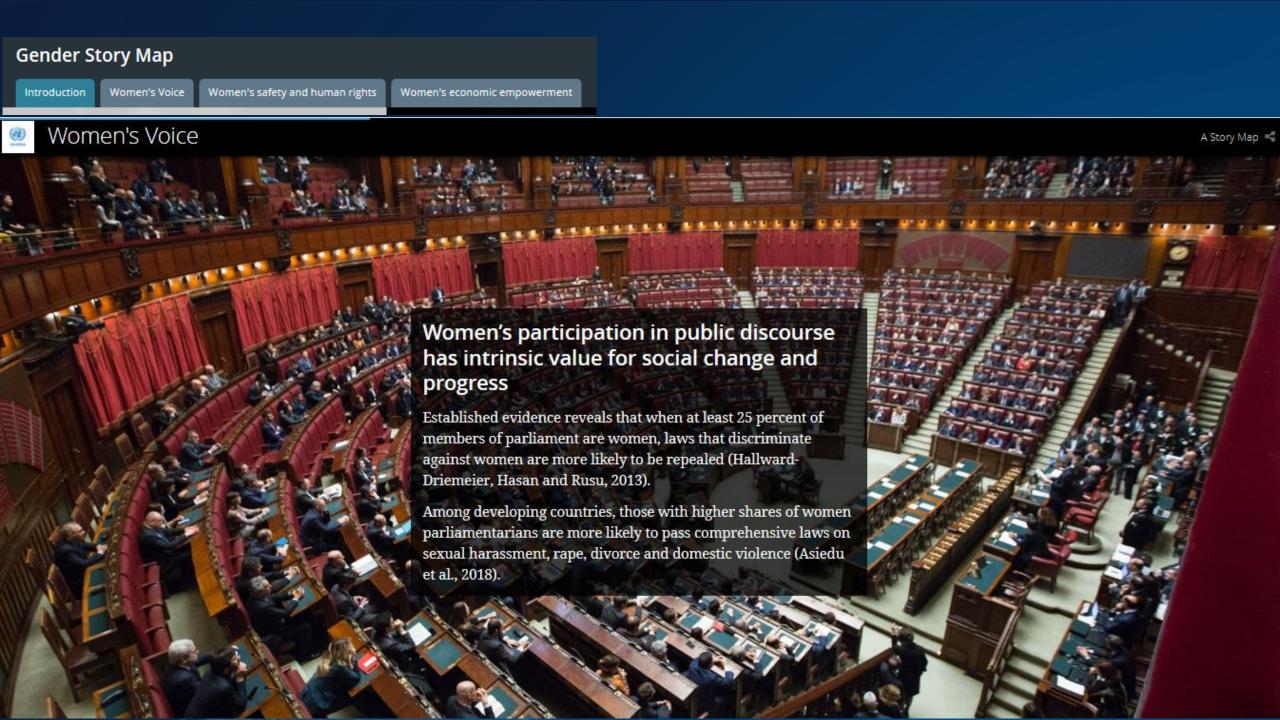
This Gender Story Map showcases how the geospatial perspective can enrich the analysis of gender indicators to follow-up and review progress towards achieving the 2030 Agenda.

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.







Women's safety and human rights

Women's economic empowerment



Women's Voice







Furthermore, the 2030 Agenda for Sustainable Development comprises various targets in Goal 5 on achieving gender equality and empowering all women and girls.

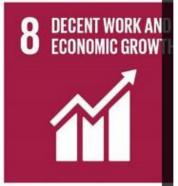
This includes Target 5.5 on ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.





A Story Map <

































Saint Helena



Introduction

#### Women's Voice

Persisting imbalances between women's and men's participation in senior positions in public decision-making processes could stem from a multitude of hurdles faced by women

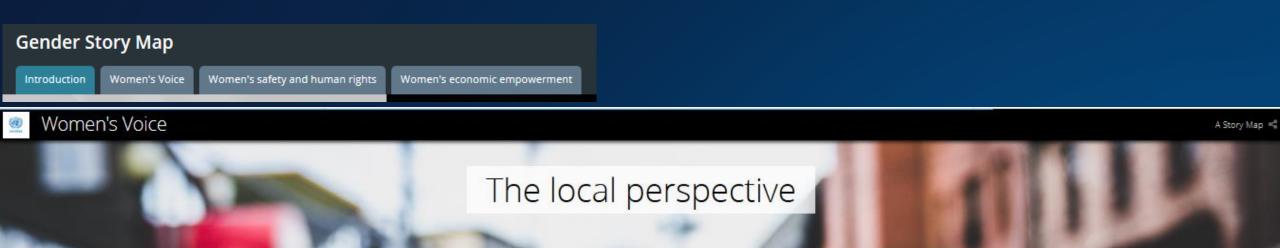
Women's safety and human rights

These include discriminatory social norms and gender stereotypes, threats of violence and intimidation, fewer education opportunities, limited financing and resources and disproportionate burden for unpaid care work.

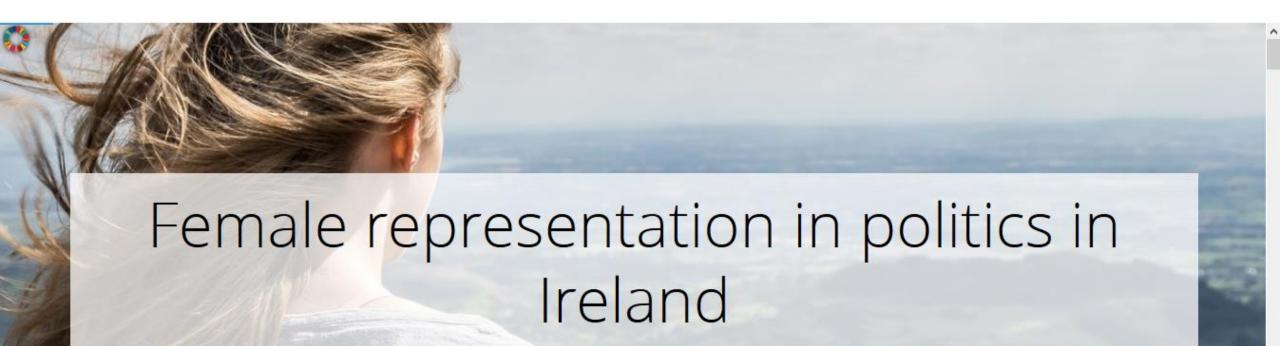




A Story Map 🤜



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

This Story Map illustrates changes in female representation in recent Local Government and General Elections in Ireland between 2004 and 2016.

Women are significantly out-numbered by men in both local and national politics in Ireland. However, the introduction of gender quota legislation before the 2016 General Elections did produce a small increase in female representation. Patterns of female representation in the 2004, 2009 and 2014 Local Government elections and in the 2011 and 2016 General Elections are examined in the text below. Maps are used alongside the text to demonstrate the regional patterns in the proportions of females elected.

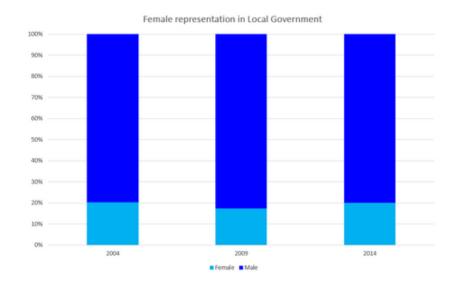
This Story Map has been developed to show case how the geospatial perspective can enrich the analysis of gender indicators. It is also part of the work involved in reporting Ireland's status in relation to achieving the United Nations (UN) Sustainable Development Goals.

Men significantly out-numbered women in Local Government seats between 2004 and 2014 with about four times as many men as women.

Nationally there has been very little change in female representation over this time period. In the 2004 round of elections 20.2% of Local Government seats were taken by women but this dropped to 17.3% in the 2009 elections before rising to 20.1% in 2014.

A Story Map 🔫

#### Men Significantly Out-Number Women in Local Government



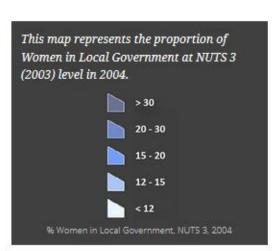
Women's safety and human rights

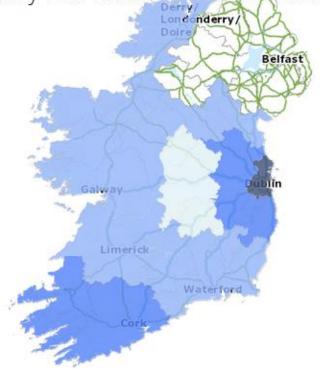
Women's economic empowerment



#### Female representation in politics in Ireland

Men Significantly Out-Number Women in Local Government







Women's safety and human rights

Women's economic empowerment



Women's Voice



Stop Exploring



Female representation in politics in Ireland

Men Significantly Out-Number Women in Local Government

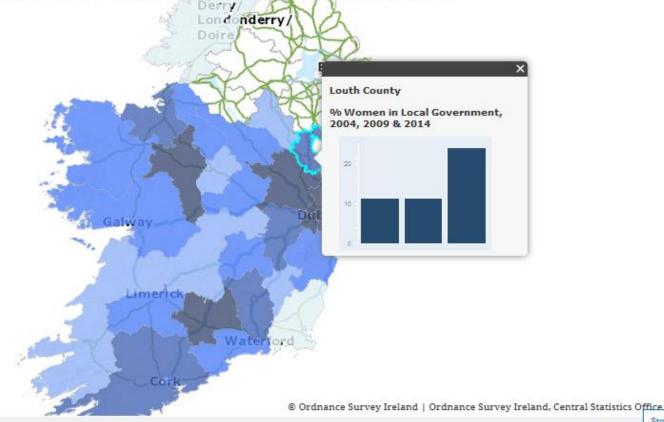
This map represents the proportion of Women in Local Government at Administrative County level in 2014.

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.











#### Women's economic empowerment



Esri, FAO, NOAA

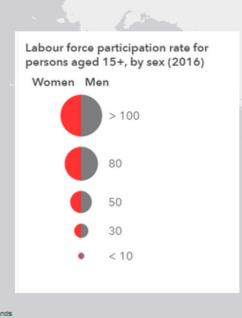




# Women's economic empowerment



Esri, FAO, NOAA



Marshall Islands

Kiribati

Tuvalu

Samoa

Fiji Niue French Polynesia
Tonga Cook Islands



Uruguay



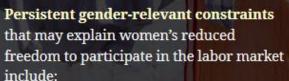
Women's Voice

Women's safety and human rights

Women's economic empowerment



# Women's economic empowerment



- limited access to education; limited access to finance and ownership of assets;
- discriminatory social norms, attitudes and gender roles;
- higher age gaps at marriage;
   unavailability of parental leave;
- unequal share of unpaid domestic and care work within a household; lack of affordable childcare;
- lack of safe and reliable transportation;
   inadequate sanitation facilities; and/or
- legal barriers to work or conduct official transactions.



South Georgia and the South Sandwich Islands



# Women's economic empowerment





Women's economic empowerment

A Story Map

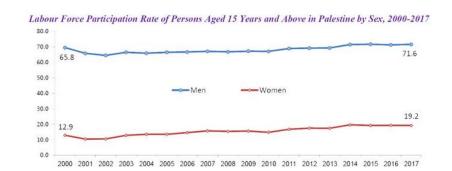
# EMPOWERING WOMEN IN THE LABOUR MARKET ...

ON THE ROAD FOR GENDER EQUALITY IN PALESTINE



Big Gap in the Participation Rate of Labor Force between Men and Women

The participation rate increased significantly in Palestine during the period from 2000- 2017 from 41.6% in 2000 to 45.7% in 2017, with obvious differences between the men and the women. Participation of men is four time higher than Participation of women.



Women's Voice

Women's safety and human rights

Women's economic empowerment



# EMPOWERING WOMEN IN THE LABOUR MARKET ...

A Story Map 🤜

There are around 1.4 million Palestinian women within the working age population; about 1.2 million, which is about 81% of women, are outside the labour force, including:

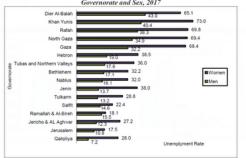
- 49.4% under 30
- 56.2% married
- 63.1% outside the labour market due to house work
- 24.7% outside the labour market due to study/ training
- 91.5% have less than diploma
- 8.5% with diploma or more degree
- 43.9% have 10-12 years of schooling



### PGS EMPOWERING WOMEN IN THE LABOUR MARKET ...,

The unemployment rate for women is the highest in Khan Yunis governorate at 73.0%, followed by North Gaza 69.4%, where the lowest unemployment rate is for women in Jerusalem governorate at 17.5% followed by Ramallah and Albireh governorate at 18.1%

Unemployment Rate among Labour Force Participants Aged 15 Years and above by Governorate and Sex, 2017





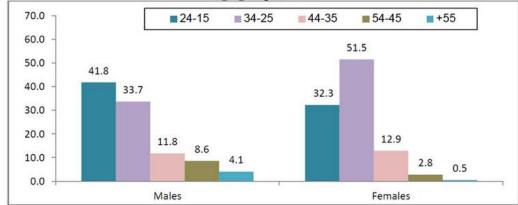


EMPOWERING WOMEN IN THE LABOUR MARKET ...

Young Women Unemployment Rate

Youth have high unemployment rate, and young women suffer more than young men. Percentage Distribution of Unemployed Individuals Aged 15 Years and Above in Palestine by Sex and
Age groups, 2017

70.0 7 24-15 34-25 44-35 54-45 +55



Women's safety and human rights

Women's economic empowerment



# EMPOWERING WOMEN IN THE LABOUR MARKET ...

Graduates have high unemployment rates reached 56.3% but it is especially higher for women reaching 72.4%. In addition, there is a gap between the West Bank and Gaza Strip.

The highest unemployment rates among graduated women 15 years and above:

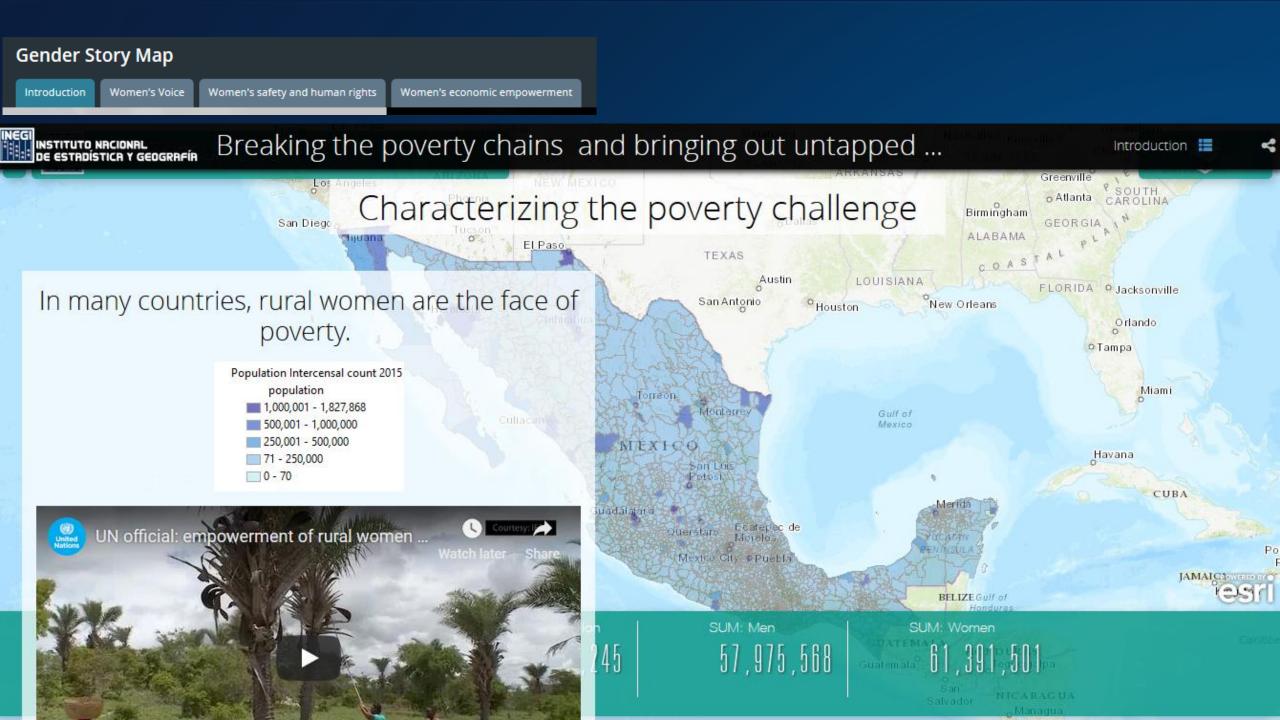
- Mass media and information was 71.7%
- Computer Science was 63.6%
- Business and Administration 59.3%
- Education Science and Teacher Rehabilitation was 58.6%

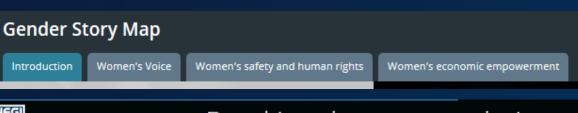
rates among graduated women

- Law was 28.0%
- Health was 37.6%
- Personal srvices was 40.8%









INEGI INSTITUTO NACIONAL DE ESTADÍSTICA Y GEOGRAFÍA

Breaking the poverty chains and bringing out untapped ...

Introduction  $\blacksquare$ 

Kingston

National Council for the Evaluation of Social Development (CONEVAL). Poverty varies significantly among regions

INSTITUTO NACIONAL DE ESTADÍSTICA Y GEOGRAFÍA

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

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

76 - 100

51 - 75

Rate

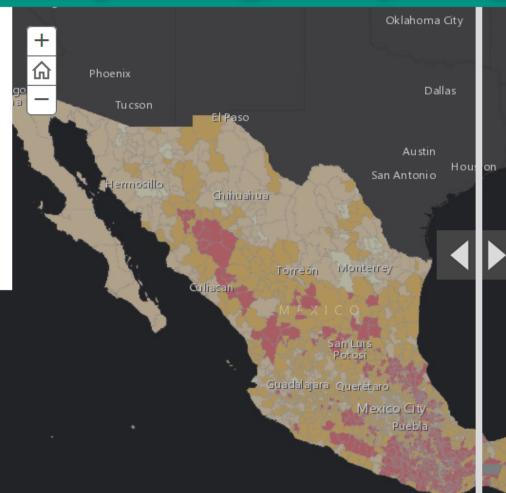
76 - 100

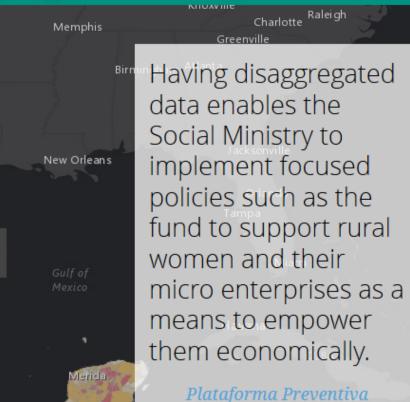
Rate

26 - 50

3 - 25 3 - 25

Not available Not available





Esri, HERE, Garmin, NGA, USGS | Esri, HERE

BELIZE Gulf of

Introduction



Breaking the poverty chains and bringing out untapped ...

Introduction ==



0





# The gender gap in employment: What's holding women back?

Around the world, finding a job is much tougher for women than it is for men. When women are employed, they tend to work in low-quality jobs in vulnerable conditions, and there is little improvement forecast in the near future.

Explore this InfoStory to get the data behind the trends and learn more about the different barriers holding women back from decent work

Traditional gender roles may define specific access and performance for women and men in the labor market.



Introduction

Women's Voice

Women's safety and human rights

Women's economic empowerment

41.24

46.55

49.90

42.28 52.55

28.40

48.66

39.32

38.05

44.52

40.83

41.13

49.43

42.02

39.45

40.84

39.07

47.81

47.39

33.62

43.26

35.13

Aguascatientes

Baja California

Coshulla de Zaragoza

Citadad de Mévico

México

Nayant

Oaxaca

Querétaro

Sonora

Tabasco

Zacatecas

Nuevo León

74.71

75.31

77.82

75.07

76.95

74.57

70.25

75.66

68.35

77.13

73.32

78.22

73.04

79.15

73.98

73.80

71.34

80.75

76.82

75.24

70.59

75.28



# Breaking the poverty chains and bringing out untapped ...

33.47

31.38

28.76

32.80

24.40

21.59

39.09

37.39

29.72

31.96

34.38

32.27

32.94

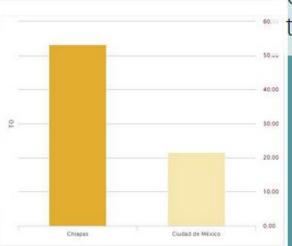
29.67

27.85

36.97

32.03





In Chiapas for example, the gender gap labor force participation is around 50%, while in States like Baja California Sur, Colima and Quintana Roo, the gap is less than 30%.

Introduction :=

www.inegi.org.mx

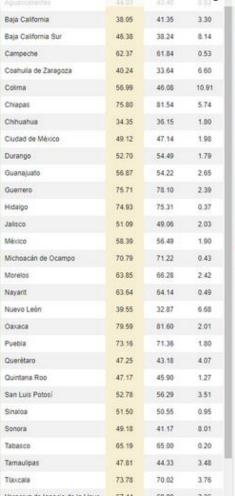


# Breaking the poverty chains and bringing out untapped ...

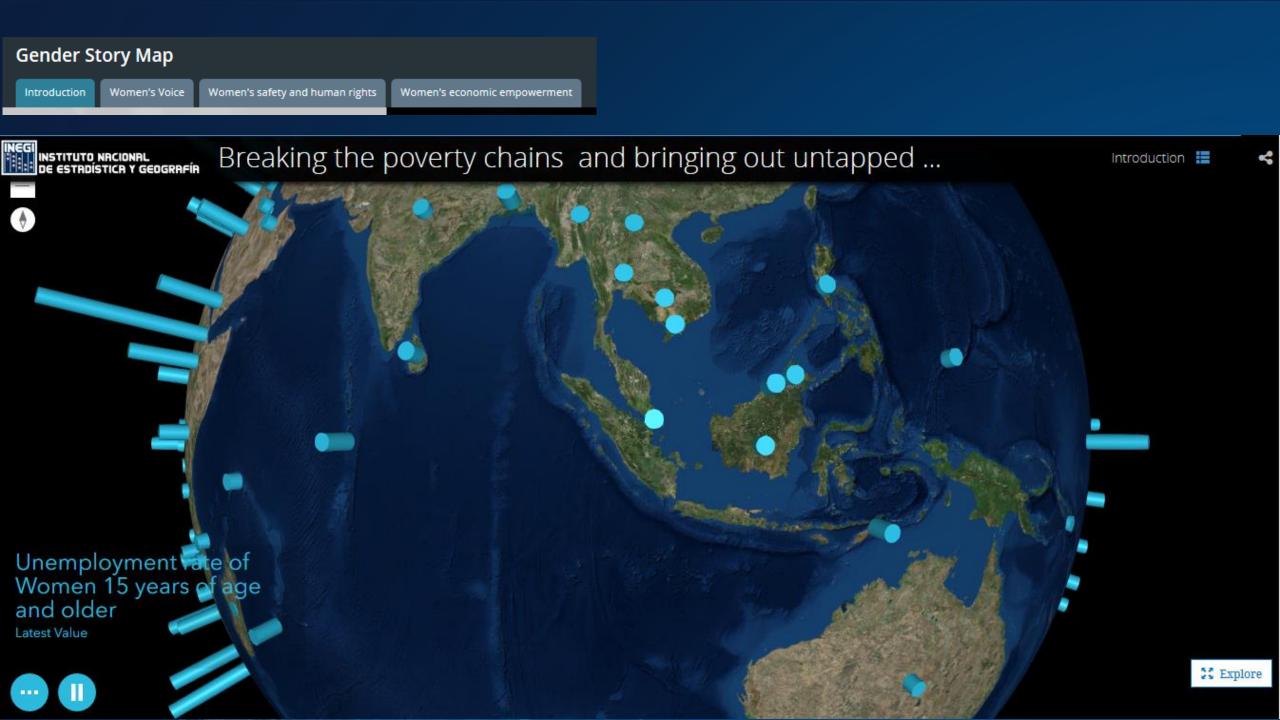
Introduction :=



# Poverty and informality are geographically correlated







### **Gender Story Map**

Introduction

Women's Voice

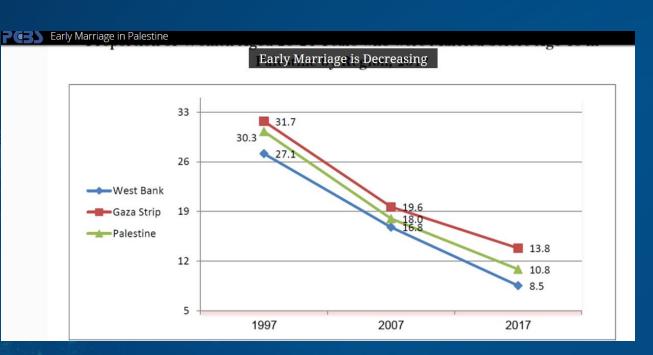
Women's safety and human rights

Women's economic empowerment









Women's economic empowerment

Home Gallery Map Scene Groups Content Organization



# Proportion of Seats Held by Women, 2014

Overview



This map represents Sustainable Development Goal indicator 5.5.1 'Proportion of Seats Held by Women in Local Government' for Ireland, 2014 at NUTS 3 level. Source: Department of Housing, Planning and Local Government, OSi, CSO.

Web Map by sdgireland\_curator

Created: Oct 18, 2018 Updated: Nov 3, 2018 View Count: 274

### Open in Map Viewer

Open in ArcGIS Desktop

Create Web App ∨

Share

### Description

This map represents Sustainable Development Goal indicator 5.5.1 'Proportion of Seats Held by Women in Local Government' for Ireland. The layer was created using data from the Department of Housing, Planning and Local Government and NUTS 3 boundary data produced by Ordnance Survey Ireland (OSi).

Note that the NUTS 3 boundary refers to the former Regional Authorities established under the NUTS Regulation (Regulation (EU) 1059/2003). These boundaries were subsequently revised in 2016 through Commission Regulation (EU) 2016/2066 amending annexes to Regulation 1059/2003 (more info).

In 2015 UN countries 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. Governments are committed to establishing national frameworks for the achievement of the 17 Goals and to review progress using accessible quality data. With these goals in mind the Central Statistics Office (CSO) and OSi are working together to link geography and statistics to produce indicators that help communicate and monitor Ireland's performance in relation to achieving the 17 sustainable development goals.

### Details

Size: 4 KB

\*\*\*\*



### Owner



sdgireland\_curator

Tags



You are a member of the Ministry of Public Health for the Democratic Republic of the Congo assigned to monitor progress on eradicating malaria and reporting on the United Nations Sustainable Development Goal (SDG) #3 Good Health and Well-Being. To gather intelligence on where prevention and aid are most needed, and to calculate the incidence rate per 1,000 for SDG reporting, you'll use Esri's Living Atlas layers and the Malaria Atlas Project's incidence reports to map the spatial and temporal distribution from 2000-2015.

# Lesson plan

	Extract boundary data	Extract select features from global datasets.	20 minutes
	Add population estimate data	Calculate population estimates within geographic units using Living Atlas data.	15 minutes
	Add malaria data	Update spreadsheets and perform joins.	20 minutes
	Calculate malaria incidence rates	Calculate the incidence rates of malaria.	25 minutes
	Style and share a web map	Share the final map as a PDF and web map, and export data as an Excel file.	20 minutes

### Builds skills in

Data Collection & Management | Mapping & Visualization | Spatial Analytics

### Focus industry

Health & Human Services

### Requirements

ArcGIS Pro (get a free trial)

Publisher or Administrator role in an ArcGIS organization or ArcGIS Enterprise Spreadsheet editing software

### Acknowledgements

Thanks to the Malaria Atlas Project (MAP) for their data.



