Harnessing data for accountability journalism

A glimpse into data journalism and its potential adoption in Cambodia

About speakers

Eva Constantaras

Eva Constantaras is a data journalist specialized in building collaborative investigative teams. These teams have reported from across Asia, the Middle East, Latin America and Africa on accountability issues ranging from algorithmic bias and food insecurity to extractive industries and sanctions evasion. As a Google Data Journalism Scholar and a Fulbright Fellow, she developed a course for investigative data journalism in high-risk environments. She is also a winner of the Sigma Data Journalism and Philip Meyer Award and a finalist for the Daniel Pearl Award for Outstanding International Investigative Reporting and for the Gabriel Garcia Marguez Award for innovative reporting.



Mardy Sam An

Mr. Mardy is a skilled IT and Website Manager at Open Development Cambodia with the background in open data and ICT. He is responsible for the development and maintenance of the open data portal. Moreover, he has contributed to design and deliver multiple training programs for various group of audience in local and regional level.

Mr. Mardy is committed to promoting data-driven decision-making and digital innovation.



Pisith Vong

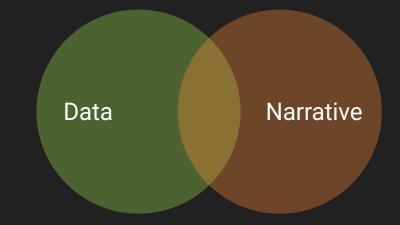
Within ODC, Pisith focuses on curriculum development for the capacity building program, specializing in data-related skills and Geographic Information Systems (GIS). He has extensive experience in conducting training on Data Literacy, Data Journalism, and GIS. Pisith's passion for data storytelling is further evidenced by his mentorship of journalists in data story production, drawing upon his expertise and experiences in data collection, analysis, visualization, and communication.



What is Data Journalism?

"At its core, the principles of data journalism and traditional journalism are the same. Both involve asking questions to paint a truthful and accurate picture of the world. In the case of traditional media, this information is usually obtained from an individual person's account of a story (a single data point).

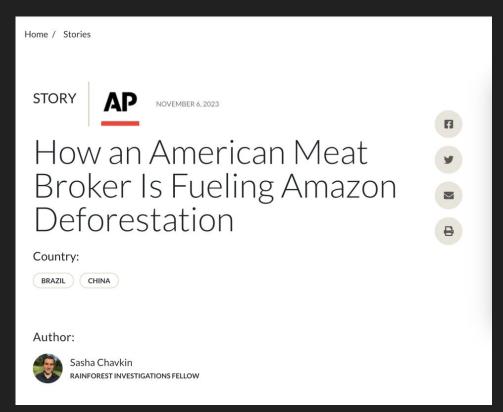
Data journalism takes this one step further by asking questions to a collection of data points (many people's stories). This approach can help reveal the larger context of a story."



Mohammed Haddad, Data Journalist, Al Jazeera

Let's learn about data stories that were done globally, regionally, and locally

Sector: Deforestation

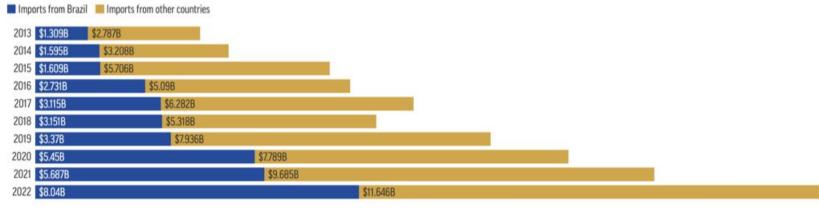


Data used in the story:

- China's beef import (UN Comtrade)
- Forest loss (Imazon)

Brazil has supplied China with 40% of its beef imports in recent years

China has become the world's largest importer of beef as household wealth has risen and the food has become a mainstay of the middle class. Brazil is now China's most prominent supplier of beef, accounting for over 40% of its beef imports in 2020 and 2022.



Major findings

- Last year, the Brazilian Amazon lost more than 4,000 square miles (10,360 square kilometers) of rainforest, the equivalent of nearly 3,000 soccer fields each day.
- In the last decade, Chinese imports of beef from Brazil have increased from \$1.3 billion in 2013 to more than \$8 billion in 2022.

Major findings

 PMI has been a major player in feeding that growing market. As of 2017, the company was the second largest importer of Brazilian beef to China.

World's biggest deforestation project gets underway in Papua for sugarcane

Comments

Share article



HANS NICHOLAS JONG 19 SEP 2024 ASIA



Data sources

• Nusantara Atlas deforestation alerts



Major findings

- A total of 2 million hectares (5 million acres) of forests, wetlands and grasslands in Merauke district will be razed to make way for a cluster of giant sugarcane plantations
- Satellite imagery analysis shows that 30% of the concessions appear to fall inside a zone that the government previously declared should be protected under a moratorium program.
- At least 356 hectares (880 acres) of forest cleared in inside Global Papua Abadi (GPA) concession by alerts data from Nusantara Atlas.

National: Cambodia's land grab endangers people, forests, and the climate

Cambodia's land grab endangers people, forests, and the climate

By Nehru Pry

August 2022

Deforestation and land concessions

In the remote and densely forested northeastern province of Mondulkiri, Song Pro, a member of the indigenous Bunong community, stares at a rubber plantation that once was a sacred forest.

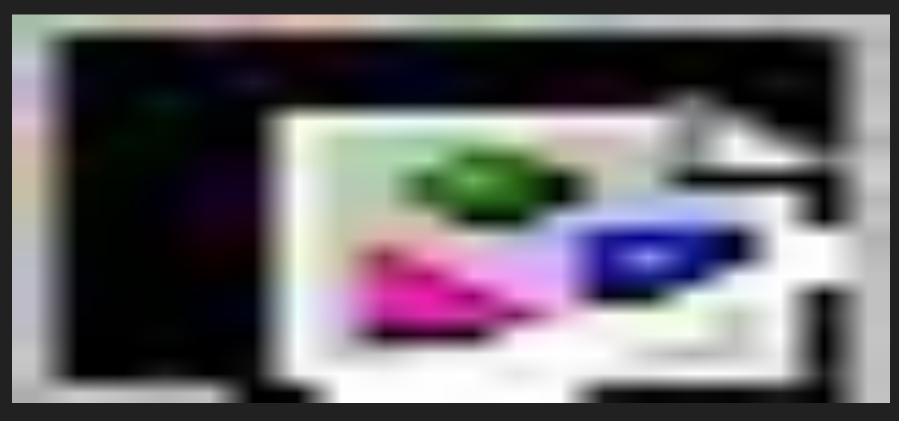
When the war in Indochina came to Cambodia, the forest saved Song Pro. At the sound of planes, she and her family hid deep within the its trails and trees, its canopy providing cover from the sights of American bombers. "We were safe in that sacred place," said the now 60-year-old farmer. But when peace finally returned, Song Pro and her community could not save the forest.

Cambodia's land grab endangers people, forests, and the climate

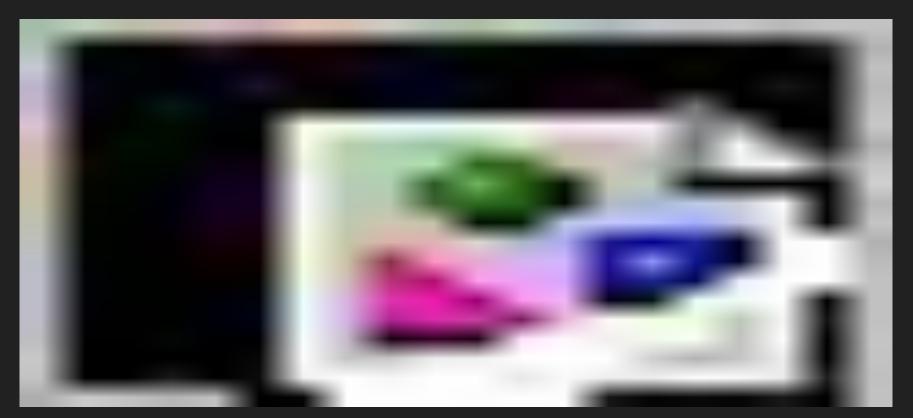
Data used:

- Tree cover loss 2000-2019 (Global forest watch)
- Cambodia land concessions (Licadho)
- Agriculture, forestry, and fishing, value added (% of GDP) (World Bank)
- Cambodia rubber export (UN Comtrade)
- Natural protected areas (ODC)

National Cambodia's land grab endangers people, forests, and the climate



National Cambodia's land grab endangers people, forests, and the climate



Cambodia's land grab endangers people, forests, and the climate

Major findings

- Cambodia lost one-third of its forest coverage over the last two decades.
- Cambodia's wildlife sanctuaries lost a half million hectares of tree cover over the same time period, the equivalent of losing a forest the size of Battambang City each year.
- Land concessions, which are almost Economic Land Concessions, granted more than 2 million hectares or one-eight of Cambodia landmass to the private sector.

Cambodia's land grab endangers people, forests, and the climate

Major findings

- About half of the land concessions went to Cambodian companies and the remainder went to foreign investors.
- Most land concessions were granted for the development of rubber plantations, accounting for almost 800,000 hectares, followed by palm oil, cassava, sugarcane, corn and jatropha.
- The export value of rubber in Cambodia over the last two decades reached 2 billion USD.

Sector: Education

Data used:

- Gov't expenditure on education (% GDP) (World Bank)
- Pass rate of TIMSS mathematics
- Pass rate of PISA reading test
- Percent of student pursuing higher education

كيف تتسع هوّة التعليم في الأردن بسبب عدم المساواة؟- الجزء الأول

أطفال العائلات الثرية يحققون درجات جيدة فيما أقرانهم من العائلات الفقيرة يحققون درجات متدنية





Major findings:

- Three out of ten children from the poorest Jordanian families completed secondary school, compared to eight out of ten children from the richest families
- Education allocations from public spending in Jordan have declined over the past years from a percentage that exceeded 7% of GDP in the mid-1990s to less than 4% since 2013
- Private schools may be a definite option for parents to provide their children with a better education in Jordan.

Major findings:

- While 4 in 10 children pass the first level of TIMSS mathematics, only 3 in 10 children from the poorest families pass, compared with 6 in 10 from the richest families.
- In 2015, 8 out of 10 students passed the PISA reading test at level 1: 7 out of 10 of the poorest and 9 out of 10 of the richest

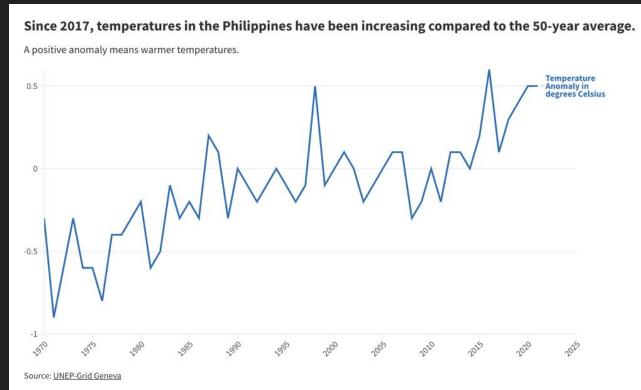
Extreme Heat a 'New Pandemic': Thousands in the Philippines Cancel Classes During 'Hottest Year'

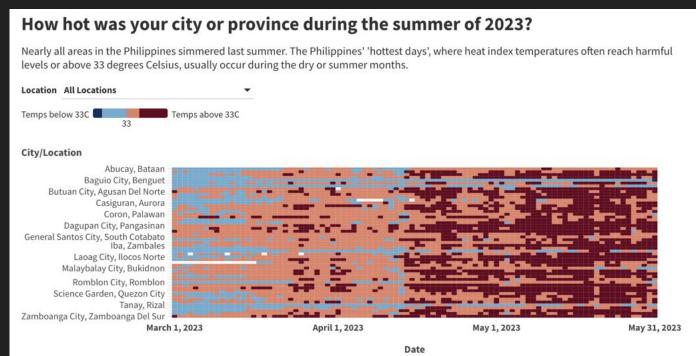
Cebu City, Philippines

A months-long analysis by Cebu Daily News showed that students and teachers from over a thousand schools in the Philippines, including outside heavily congested Metro Manila, reported suffering from unbearable heat during the summer of 2023.

Data used:

- Heat index
- Heat-Health Risk Index
- Online survey by the Alliance of Concerned Teachers (ACT)

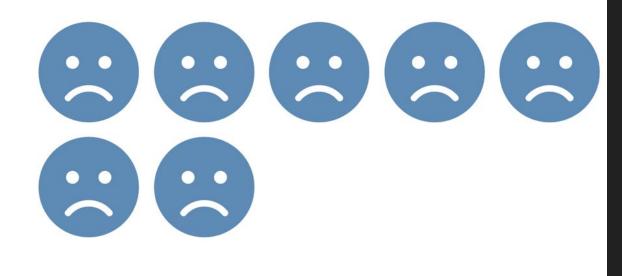


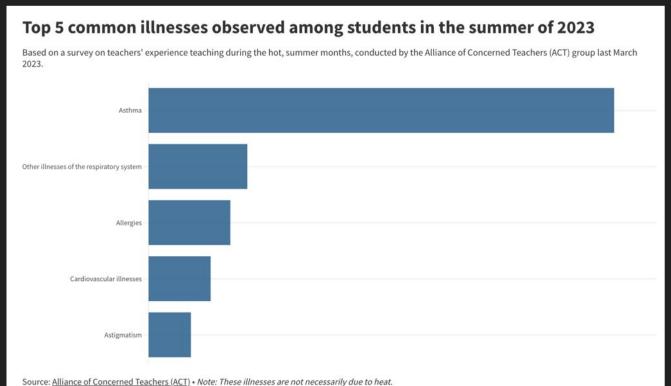


Source: <u>Philippine Atmospheric Geophysical and Astronomical Services Administration</u> • Note: Erroneous data due to technical errors from several weather stations have been omitted.

Around 7 out of 10 teachers surveyed by the ACT group complained of unbearable heat when teaching during the summer months of 2023.

A total of 11,707 participated in ACT's survey about teaching experiences in the summer. It was conducted last March 2023.





- Nearly 9 out of 10 teachers surveyed said they and their students could not focus on lessons due to intolerable heat in classrooms.
- At the time of the shift, the average annual temperature in the country was 26.6 degrees Celsius, data from the United Nations Environment Programme (UNEP) and GRID-Geneva showed. But annual temperatures have since increased to 27.1 in 2021.

• Around 7 out of 10 teachers surveyed by the ACT group complained of unbearable heat when teaching during the summer months of 2023.

EDUCATION

Low Teachers' Salaries Impacting Education Quality

Teachers are being forced to take on second jobs as they struggle to survive on "low" wages, with the sector facing a shortage of educators as graduates seek higher-paid employment elsewhere



A primary student raises hand in class on January 02, 2024 at Hun Sen Sen Monorom Primary School. Kiripst/Meas Molika

Data used:

- Public education statistic
 - Student-teacher ratio
 - Student dropout rate
- Gov't expenditure on education (% GDP)

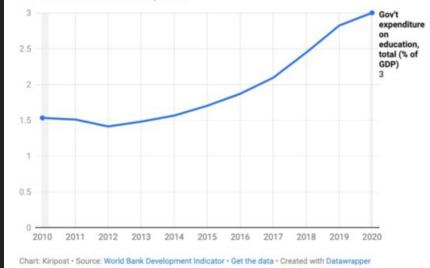
Government expenditure on education (% GDP) is increasing

Over the past decade, the Cambodian government has demonstrated a commitment to increasing its budgetary allocation to education. As evidenced by data, government spending on education as a percentage of GDP has experienced a significant upward trend, doubling from 1.53% in 2010 to 3.00% by 2020.

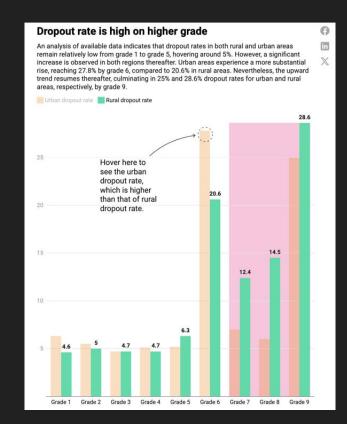
0

87

X



Student-Teacher Ratio Comparison with Lower Secondary and Upper Secondary iii) Available data indicates a statistically significant disparity in student-teacher ratios (STRs) X among primary, lower secondary, and upper secondary education levels during the period 2016-2021. On average, primary schools exhibit an STR nearly twice that of upper secondary institutions, with figures standing at approximately 44.00% and 22.00%, respectively. Q Search in table **Academic Years Types of Schools** ST Ratio 2015-2016 Primary School 45 lower-secondary 23 22 upper-secondary 2016-2017 Primary School 45 lower-secondary 20 upper-secondary 20 2017-2018 Primary School 44 lower-secondary 22 22 upper-secondary 2018-2019 45 Primary School 22 lower-secondary upper-secondary 22 2020-2021 Primary School 45 23 lower-secondary 22 upper-secondary 2021-2022 Primary School 45



Major findings:

- Over the past decade, government spending on education as a percentage of GDP doubled from 1.53 percent in 2010 to three percent in 2020.
- The ratio in primary schools was approximately 44 students to one teacher (44:1), while the ratio in lower and upper secondary school was 22:1.
- Student dropout rate is high and higher on upper grade.

Sector: Domestic violence



UNFOUNDED

WHY POLICE DISMISS 1 IN 5 SEXUAL ASSAULT CLAIMS AS BASELESS

Data used:

• National police data (unfounded sexual-assault cases)

Major findings:

- According to The Globe's data, 42 per cent of sex-assault complaints lead to a charge.
- The Globe's data show vast discrepancies in unfounded rates between jurisdictions across Canada – inexplicable swings from city to city, province to province, regardless of size and demographics – which suggest that complainants of sex assault in some parts of the country are far less likely to be believed than in other parts.

Major findings:

 Although discussion is often focused on the fact that fewer than one in 10 victims report their assault to police, and that fewer than half of the cases that do go to court end with a conviction – among the lowest conviction rates of any type of violent crime

Major findings:

• Every year, an average of 5,500 people are reporting sexual violence to Canadian police, but their cases are dropping out of the system as unfounded long before a Crown prosecutor, judge or jury has a chance to weigh in.

Regional: Delhi's Dowry Bazaar

Delhi's Dowry Bazaar

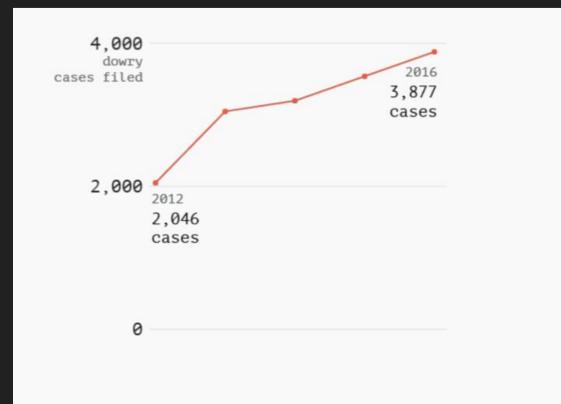
A buffalo to a gas cylinder, an auto rickshaw to an Audi, a few thousands to a crore in cash - what sells in Delhi weddings.

By Manas Sharma and Prawesh Lama

August 14, 2017

Data used:

• Dowry harassment cases



Major findings:

- Dowry harassment cases have almost doubled in the last 5 years.
- In 959 cases, women alleged being harassed for a demand of either cash, car, motorcycle, LED TV or property.
- Out of 1,330 women, more than half specified the cash they paid or were asked. The total exceeded 66 crore. The rest were harassed for reasons other than cash.

Major findings:

- One out of three women 441 cases alleged harassment for not giving a specific car.
- At least 5 women alleged their husband made sex tapes and threatened to upload them on the internet if the dowry wasn't paid.

Regional: Many battered women still keep abuses to themselves

Many battered women still keep abuses to themselves – DSWD

NOV 29, 2022 2:22 PM PHT

BOBBY LAGSA



POWERED BY SPEECHIFY

Already have Rappler+? Sign in to listen to groundbreaking journalism.



Regional: Many battered women still keep abuses to themselves

Data used:

 Number of cases of violence against women and children Philippine National Police (PNP)

Regional: Many battered women still keep abuses to themselves

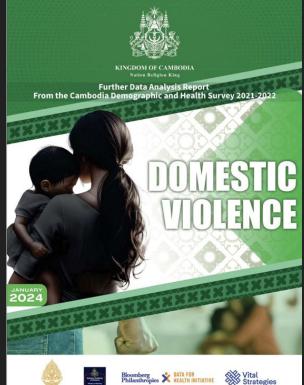
Major findings:

- Data from the Philippine National Police (PNP) showed that more than 12,000 VAWC cases were reported throughout the country in 2021, over 8,000 involving women as victims.
- In the first half of 2022, the number of cases involving women as victims reached some 5,339 throughout the country.
- The Philippine Statistics Authority's National Demographic and Health Survey showed that in 2017, one in every four Filipino women, aged 15 to 49, or 26% have reported experiencing some form of physical, sexual, and emotional violence.

What about Domestic Violence story in Cambodia?

Where is the data?

Available data for covering Domestic Violence story in Cambodia



Available data for covering Domestic Violence story in Cambodia

Which age group of women has had the highest rates of experiencing physical violence?

Age	podia DHS 20 Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	ce by current Number of women	
15-19	3.5	0.2	0.0	3.7	1,127	
15-17	2.4	0.1	0.1	2.5	731	
18-19	5.6	0.3	0.0	6.0	397	
20-24	3.7	1.0	0.6	5.3	1,014	
25-29	8.9	1.1	1.3	11.2	1,130	
30-39	9.4	1.5	2.1	12.9	2,453	
40-49	12.5	1.2	4.1	17.8	1,619	
Total	8.3	1.1	1.9	11.3	7,344	

Who do women seek for help from to stop gender-based violence?

Table 3-3. Sources for help to stop the violence, women who had experienced intimate partner or nonpartner physical or sexual violence by type of violence experienced (physical only, sexual only, physical and sexual, physical or sexual violence), Cambodia 2021-22

Percentage of women aged 15–49 who have experienced physical or sexual violence and sought help by sources from which they sought help according to the type of violence that women reported, Cambodia DHS 2021–22

	Type of	Dhunical or course				
Source	Physical only	Sexual only	Both physical and sexual	 Physical or sexual violence 		
Own family	54.5	*	66.2	59.1		
Husband/intimate partner's family	9.6	*	13.4	10.6		
Current/former husband/intimate partner	0.9	*	0.4	0.7		
Current/former boyfriend	0.0	*	1.4	0.4		
Friend	6.7	*	3.5	5.4		
Neighbor	14.4	*	17.1	14.1		
Religious leader	1.3	*	0.4	1.0		
Police	23.4	*	19.2	20.5		
Lawyer	0.0	*	0.1	0.0		
Social work organization	3.2	*	0.0	2.0		
Other	1.8	*	3.0	3.3		
Number of women who have sought help	161	20	74	256		

Available data for covering Domestic Violence story in Cambodia

How have rates of different types of violence changed over time by age group?

Age	22	2000			2005			2014			2021-22		
	Physical	Sexual	Emotion	nalPhysic	alSexua	Emotiona	Physical	Sexual	Emotional	Physical	Sexuall	Emotion	
15-19	4.0	1.0	3.0	6.0	1.5	13.6	6.5	1.9	13.0	3.6	0.7	6.8	
20-24	10.7	3.1	6.1	8.6	1.7	13.2	7.4	3.9	12.1	2.3	0.7	8.6	
25-29	18.6	3.7	7.7	7.4	1.9	13.1	6.1	3.6	13.5	3.6	1.2	11.4	
30-34	16.0	3.4	7.1	10.7	0.9	14.8	11.7	3.6	18.8	4.7	2.0	11.9	
35-39	16.2	3.5	9.2	8.9	1.3	13.7	11.1	5.1	20.9	5.7	2.9	15.7	
40-44	10.3	1.8	7.2	7.5	1.8	13.5	9.8	3.5	20.6	3.6	0.7	6.8	
45-49	16.7	4.2	9.9	7.5	2.5	15.4	10.3	4.9	18.9	2.3	0.7	8.6	

Table A.1: Intimate-partner violence by background characteristics

Percentage of women aged 15–49 who have ever had a husband or intimate partner who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/intimate partner, according to background characteristics, Cambodia DHS 2021–22

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Age	23525235	10.000	10000	222.0	10-7020	202122
15-19	13.0	4.8	0.7	5.4	15.1	218
20-24	11.0	4.0	1.4	4.8	12.1	704
25-29	17.5	8.1	1.7	9.0	19.0	1,002
30-39	18.4	8.5	2.7	9.7	20.4	2,313
40-49	24.3	12.2	3.9	13.5	26.9	1,543
Religion	2112		010			10.00
Buddhist	18.8	8.7	2.6	9.8	20.7	5.635
Moslem	8.1	2.6	0.3	2.6	8.1	100
Christian	17.6	19.7	10.0	29.4	40.4	32
No religion	*	*			*	14
Residence						17.73
Urban	16.0	6.7	2.2	7.6	17.3	2,378
Rural	20.6	10.1	2.9	11.4	23.1	3,402
Region	20.0	10.1	4.9	11.4	4.5.1	5,462
Banteav Meanchey	31.3	18.2	4.6	20.2	34.9	235
Battambang	24.9	16.1	6.3	19.8	30.4	378
Kampong Cham	7.7	5.2	1.1	5.8	11.5	352
Kampong Chhnang	19.2	6.7	1.7	6.7	19.2	213
Kampong Speu	16.6	9.5	2.6	10.1	19.2	362
Kampong Thom	32.4	12.1	5.0	14.4	35.1	242
Kampong Thom Kampot	20.8	6.4	4.0	9.0	23.0	242 218
Kandal	20.8	6.2	2.0	6.5	23.9	423
Koh Kong	5.4	3.8	0.4	3.8	6.2	41
Kratie	13.7	9.1	2.8	10.2	15.9	138
Mondul Kiri	42.7	19.0	3.6	19.4	45.2	34
Phnom Penh	10.3	5.1	1.3	5.8	11.0	904
Preah Vihear	38.1	20.2	8.5	22.4	40.0	108
Prey Veng	25.0	7.2	1.7	8.6	26.3	366
Pursat	10.8	3.6	0.7	3.6	10.8	111
Ratanak Kiri	24.7	6.6	0.8	7.1	25.7	96
Siemreap	21.5	12.0	2.9	13.5	24.6	482
Preah Sihanouk	10.3	3.4	1.6	4.0	10.8	75
Stung Treng	29.3	12.5	7.5	16.3	31.5	66
Svay Rieng	10.9	8.3	2.1	8.8	13.6	217
Takeo	18.4	7.4	1.2	8.0	19.3	344
Otdar Meanchey	15.1	6.1	0.0	6.1	15.4	77
Kep	8.0	7.2	1.2	7.7	11.0	18
Pailin	11.3	9.5	1.7	9.5	14.2	29
Tboung Khmum	11.1	7.3	2.3	7.3	14.0	252
Marital status						
Never married	5.7	0.9	0.0	0.9	6.3	267
Currently has intimate partner	7.2	1.1	0.0	1.1	8.0	210
Had intimate partner	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	56
Ever married	19.3	9.1	2.7	10.3	21.4	5,514
Married/living together		8.1	2.3	9.1	19.9	5,042
Divorced/separated/						472
widowed Employment	34.3	19.4	7.3	22.9	37.5	

Which patterns can you spot in gender based violence by:

*age *religion *urban/rural *region *marital status *Employment *Education *Wealth

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Employed for cash	19.3	9.3	2.7	10.3	21.4	4,244
Employed not for cash	19.0	10.9	3.3	11.6	21.1	385
Not employed	16.4	6.0	2.0	7.5	18.1	1,151
Education						
No education	27.6	16.3	4.8	17.0	30.4	786
Primary	21.2	9.6	2.8	11.1	23.6	2,536
Secondary	13.9	6.1	1.8	7.0	15.4	2,113
More than secondary	8.8	1.3	0.6	1.9	9.8	345
Wealth quintile						
Lowest	26.5	14.3	4.7	15.9	29.0	1,050
Second	19.7	9.1	2.7	10.7	21.8	1,022
Middle	19.5	11.1	2.9	12.3	23.4	1,125
Fourth	16.4	6.9	2.1	7.7	17.9	1,276
Highest	13.2	3.7	1.1	4.3	13.5	1,307
Total	18.7	8.7	2.6	9.9	20.7	5,780

Round table discussion

Roadmap for embracing Data Journalism in Cambodia context

Guiding questions

What are the challenges and opportunities for embracing data journalism in your newsroom?

What existing data sources would you like to explore in Cambodia?

What important discussions in Cambodia should be informed by data?