

# Food Insecurity Experience Scale 2024

**Food and Agriculture Organization of the United Nations**

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visit\_data\_catalog\_at: <https://microdata.worldbank.org/index.php>

## Identification

### SURVEY ID NUMBER

DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### TITLE

Food Insecurity Experience Scale 2024

### ABBREVIATION OR ACRONYM

FIES 2024

### COUNTRY/ECONOMY

| Name    | Country code |
|---------|--------------|
| Germany | DEU          |

### STUDY TYPE

Socio-Economic/Monitoring Survey [hh/sems]

### ABSTRACT

Sustainable Development Goal (SDG) target 2.1 commits countries to end hunger, ensure access by all people to safe, nutritious and sufficient food all year around. Indicator 2.1.2, "Prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES)", provides internationally-comparable estimates of the proportion of the population facing difficulties in accessing food. More detailed background information is available at <https://www.fao.org/measuring-hunger/en>.

The FIES-based indicators are compiled using the FIES survey module, containing eight questions. Two indicators can be computed:

1. The proportion of the population experiencing moderate or severe food insecurity (SDG indicator 2.1.2),
2. The proportion of the population experiencing severe food insecurity.

These data were collected by FAO through the Gallup World Poll. General information on the methodology can be found here: <https://www.gallup.com/178667/gallup-world-poll-work.aspx>. National institutions can also collect FIES data by including the FIES survey module in nationally representative surveys.

Microdata can be used to calculate the indicator 2.1.2 at national level. Instructions for computing this indicator are described in the methodological document available in the downloads tab. Disaggregating results at sub-national level is not encouraged because estimates will suffer from substantial sampling and measurement error.

### KIND OF DATA

Sample survey data [ssd]

### UNIT OF ANALYSIS

Individuals

## Scope

### NOTES

The FIES survey module includes the following questions to compute the FIES-based indicators:

During the last 12 months, was there a time when, because of lack of money or other resources:

1. You were worried you would not have enough food to eat? (labelled as WORRIED)
2. You were unable to eat healthy and nutritious food? (labelled as HEALTHY)
3. You ate only a few kinds of foods? (labelled as FEWFOOD)
4. You had to skip a meal? (labelled as SKIPPED)
5. You ate less than you thought you should? (labelled as ATELESS)
6. Your household ran out of food? (labelled as RUNOUT)
7. You were hungry but did not eat? (labelled as HUNGRY)
8. You went without eating for a whole day? (labelled as WHLDAY)

Each of these questions has the following response options:

- Yes (coded as 1)
- No (coded as 0)
- Don't know / Refuse to answer (coded as NA)

The dataset includes derived FIES variables computed by FAO described in the documentation. It also contains demographic variables related to the number of adults and children in the household, age, education, area (urban/rural), gender, income and degree of urbanization.

#### TOPICS

| Topic       |
|-------------|
| SDGs        |
| Food Access |

#### KEYWORDS

| Keyword                          |
|----------------------------------|
| Food Insecurity Experience Scale |
| FIES                             |
| Sustainable Development Goals    |
| SDG                              |
| Zero Hunger                      |
| End Hunger                       |
| SDG Indicator 2.1.2              |

## Coverage

#### GEOGRAPHIC COVERAGE

National

#### UNIVERSE

Non-institutionalized adult population (15 years of age or older) living in households with access to landline and/or mobile phones.

## Producers and sponsors

#### PRIMARY INVESTIGATORS

| Name  | Affiliation    |
|---|----------------|
| Food and Agriculture Organization of the United Nations | United Nations |

## Sampling

#### SAMPLING PROCEDURE

With some exceptions, all samples are probability based and nationally representative of the resident adult population. The coverage area is the entire country including rural areas, and the sampling frame represents the entire civilian, non-institutionalized, aged 15 and older population.

For more details on the overall sampling and data collection methodology, see the World poll methodology attached as a resource in the downloads tab. Specific sampling details for each country are also attached as technical documents in the downloads tab.

Exclusions: NA

Design effect: 1.67

#### WEIGHTING

The sample data was weighted to minimize bias in survey-based estimates. The weighting procedure was formulated based on the sample design and was carried out in multiple stages. A probability weight factor (base weight) was constructed to account for selection of telephone numbers from the respective frames and correct for unequal selection probabilities as a result of selecting one adult in landline households and for dual-users coming from both the landline and mobile frame. At the next step, the base weights were post-stratified to adjust for non-response and to match the weighted sample totals to known target population totals obtained from country level census data.

## Data collection

#### DATES OF DATA COLLECTION

| Start      | End        |
|------------|------------|
| 2024-08-26 | 2024-09-26 |

#### DATA COLLECTION MODE

Computer-Assisted Telephone Interviewing [CATI]

## data\_processing

#### DATA EDITING

Statistical validation assesses the quality of the FIES data collected by testing their consistency with the assumptions of the Rasch model. This analysis involves the interpretation of several statistics that reveal 1) items that do not perform well in a given context, 2) cases with highly erratic response patterns, 3) pairs of items that may be redundant, and 4) the proportion of total variance in the population that is accounted for by the measurement model.

#### METHODOLOGY NOTES

As part of the statistical disclosure control process, values for number of children and number of adults that were 10 or above, were recoded as "10+" and categories for area were combined into "urban/suburbs" and "towns/rural".

## data\_appraisal

#### ESTIMATES OF SAMPLING ERROR

The margin of error is estimated as 4 percentage points. By adding and subtracting this value to the result, the confidence interval at 95% level is obtained. The margin of error was calculated assuming a reported outcome of 50% (giving the maximum sampling variability for that sample size) and takes into account the design effect.

## Access policy

#### CONTACTS

| Name   | Affiliation   | Email                                    | URL                  |
|--|---|--|----------------------|
| Food and Agriculture Organization of the United Nations, Statistics Division | Food and Agriculture Organization of the United Nations | Carlo.Cafiero@fao.org, FIES-help@fao.org | <a href="#">Link</a> |

#### CONFIDENTIALITY

The users shall not take any action with the purpose of identifying any individual entity (i.e. person, household, enterprise, etc.) in the micro dataset(s). If such a disclosure is made inadvertently, no use will be made of the information, and it will be reported immediately to FAO.

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- The micro dataset will only be used for statistical and/or research purposes;
- Any results derived from the micro dataset will be used solely for reporting aggregated information, and not for any specific individual entities or data subjects;
- The users shall not take any action with the purpose of identifying any individual entity (i.e. person, household, enterprise, etc.) in the micro dataset(s). If such a disclosure is made inadvertently, no use will be made of the information, and it will be reported immediately to FAO;
- The micro dataset cannot be re-disseminated by users or shared with anyone other than the individuals that are granted access to the micro dataset by FAO.

## Disclaimer and copyrights

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### DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

## Metadata production

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### DDI DOCUMENT ID

DDI\_DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS\_FAO

### PRODUCERS

| Name                   | Abbreviation | Affiliation   | Role  |
|------------------------|--------------|---|---|
| Statistics Division    | ESS          | Food and Agriculture Organization of the United Nations | Metadata producer and Metadata adapted for FAM    |
| Development Data Group | DECDG        | The World Bank  | Metadata adapted for World Bank Microdata Library |

### DDI DOCUMENT VERSION

Identical to a metadata (DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS) published on FAO microdata repository (<https://microdata.fao.org/index.php/catalog>). Some of the metadata fields have been edited.

**data\_dictionary**

| Data file   | Cases | variables |
|---|-------|-----------|
| <b>DEU_2024_FIES_v01_M_v01_A_ESS</b><br>This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey. | 1000  | 24        |



**Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS**

This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey.

Cases: 1000

variables: 24

**variables**

| ID | Name                | Label   | Question |
|----|---------------------|---|----------|
| 53 | Random_ID           | Unique respondent identifier  |          |
| 54 | WORRIED             | Worried you would not have enough food to eat because of a lack of money or other resources |          |
| 55 | HEALTHY             | Unable to eat healthy and nutritious food because of a lack of money or other resources     |          |
| 56 | FEWFOOD             | Ate only a few kinds of foods because of a lack of money or other resources                 |          |
| 57 | SKIPPED             | Skipped a meal because there was not enough money or other resources to get food            |          |
| 58 | ATELESS             | Ate less than you thought you should because of a lack of money or other resources          |          |
| 59 | RUNOUT              | Household ran out of food because of a lack of money or other resources                     |          |
| 60 | HUNGRY              | Hungry but did not eat because there was not enough money or other resources for food?      |          |
| 61 | WHLDAY              | Went without eating for a whole day because of a lack of money or other resources?          |          |
| 62 | wt                  | Post-stratification sampling weights  |          |
| 63 | year                | Year when the GWP was administered in the country   |          |
| 64 | N_adults            | Number of adults 15 years of age and above in household                                     |          |
| 65 | N_child             | Number of children under 15 years of age in household                                       |          |
| 66 | Raw_score           | Sum of Affirmative responses to FIES questions  |          |
| 67 | Raw_score_par       | Estimated person parameters using the Rasch model   |          |
| 68 | Raw_score_par_error | Estimated person parameter errors using the Rasch model                                     |          |
| 69 | Prob_Mod_Sev        | Probability of being moderately or severely food insecure                                   |          |
| 70 | Prob_sev            | Probability of being severely food insecure   |          |
| 71 | Age                 | Age of the respondent   |          |
| 72 | Education           | Education of the respondent   |          |
| 73 | Area                | Area  |          |
| 74 | Gender              | Gender of the respondent  |          |
| 75 | Income              | Income quintile   |          |
| 76 | DEGURBA             | Degree of Urbanisation  |          |

total: 24



**RANDOM\_ID: Unique respondent identifier**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 1000 Invalid: 0 Minimum: 111223803 Maximum: 211034616 Mean: 161304023.942 Standard deviation: 29113443.777  
 Type: Continuous Decimal: 0 Width: 10 Range: 111223803 - 211034616 Format: Numeric

**WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

## CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 930   | 93.1% |
| 1       | Yes      | 69    | 6.9%  |
| Sysmiss |          | 1     |       |

**HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

## CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 933   | 93.4% |
| 1       | Yes      | 66    | 6.6%  |
| Sysmiss |          | 1     |       |

**FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 942   | 94.3% |
| 1       | Yes      | 57    | 5.7%  |
| Sysmiss |          | 1     |       |

**SKIPPED: Skipped a meal because there was not enough money or other resources to get food**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 966   | 96.7% |
| 1       | Yes      | 33    | 3.3%  |
| Sysmiss |          | 1     |       |

**ATELESS: Ate less than you thought you should because of a lack of money or other resources**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

CATEGORIES

| Value   | Category | Cases |     |
|---------|----------|-------|-----|
| 0       | No       | 959   | 96% |
| 1       | Yes      | 40    | 4%  |
| Sysmiss |          | 1     |     |

### **RUNOUT: Household ran out of food because of a lack of money or other resources**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

#### **Overview**

Valid: 999 Invalid: 1  
Type: Discrete Width: 12 Range: 0 - 1 Format: character

#### **Questions and instructions**

##### CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 952   | 95.3% |
| 1       | Yes      | 47    | 4.7%  |
| Sysmiss |          | 1     |       |

### **HUNGRY: Hungry but did not eat because there was not enough money or other resources for food?**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

#### **Overview**

Valid: 999 Invalid: 1  
Type: Discrete Width: 12 Range: 0 - 1 Format: character

#### **Questions and instructions**

##### CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 0       | No       | 966   | 96.7% |
| 1       | Yes      | 33    | 3.3%  |
| Sysmiss |          | 1     |       |

### **WHLDAY: Went without eating for a whole day because of a lack of money or other resources?**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1  
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

**Questions and instructions**

## CATEGORIES

| Value   | Category | Cases |     |
|---------|----------|-------|-----|
| 0       | No       | 979   | 98% |
| 1       | Yes      | 20    | 2%  |
| Sysmiss |          | 1     |     |

**WT: Post-stratification sampling weights**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 1000 Invalid: 0 Minimum: 0.304 Maximum: 4.562 Mean: 1 Standard deviation: 0.816  
 Type: Continuous Decimal: 0 Width: 10 Range: 0.304139625300458 - 4.56209437950687 Format: Numeric  
 Weighted: yes

**YEAR: Year when the GWP was administered in the country**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 1000 Invalid: 0 Minimum: 2024 Maximum: 2024 Mean: 2024 Standard deviation: 0  
 Type: Continuous Decimal: 0 Width: 10 Range: 2024 - 2024 Format: Numeric

**N\_ADULTS: Number of adults 15 years of age and above in household**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 1000 Invalid: 0  
 Type: Discrete Width: 12 Range: 1 - 6 Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category | Cases |       |
|-------|----------|-------|-------|
| 01    | 01       | 305   | 30.5% |
| 02    | 02       | 514   | 51.4% |
| 03    | 03       | 113   | 11.3% |

|         |    |    |      |
|---------|----|----|------|
| 04      | 04 | 52 | 5.2% |
| 05      | 05 | 13 | 1.3% |
| 06      | 06 | 3  | 0.3% |
| Sysmiss |    | 0  |      |

## N\_CHILD: Number of children under 15 years of age in household

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 999 Invalid: 1  
Type: Discrete Width: 12 Range: 0 - 5 Format: character

### Questions and instructions

#### CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 00      | 00       | 883   | 88.4% |
| 01      | 01       | 66    | 6.6%  |
| 02      | 02       | 32    | 3.2%  |
| 03      | 03       | 12    | 1.2%  |
| 04      | 04       | 3     | 0.3%  |
| 05      | 05       | 3     | 0.3%  |
| Sysmiss |          | 1     |       |

## RAW\_SCORE: Sum of Affirmative responses to FIES questions

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 999 Invalid: 1 Minimum: 0 Maximum: 8 Mean: 0.365 Standard deviation: 1.051  
Type: Continuous Decimal: 0 Width: 10 Range: 0 - 8 Format: Numeric

## RAW\_SCORE\_PAR: Estimated person parameters using the Rasch model

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 999 Invalid: 1 Minimum: -4.064 Maximum: 4.066 Mean: -3.681 Standard deviation: 1.07  
Type: Continuous Decimal: 0 Width: 10 Range: -4.06391681037703 - 4.06573238018433 Format: Numeric

**RAW\_SCORE\_PAR\_ERROR: Estimated person parameter errors using the Rasch model**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1 Minimum: 1.023 Maximum: 2.019 Mean: 1.901 Standard deviation: 0.281  
 Type: Continuous Decimal: 0 Width: 10 Range: 1.02291393811353 - 2.01908090973832 Format: Numeric

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**PROB\_MOD\_SEV: Probability of being moderately or severely food insecure**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1 Minimum: 0 Maximum: 0.985 Mean: 0.034 Standard deviation: 0.134  
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.984923762815435 Format: Numeric

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**PROB\_SEV: Probability of being severely food insecure**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 999 Invalid: 1 Minimum: 0 Maximum: 0.861 Mean: 0.007 Standard deviation: 0.066  
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.860983699187252 Format: Numeric

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**AGE: Age of the respondent**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 1000 Invalid: 0 Minimum: 18 Maximum: 100 Mean: 54.302 Standard deviation: 15.697  
 Type: Continuous Decimal: 0 Width: 10 Range: 18 - 100 Format: Numeric

---

**EDUCATION: Education of the respondent**

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

**Overview**

Valid: 997 Invalid: 3  
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

**Questions and instructions**

## CATEGORIES

| Value | Category           | Cases |       |
|-------|--------------------|-------|-------|
| 1     | Elementary_or_less | 24    | 2.4%  |
| 2     | Secondary          | 669   | 67.1% |
| 3     | College            | 304   | 30.5% |

|         |  |   |  |
|---------|--|---|--|
| Sysmiss |  | 3 |  |
|---------|--|---|--|

## AREA: Area

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 997 Invalid: 3

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

### Questions and instructions

#### CATEGORIES

| Value   | Category      | Cases |       |
|---------|---------------|-------|-------|
| 1       | Urban/Suburbs | 403   | 40.4% |
| 2       | Towns/Rural   | 593   | 59.5% |
| 4       | Refused       | 1     | 0.1%  |
| Sysmiss |               | 3     |       |

## GENDER: Gender of the respondent

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 1000 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

### Questions and instructions

#### CATEGORIES

| Value   | Category | Cases |       |
|---------|----------|-------|-------|
| 1       | Male     | 525   | 52.5% |
| 2       | Female   | 475   | 47.5% |
| Sysmiss |          | 0     |       |

## INCOME: Income quintile

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 1000 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 5 Format: Numeric

## Questions and instructions

### CATEGORIES

| Value   | Category    | Cases |       |
|---------|-------------|-------|-------|
| 1       | Poorest_20% | 176   | 17.6% |
| 2       | Second_20%  | 179   | 17.9% |
| 3       | Middle_20%  | 190   | 19%   |
| 4       | Fourth_20%  | 229   | 22.9% |
| 5       | Richest_20% | 226   | 22.6% |
| Sysmiss |             | 0     |       |

## DEGURBA: Degree of Urbanisation

Data file: DEU\_2024\_FIES\_v01\_M\_v01\_A\_ESS

### Overview

Valid: 1000 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

## Questions and instructions

### CATEGORIES

| Value   | Category                   | Cases |       |
|---------|----------------------------|-------|-------|
| 1       | Rural areas                | 299   | 29.9% |
| 2       | Towns and semi-dense areas | 326   | 32.6% |
| 3       | Cities                     | 365   | 36.5% |
| 4       | Not available              | 10    | 1%    |
| Sysmiss |                            | 0     |       |

# study\_resources

## questionnaires

### FIES questions

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title FIES questions  
description This document contains the 8 FIES questions as they were asked during the survey.  
filename FIES\_Questions.pdf

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## technical\_documents

### Derived variables and methodology to compute indicator 2.1.2

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title Derived variables and methodology to compute indicator 2.1.2  
description This document contains the methodology of the derived variables and the computation of the indicator 2.1.2.  
filename Derived\_variables\_and\_Computation\_indicator.pdf

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### Degree of Urbanisation Variable

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title Degree of Urbanisation Variable  
description This document contains an explanation on the degree of urbanisation from Gallup, an harmonized variable for cross-country survey research.  
filename World\_Poll\_Degree\_of\_Urbanisation\_2024\_FAO.pdf

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### World Poll Methodology

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title World Poll Methodology  
description This document contains the description of the methodology used for the survey.  
filename Gallup\_World\_Poll\_Methodology.pdf

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### Technical Methodology

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title Technical Methodology  
country Germany  
filename Germany\_2024\_Methodology.pdf

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