Working Group on Water and Health – sixth Meeting
Geneva, Switzerland, 3 and 4 July 2013

Atlas on Water and Health [AoWaH]
- Progress Report 2013 -

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**WHO Collaborating Centre for Health
Promoting Water Management & Risk Communication**

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AoWaH – The Basic Concept

More than a collection of maps:

- Comprehensive reference
- One-stop-shop for an audience interested in Water, Sanitation and Health

Intended benefits

- Update available data
- Combine different sources
  which cover water, sanitation and health
- Integrate the temporal dimension
- Provide analysis tools
- Serve countries and focal points,
  support and facilitate reporting

Settings

What is not intended:

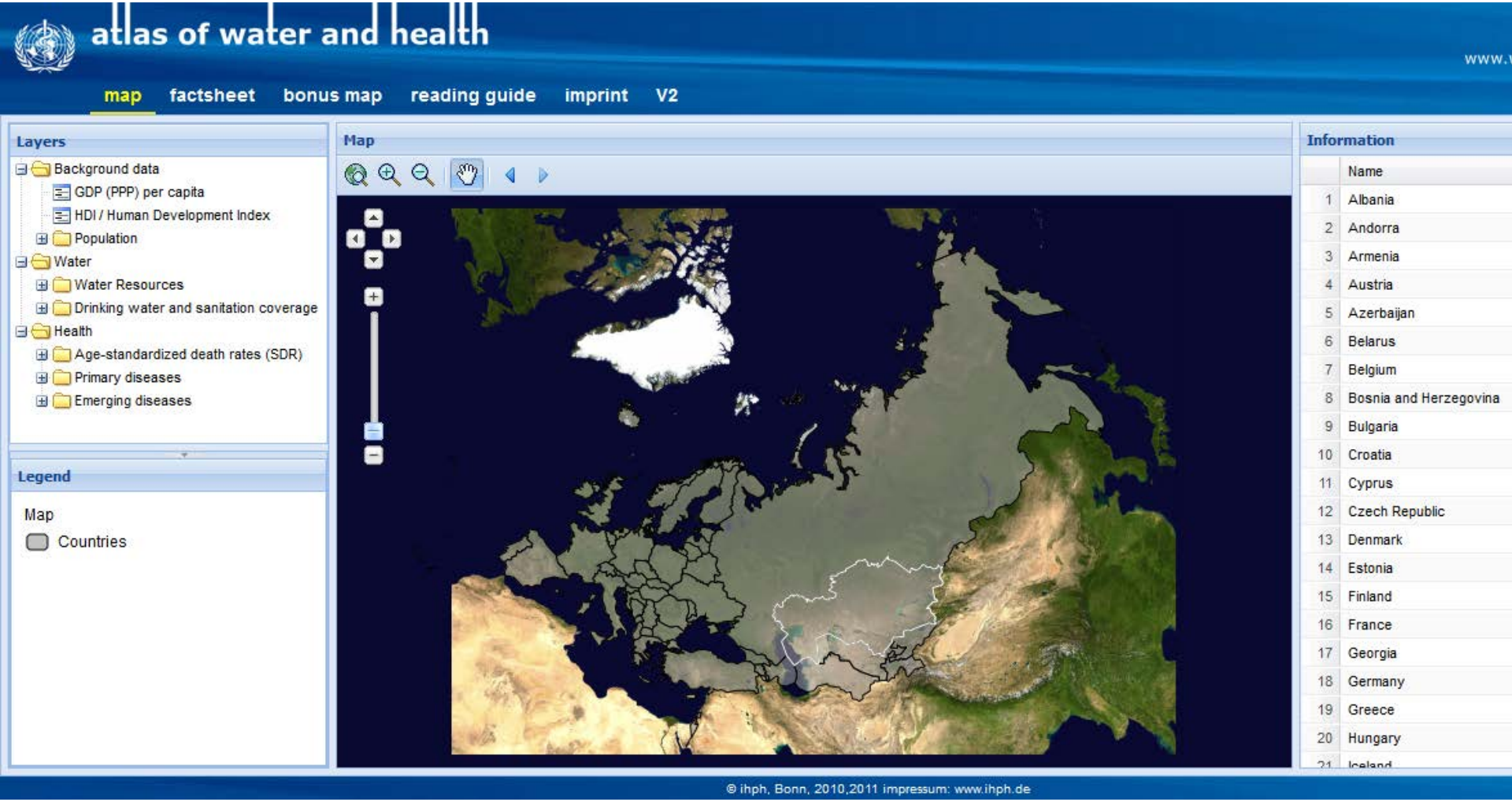
- New surveys
- New questionnaires
- Additional monitoring

but:

- Use available data
- Rely on JMP, CISID, GLAAS, ENHIS, …

From where did we start?

- Version **1** of the Atlas (Parma 2009)
- Dr. Ina Wienand, Tobias Frechen, Christoph Höser, Thomas Kistemann
- **http://www.waterandhealth.eu/**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4 Austria
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7 Belgium
8 Bosnia and Herzegovina
9 Bulgaria
10 Croatia
11 Cyprus
12 Czech Republic
13 Denmark
14 Estonia
15 Finland
16 France
17 Georgia
18 Germany
19 Greece
20 Hungary
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Challenges

Time

- Visualize **progress** and **development** by making the time dimension easily available

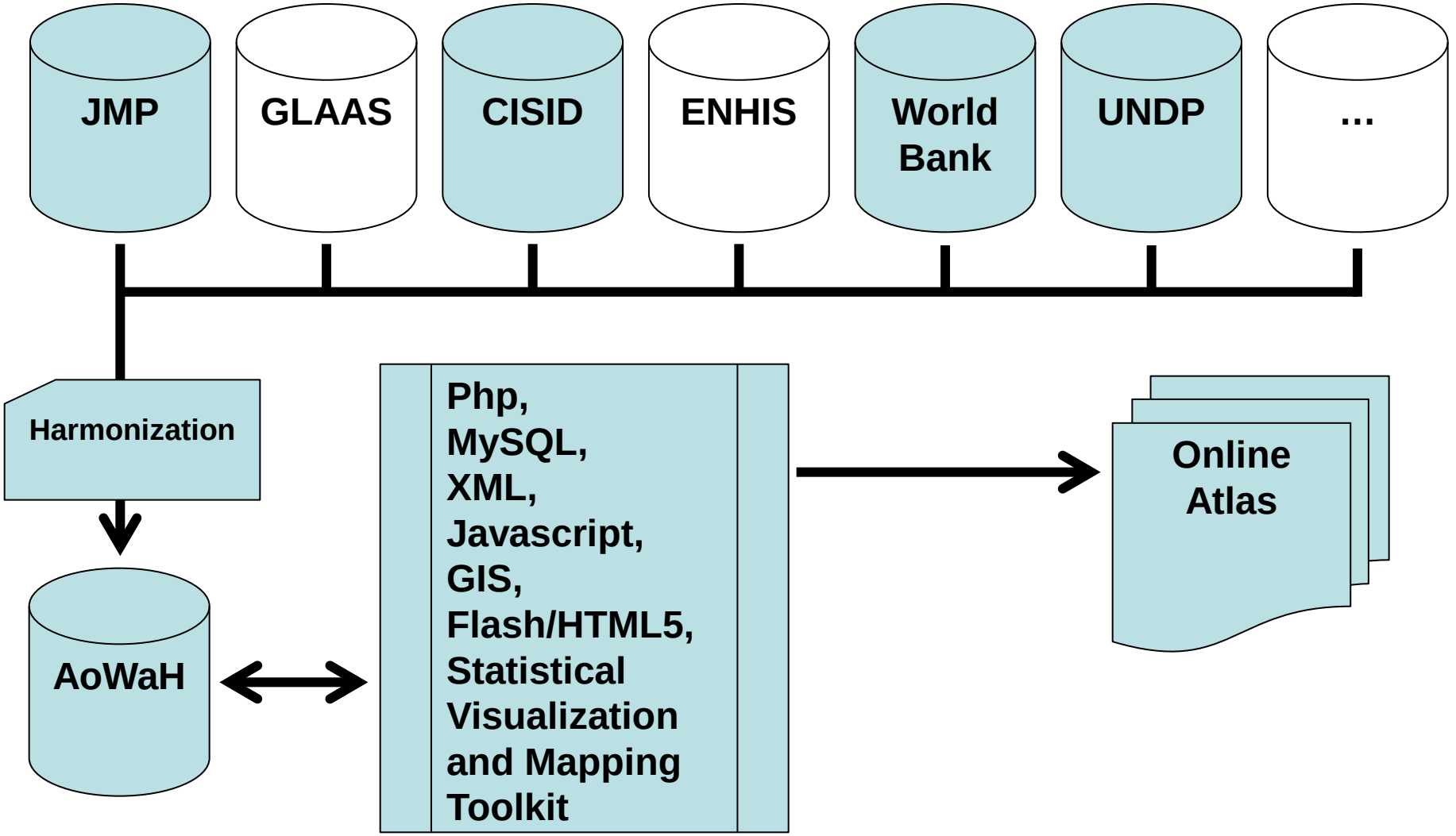
Combination

- Visualize indicators about health **AND** water **AND** sanitation issues

Version 2: What already happened

- Launched in 2012
- Technical meetings in Summer 2012, Concept definition
- Regional meeting in October 2012, Bonn Decision about conceptual framework
- Regional meeting: Strengthening monitoring of water supply and sanitation, Bonn, 12-13 June 2013: Presentation of Atlas Version 2

Technical realization

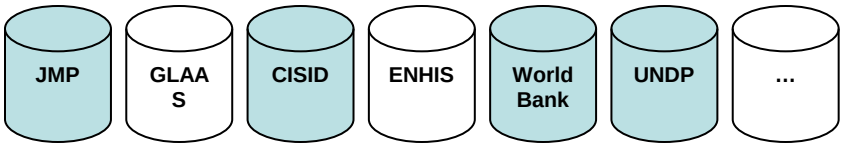


harmonization

Technical realization

Harmonization

- Country codes need supervision, not automated
- Changes of names, ISO-Codes,
  spatial extension, dispartment, new states,...
- Finally developed our own system to be
  flexible for data sources and GIS-based maps,
  (technical background, not visible for users)
- But: no change of values, no calculation (wb)



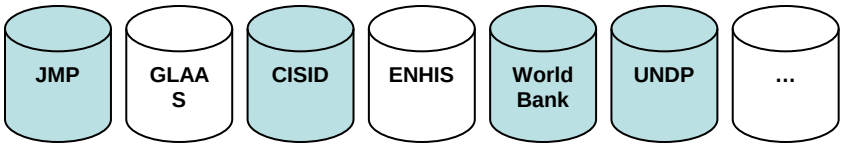
Technical realization

Atlas: data sources

Atlas depends on the availability of databases and their preceding collection, data analysis, harmonization, reconciliation, baseline-calculation etc.

Tremendous work we don't want to repeat!

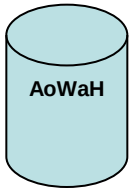
The Atlas-Project will not serve as a focal point for complaints about unexpected figures. The Atlas is a mirror, reflecting sources.



Technical realization

Current data sources

- JMP – Joint Monitoring Programme (1990-2011)
- CISID – Centralized Information System for Infectious Diseases (WHO Europe) (1980-2012)
- Worldbank (1960-2011)
- UNDP – United Nations Developing Programme (1980-2012)
- Future: GLAAS, ENHIS, ...

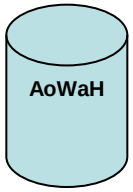


Technical realization

Current restrictions:

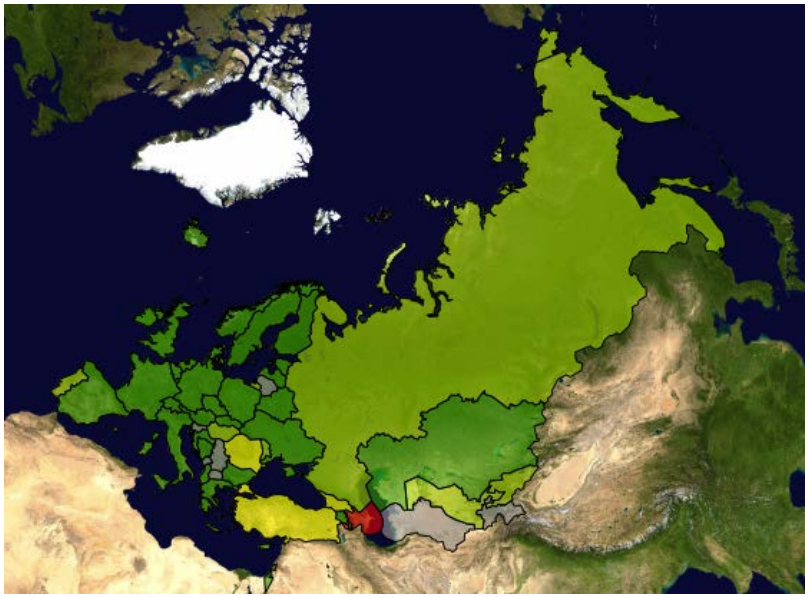
- Spatially: country-wide data
  (no subnational information)
- Temporarily: yearly data
  (no monthly, weekly or daily information)

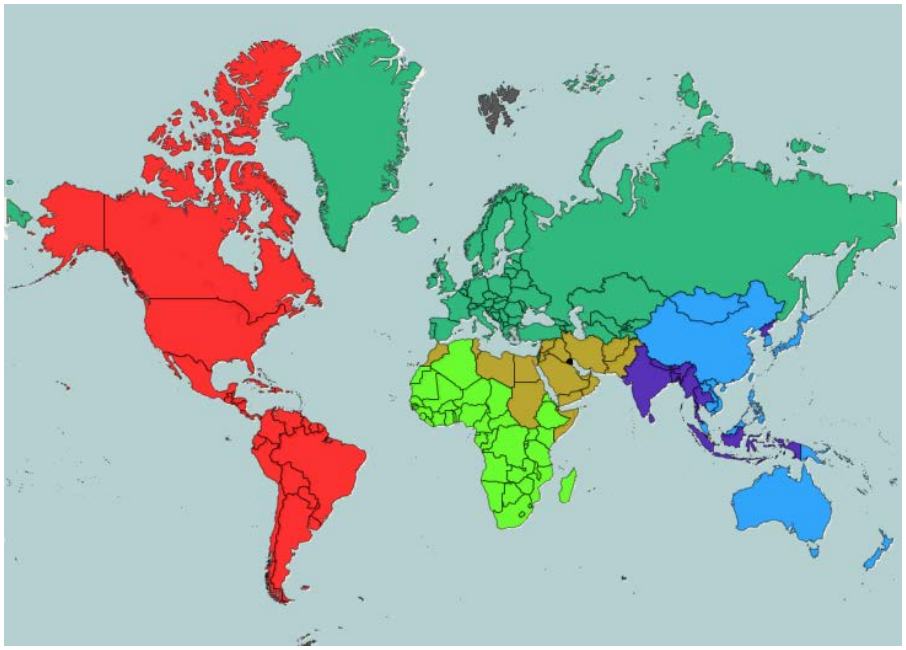
Software is capable to manage more and different tempo-spatial resolutions, but is not integrated into Atlas today.

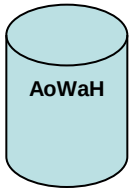


Technical realization

Atlas: countries ver. 1 vs. ver. 2







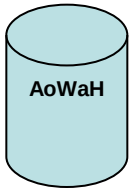
Technical realization

Indicators included

Depends on availability

Overall goal:

- Collect aspects related to
  - Water
  - Sanitation
  - Health
- Avoid over-crowding



Technical realization

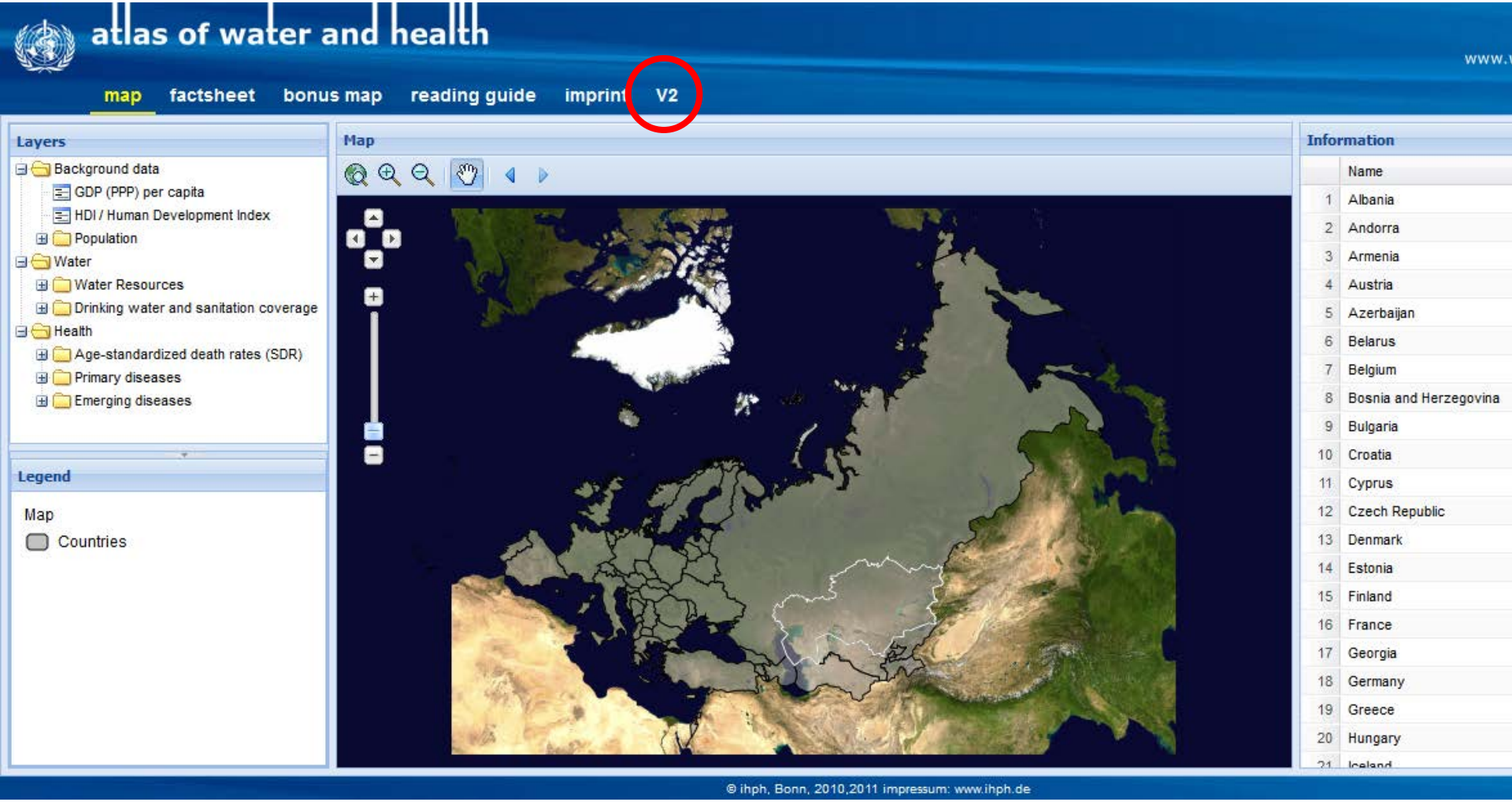
Health indicators: ver. 1 vs. ver. 2

- Health
  - Age-standardized death rates (SDR)
    - Diarrhoeal diseases, under 5 years per 100,000
  - Primary diseases
    - Cholera
    - Enterohaemorrhagic E. Coli
    - Shigellosis
    - Typhoid Fever
    - Hepatitis A
  - Emerging diseases
    - Campylobacteriosis
    - Cryptosporidiosis
    - Giardiasis
    - Legionellosis

10, Cases only

- Under-five mortality (per 1,000 live births)
- Campylobacteriosis
- Cholera
- Cryptosporidiosis
- Enterohaemorrhagic E.Coli
- Giardiasis
- Hepatitis A
- Hepatitis E, acute
- Legionellosis
- Shigellosis
- Typhoid (Paratyphoid Fever)
- Typhoid Fever
- Health index
- Life expectancy at birth (years)

14, Cases and incidences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Hands on!

New features of Version 2:

- documentation of sources, indicators, countries
- layout and usage
- Timeline options
- Enhanced graphic toolset
- Export functions: print, embed, share, present
- Extreme flat hierarchy for easy access
- Apply filter, selection by value-range
- Data lenses, enlarging windows
- Prepared to be published in different languages

www.waterandhealth.eu

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WHO Europe
Cyprus
Czech Republic
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Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Country Report
Name
Germany
Categories
(JMP) MDG-categories - Developed countries
(JMP) WHO-categories - Europe
(JMP) UNICEF-categories - Industrialized countries
(CISID) WHO European Region
(CISID) Europe
(CISID) European Union
(CISID) Non-Endemic Member States/AFP surv
Indicators for this country:
hide non focus
show all, keep focus
show all, reset focus
Source
Group
focus
Name
Unit
Spark 1980-2012
Range
Values
CISID
Background
Population
absolute
years:
1980 to 2012
Value-range:
77,684,856 to
82,558,800
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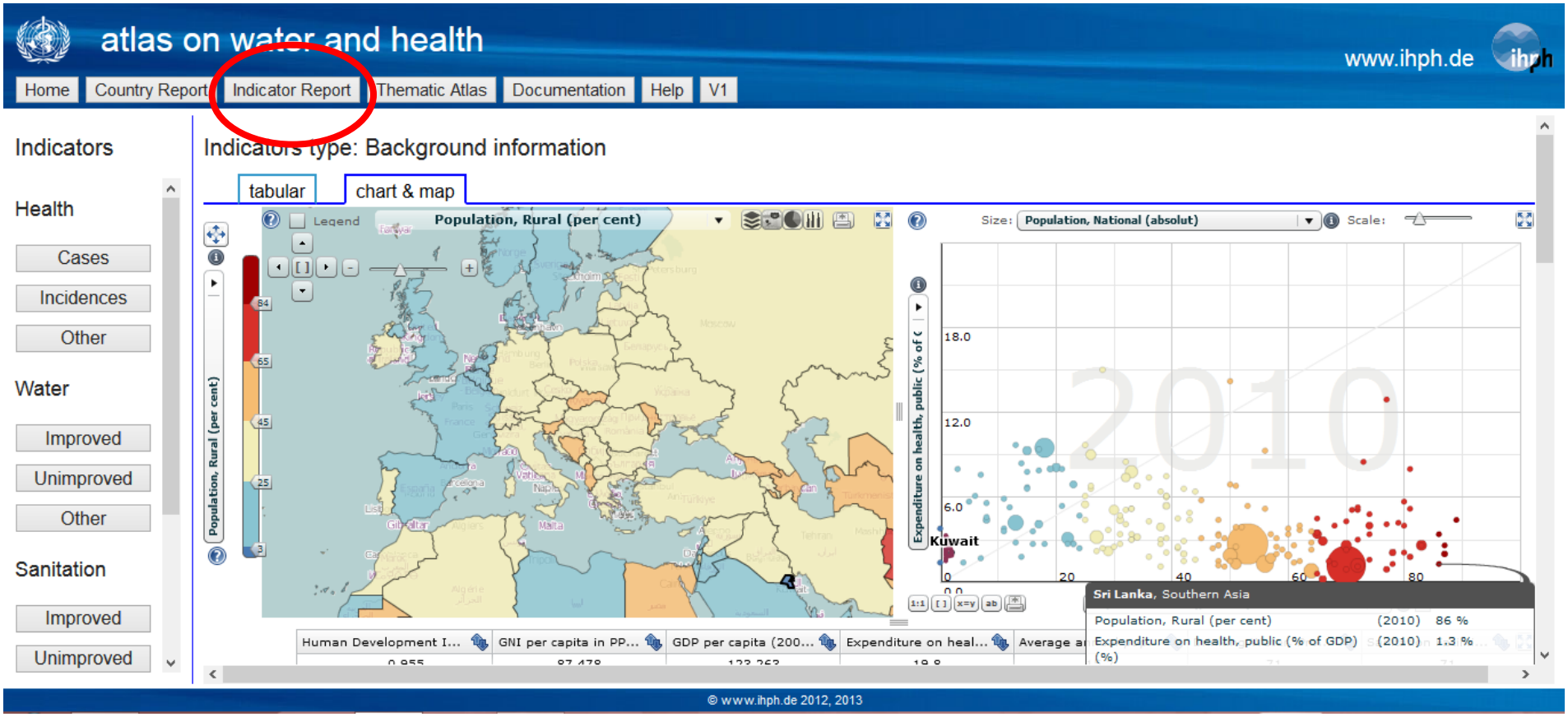
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Indicators
Health
Cases
Incidences
Other
Water
Improved
Unimproved
Other
Sanitation
Improved
Unimproved
Indicators type: Background information
tabular
chart & map
Legend
Population, Rural (per cent)
Population, Rural (per cent)
84
65
45
25
3
Size:
Population, National (absolut)
Scale:
Expenditure on health, public (% of
18.0
12.0
6.0
0.0
0
20
40
60
80
2010
Kuwait
Sri Lanka, Southern Asia
Population, Rural (per cent) (2010) 86 %
Expenditure on health, public (% of GDP) (2010) 1.3 %
(%)
Human Development I...
GNI per capita in PP...
GDP per capita (200...
Expenditure on heal...
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Synopsis
Synopsis
Expert Version
Expert's atlas
Thematic Atlas: Gaining access to save drinking water and sanitation facilities
Legend
Population, Rural (per cent)
Africa
Eastern Mediterranean
Europe
South-East Asia
The Americas
Western Pacific
not_member_of_thi...
WHO categories
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Size:
Population, National (absolut)
Scale:
Sanitation Facilities, Proportion of the 2010
60
40
20
0
-20
-80
-60
-40
-20
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40
60
Drinking Water, Proportion of the 2010 populatior
Trails
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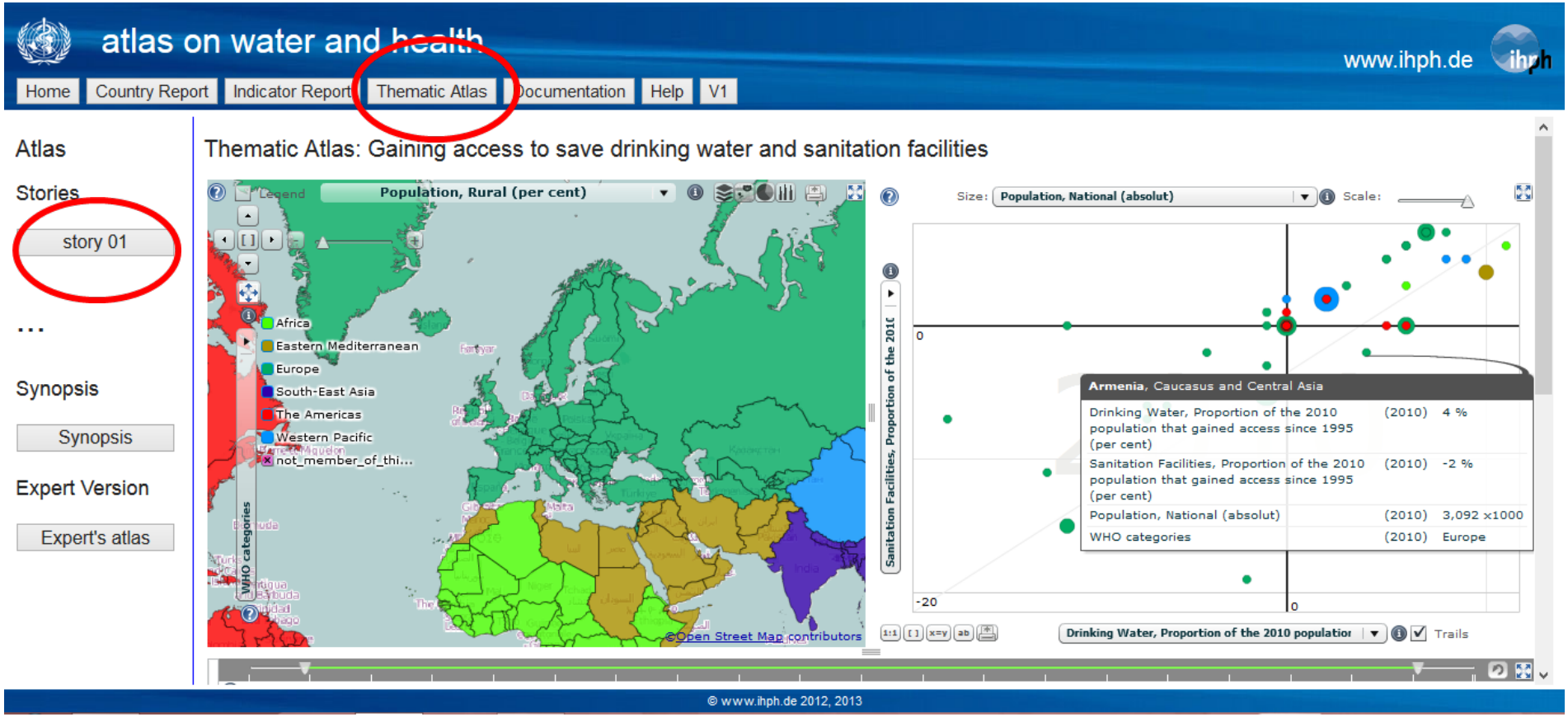
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The Americas
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WHO categories
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Size:
Population, National (absolut)
Scale:
Sanitation Facilities, Proportion of the 2010
0
-20
0
Armenia, Caucasus and Central Asia
Drinking Water, Proportion of the 2010 population that gained access since 1995 (per cent) (2010) 4 %
Sanitation Facilities, Proportion of the 2010 population that gained access since 1995 (per cent) (2010) -2 %
Population, National (absolut) (2010) 3,092 x1000
WHO categories (2010) Europe
Drinking Water, Proportion of the 2010 populatior
Trails
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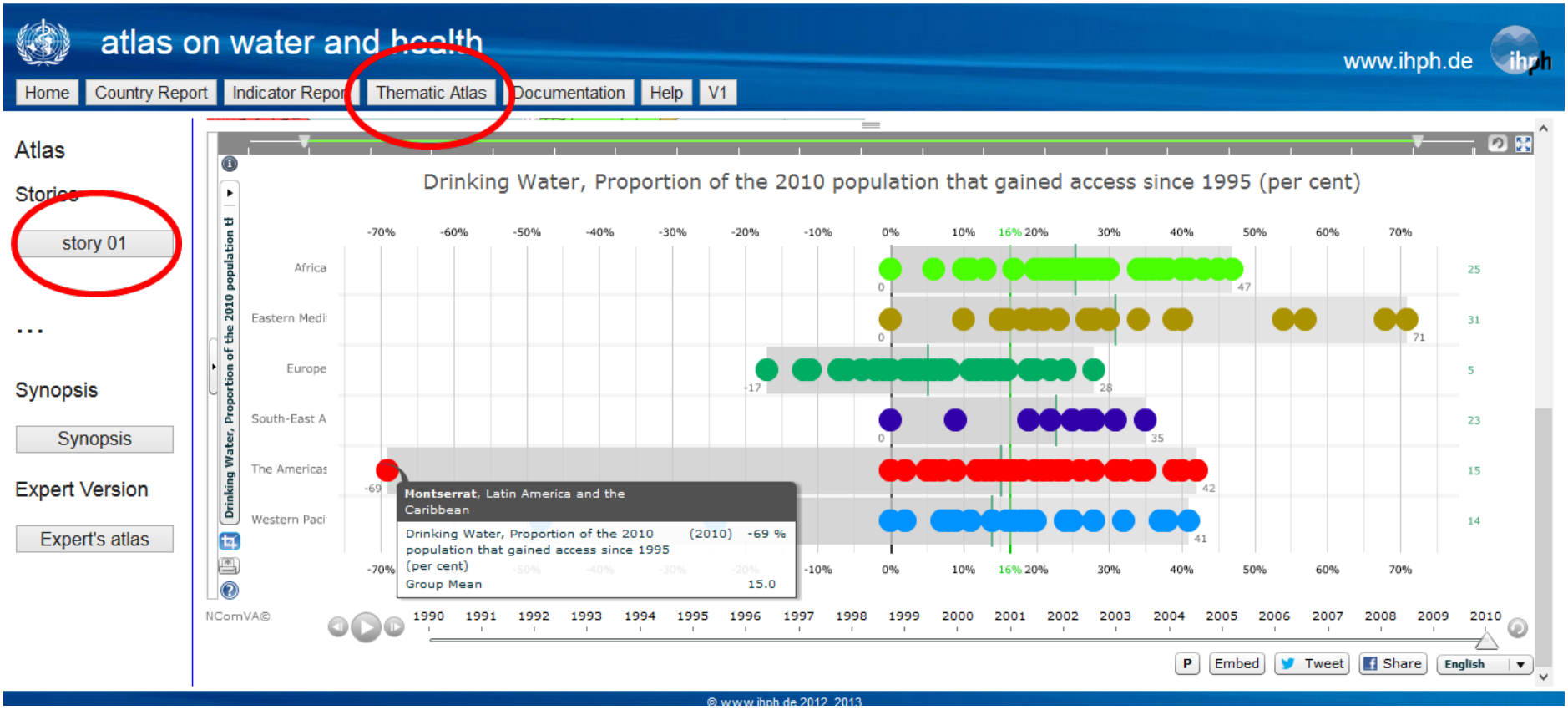
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Drinking Water, Proportion of the 2010 population tl
Africa
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South-East A
The Americas
Western Paci
Montserrat, Latin America and the Caribbean
Drinking Water, Proportion of the 2010 population that gained access since 1995 (per cent) (2010) -69 %
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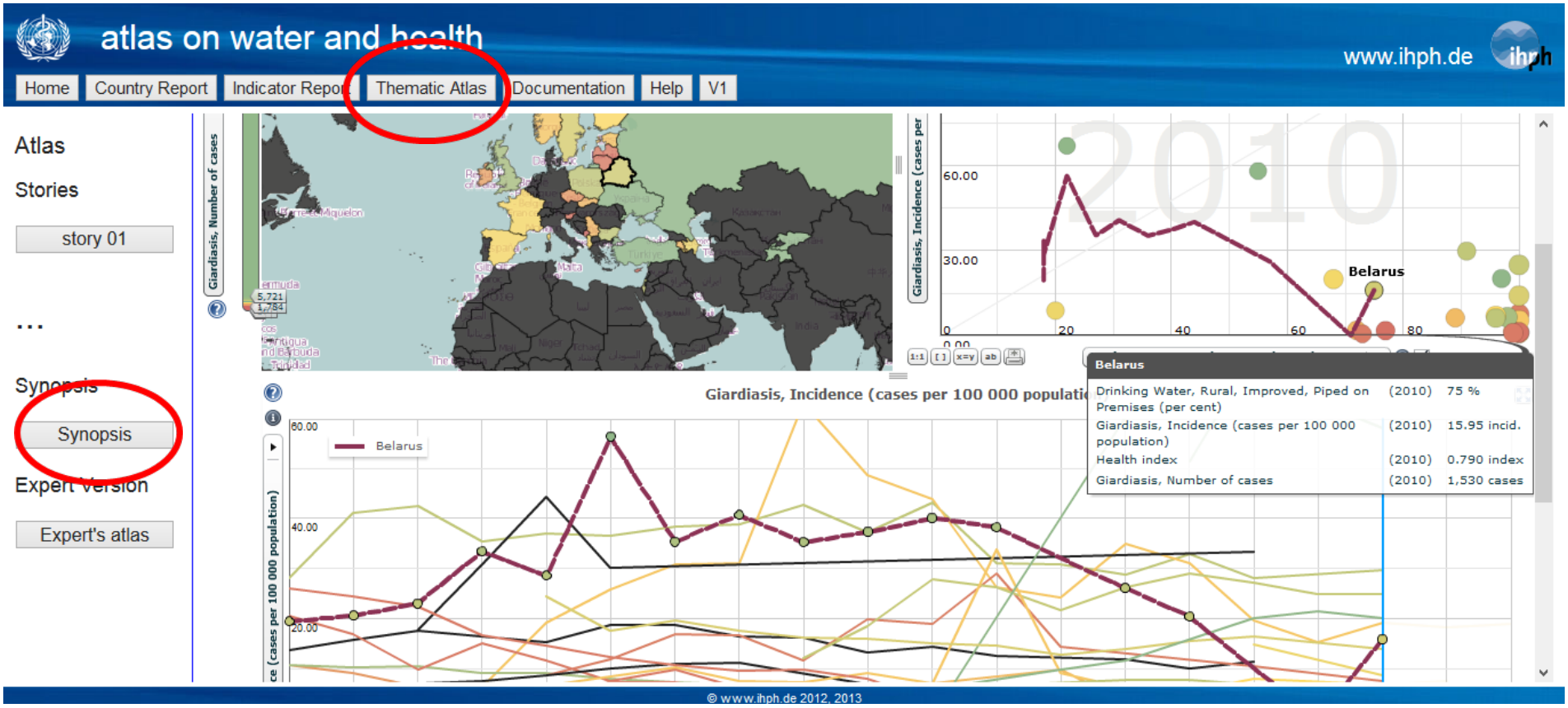
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Giardiasis, Number of cases
Giardiasis, Incidence (cases per
2010
60.00
30.00
0
20
40
60
80
Belarus
Belarus
Drinking Water, Rural, Improved, Piped on Premises (per cent) (2010) 75 %
Giardiasis, Incidence (cases per 100 000 population) (2010) 15.95 incid.
Health index (2010) 0.790 index
Giardiasis, Number of cases (2010) 1,530 cases
Giardiasis, Incidence (cases per 100 000 populati
60.00
40.00
20.00
Belarus
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To do

- Integration of different languages: Russian!
- Preparation of a collection of predefined layouts
- Integration of indicators
- Automated data update
- …