

# DVD Manual: Climate Change from above

## Climate Change Education for Sustainable Development based on satellite images and complementing materials

All materials on this DVD are meant to support your educational work as a teacher, NGO educational staff or as a youth group leader.

### Structure of the materials

The materials are grouped in four pillars.

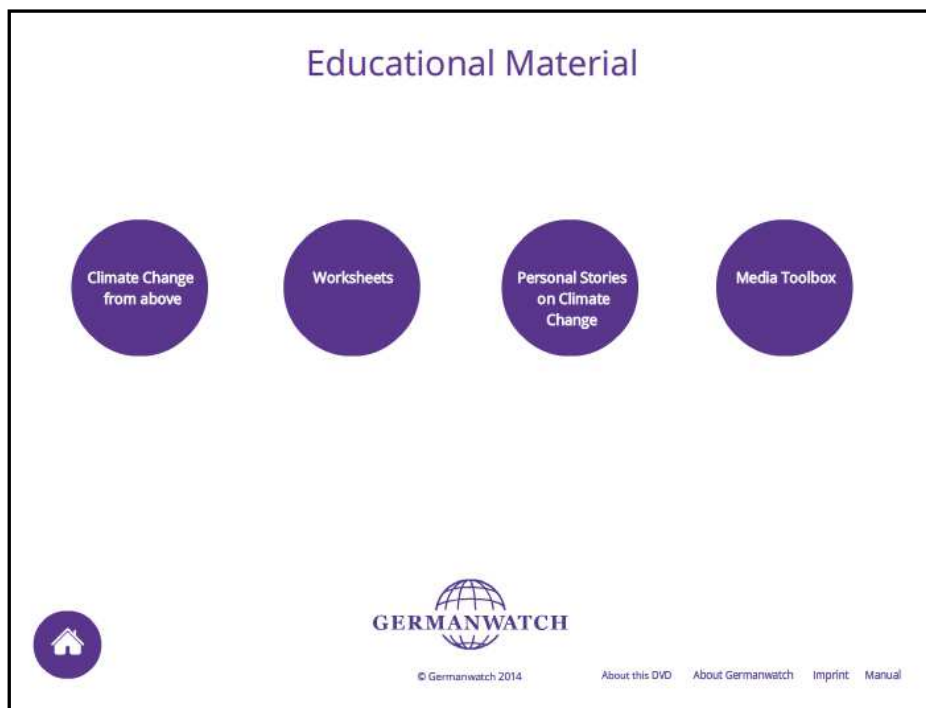


Figure: Screenshot of the DVD menu with its four main pillars.

The first one provides a booklet titled '**Climate change from above**' with an introduction to climate change. The booklet is based on satellite images and short information to different climate change topics.

Next to the booklet there are 7 **worksheets on climate change** and an introduction to the worksheets. Each worksheet consists of general information to the topic, a lot of ready-to-use materials, didactic explanations how the materials can be used and

exercises suited for students in upper secondary education. Each worksheet is designed to fill at least one learning section. The worksheets can also be combined to establish relationships between various topics of climate change.

The third pillar presents **personal stories on climate change**. Therein you find e.g. stories of affected people and examples how they react to climate change. These materials are divided into four subcategories: adaptation stories, mitigation stories, climate witness stories and stories of education and awareness.

- The adaptation stories are extracts of an exhibition called 'Adaptation against the odds' assembled by the NGO Practical Action. These short stories tell how people in different countries like Bangladesh, Peru, Zambia and Kenya adapt to climate change.
- The mitigation stories are examples of personal action to stop climate change and show that everyone of us can do something.
- The folder of climate witness stories contains many stories from all over the world which show how people feel and witness climate change. They use a local perspective to make climate change visible and are provided by WWF International, WWF Germany, Verband Entwicklungspolitik Niedersachsen e.V.
- Change in thinking, behaviour and action needs awareness and education. The education and awareness stories show examples of how other NGOs and groups conduct awareness raising activities and climate change education.

The **Media Toolbox**, the fourth pillar of the DVD, contains high-resolution satellite images, short films, songs, posters and games.

The folder of satellite images includes the images used in the booklet 'Climate change from above' and some additional satellite images. They are arranged in thematic folders. The document 'Right to use the satellite images' gives an overview of all satellite images on the DVD and names their exact references. The satellite images can be used for educational work but have to be referenced correctly.

In addition, the Media Toolbox provides a selection of short films, songs, posters and educational games related to environmental issues, especially to climate change. The games provided by 'Info Desk for Climate Justice, Zentrum für Mission und Ökumene der Nordkirche' give methodological instructions for educational games

and exercises to address climate change issues. All games can be played with friends, in small groups or during lessons and workshops.

### Usage of the materials:

The materials on the DVD can be used both combined and separately. For instance you can combine the following materials related to the topic of sea level rise:

- The brochure for some brief information to sea level rise
- Satellite images of the coastline of the Netherlands and Bangladesh
- Worksheets: 'Sea level rise – consequences for coastal and lowland areas: Bangladesh and the Netherlands ' as well as 'Going under! The threat of rising sea levels for the small island nation of Tuvalu'
- Adaptation and climate witness stories
- Songs and short films
- Games

As an option, you start with showing some satellite images. Students can describe what they see on the satellite images. Afterwards you provide more information based on the booklet regarding the satellite images. Some parts of the worksheets can be read and then some exercises from the worksheets can be done together. Adaptation and climate witness stories can help to get a better insight of personal perspectives on certain issues. Songs, short films and games in-between can be useful for a good working atmosphere of the group. Especially the games provide interesting methods to learn more about the topic in a different way. Afterwards you can discuss the topic of sea level rise and think about what each of us can do to mitigate climate change.

## Overview of this DVD including all materials:

### I. Climate Change from above

- Booklet: *Climate change from above*

### II. Worksheets on Climate Change

- Worksheet: *Global climate change – general issues*
- Worksheet: *The melting glaciers – glacial lake outburst floods in Nepal and Switzerland*
- Worksheet: *Sea level rise – consequences for coastal and lowland areas: Bangladesh and the Netherlands*
- Worksheet: *Going under! The threat of rising sea levels for the small island nation of Tuvalu*
- Worksheet: *The threat to tropical rainforests and international climate protection*
- Worksheet: *Climate change and food security – trends and key challenges*
- Worksheet: *Extreme events and climate change – insurances for developing countries*
- Information: *Introduction to the Worksheets on Climate Change*

### III. Personal stories on climate change

Climate Witness Stories	Adaptation Stories	Mitigation Stories	Education + Awareness Stories
<ul style="list-style-type: none"> <li>▪ <i>Australia</i></li> <li>▪ <i>Belize (woman)</i></li> <li>▪ <i>Belize (man)</i></li> <li>▪ <i>Bolivia</i></li> <li>▪ <i>Canada</i></li> <li>▪ <i>China</i></li> <li>▪ <i>Germany</i></li> <li>▪ <i>Guatemala</i></li> <li>▪ <i>India (woman)</i></li> <li>▪ <i>India (man)</i></li> <li>▪ <i>Kiribati</i></li> <li>▪ <i>Mongolia</i></li> <li>▪ <i>Nepal</i></li> <li>▪ <i>Tanzania</i></li> <li>▪ <i>Uganda</i></li> <li>▪ <i>USA</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Bangladesh</i></li> <li>▪ <i>Kenya</i></li> <li>▪ <i>Nepal</i></li> <li>▪ <i>Peru</i></li> <li>▪ <i>Sudan</i></li> <li>▪ <i>Zambia</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Addressing vehicular pollution in the neighbourhood</i></li> <li>▪ <i>Bike bus</i></li> <li>▪ <i>Energy conservation in classrooms</i></li> <li>▪ <i>Generating electricity with pine needles</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>Critical theatre</i></li> <li>▪ <i>The story of the Green thread</i></li> <li>▪ <i>Tree of Hope</i></li> </ul>

### IV. Media Toolbox

#### ▪ Satellite images

- Agriculture in Bolivia
  - Image: *Department Santa Cruz, Bolivia in 1984*
  - Image: *Department Santa Cruz, Bolivia in 2000*
- The Arctic
  - Movie: *Change of Arctic*
- Coal Mine
  - Image: *Coal Mine Germany*
- Country Images
  - Image: *Bangladesh*
  - Image: *Cuba and Jamaica*
  - Image: *India*
  - Image: *South Africa*
- Floods
  - Image: *Coastline of Bangladesh*
  - Image: *Coastline of Bangladesh\_1*
  - Image: *Coastline of Bangladesh\_2*
  - Image: *Elbe in Germany*
  - Image: *Flood of the Elbe in Germany*
- Glaciers
  - Image: *Columbia Glacier in Southeastern Alaska*
  - Image: *Glacier in Bhutan*
  - Image: *Greenland comparison of ice melting*
  - Image: *Greenland*
  - Image: *Greenland\_1*
  - Image: *Greenland\_2*
- Lake Chad

- Image: *Lake Chad 1963*
    - Image: *Lake Chad 2012*
  - Night Images
    - Image: *Central Europe illuminated by night*
    - Image: *India illuminated by night during Diwali festival*
    - Image: *World illuminated by night*
  - Palm Oil Plantations
    - Image: *Sumatra June 2013*
    - Image: *Sumatra May 2013*
  - Sea Level Rise
    - Image: *Coastline of Bangladesh*
    - Image: *Coastline of the Netherlands and dams*
    - Image: *Coastline of the Netherlands and Northeastern Germany*
  - Tropical Cyclones
    - Hurricane Catarina
      - Image: *Hurricane Catarina*
    - Hurricane Sandy
      - 40 images of *Sandy's formation and pathway*
    - Hurricane Vince (OM1)
      - 21 images of *Vince's formation and pathway*
    - Typhoon Haiyan
      - Image: *Typhoon Haiyan by night*
      - 30 images of *Haiyan's formation and pathway*
  - World Images
    - Image: *Earth Lights 2012*
    - Image: *World in December*
    - Image: *World in June*
    - Image: *Planet earth*
  - Information: *Right to use for satellite images*
- **Short Films**
    - Movie: *Climate Dish - Germanwatch*
    - Movie: *Human Earthbeat - Germanwatch*
    - Movie: *It hits all of us - Germanwatch*
    - Movie: *The Bill - Germanwatch*
    - Movie: *What am I - Germanwatch*
    - Movie: *Football - jugend denkt um.welt*
    - Movie: *Let the games begin - jugend denkt um.welt*
    - Movie: *Museum - jugend denkt um.welt*
    - Movie: *Restaurant - jugend denkt um.welt*
    - Movie: *Solar - jugend denkt um.welt*
  - **Songs**
    - Song: *Global Warning*
    - Song: *Breath of Fresh Air (Boom Dawn)*
    - Song: *To the Leaders (Fyah Juice)*
    - Song: *Moral Duty (Fyah Juice feat. Fyah Wayne and Free da Ghetto Youths)*
    - Song: *Mother Earth's Cry (Richie Ramsay)*
    - Song: *Our Planet's Aid (Lloyd Lovindeer)*
    - Video-Clip: *Global Warning*
  - **Posters**
    - Poster: *Climate change is not a game*
    - Poster: *Connect the dots: flight*
    - Poster: *Connect the dots: SUV*
    - Poster: *Connect the dots: T-Bone Steak*
    - Poster: *One world - one Climate*
  - **Games**
    - Game Instruction: *Brainwriting on options for climate action*
    - Game Instruction: *Climate Opinion Beam*
    - Game Instruction: *Climate Outburst*
    - Game Instruction: *Climate salad*
    - Game Instruction: *World Distribution Game*

## Credits:

Germanwatch developed this DVD in dialogue with climate change experts from:

- CEE - Center for Environment Education India ([www.ceeindia.org](http://www.ceeindia.org))
- CPRD - Center of Participatory Research and Development ([www.cprdbd.org](http://www.cprdbd.org))
- GeaSphere South Africa ([www.geasphere.co.za](http://www.geasphere.co.za))
- Geoscopia ([www.geoscopia.de](http://www.geoscopia.de))
- PANOS Caribbean ([www.panoscaribbean.org](http://www.panoscaribbean.org))
- WOSM - World Organization of the Scout Movement ([www.scout.org](http://www.scout.org))
- youththinkgreen ([www.youththinkgreen.org](http://www.youththinkgreen.org))

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