KONRAD-ADENAUER-STIFTUNG 2|2016

INTERNATIONAL REPORTS

Climate. Energy. Security.

INTERNATIONAL REPORTS

2|2016

Dear Readers,

The fight against climate change is not merely a question of ecological necessity but a question of economic reason. It is a question of generational equity, a question of compassion and a question of humanity and its future. These are the aspects Angela Merkel reminded her audience of when she addressed the 21st UN Climate Change Conference (COP21) at the end of 2015. Against this backdrop, the "Paris Agreement" has been welcomed by all sides, and rightly so. However, the reasons as to why this agreement came about pertain mainly to its non-binding and procedural character, as Jasper Eitze stresses in his article on the key topic of this issue. At the same time, he underscores Germany's unique role and recommends giving due attention to the cost factor. It will be important to seek closer cooperation with its European and international partners.

In their article, Peter Hefele, Johannes Vogel and Eric Lee show that energy production, climate change and security are closely intertwined with one another, taking the Asia-Pacific Region as an example. They maintain that particularly with respect to the connection between climate change and migration, reliable identification of cause and effect is virtually impossible. This does not alter the fact that German development policy should make efforts to improve the capability of poorer sections of society in particular to adapt to climate change and thus mitigate climate migration. However, there is still a lack of suitable early warning systems whereby energy and climate-related sources of conflict could be identified in good time so that an appropriate response can be taken.

In his article on Latin America, Christian Hübner focuses on the security dimension of climate change. In this context, climate change exacerbates crises, for instance by increasing risks inherent in the power supply situation, fuelling conflicts about water and land as well as intensifying the urbanisation pressures, which are strong already – not to mention hurricanes, melting glaciers, droughts and flooding.

The African continent is gravely afflicted by climate change, as Oliver Ruppel and Arne Wulff show in their article. However, the situation is further exacerbated above all by the fact that many African countries are among the so-called fragile states. It is obvious that these countries are hardly in a position to mitigate the effects of climate change, let alone take effective measures to

combat its causes. The remit of European Development Cooperation must entail supporting the affected countries in developing the necessary technical, human and above all political capabilities as to enable them to take part in the fight against climate change to begin with.

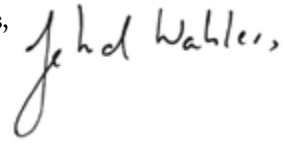
All six member states of the Gulf Cooperation Council continue to rank among the 15 largest CO_2 emitters worldwide. However, as Gidon Windecker and Sebastian Pfülb explain in their article, there are now indications of a tentative shift towards renewable energy production. Concerns pertaining to energy security and economic prosperity in view of shrinking oil revenues constitute the motives behind that shift. Nonetheless, the change in attitude towards energy issues could also bring about structural changes in politics and society.

For Kazakhstan too, vast reserves of natural resources have not only been a blessing, but also a curse. In their article, Thomas Helm and Nicolas Scholz illustrate how falling prices on the international natural resource markets have caused the Kazakh economy to slide into crisis. The government, which had relied on the sale of fossil fuels and other natural resources for long, is now attempting to steer a new course, and looking mainly to renewable energies in doing so. If the transformation of the Kazakh economy into a modern industrial society is to be successful, the country will still need to rely on fossil fuel extraction for the time being as that is the only way to fund such an undertaking without risking social unrest and societal resistance.

All in all, the articles on the key topic of this issue primarily illustrate the complexity of the interaction between energy production, climate change phenomena and efforts to ensure security in different regions around the world. The fight against climate change is no doubt one of the main challenges of our time – a challenge which, to be overcome, will require consideration of questions of energy security and aspects of economic policy as well as, in particular, coordination within Europe and the transatlantic alliance.

I wish you a stimulating read.

Yours,



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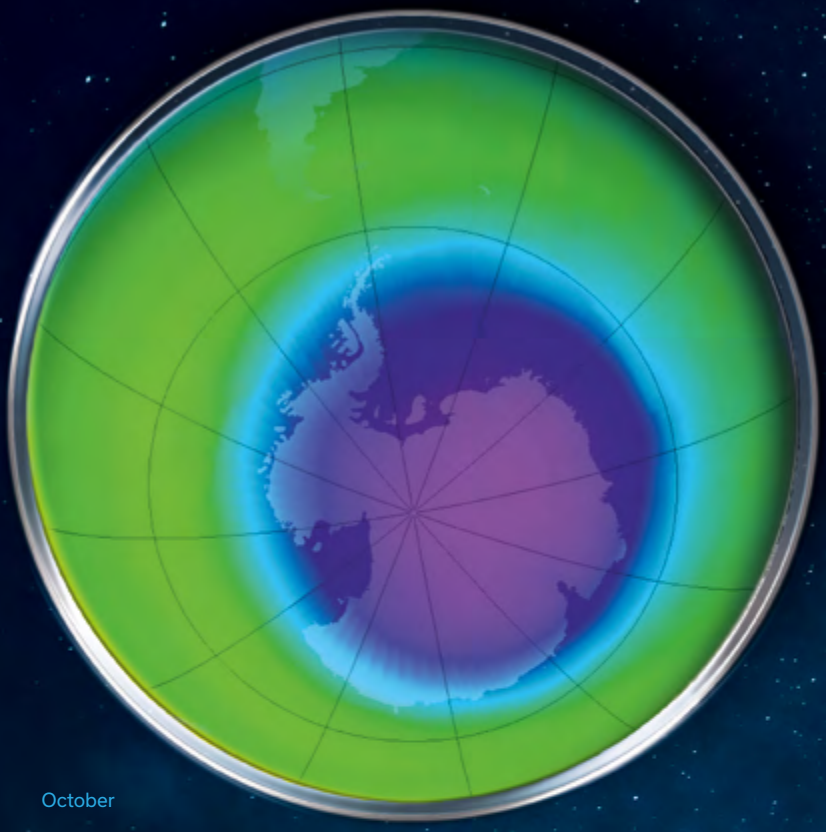

October
1996

October
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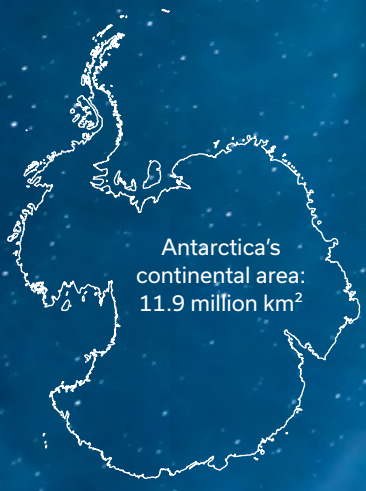
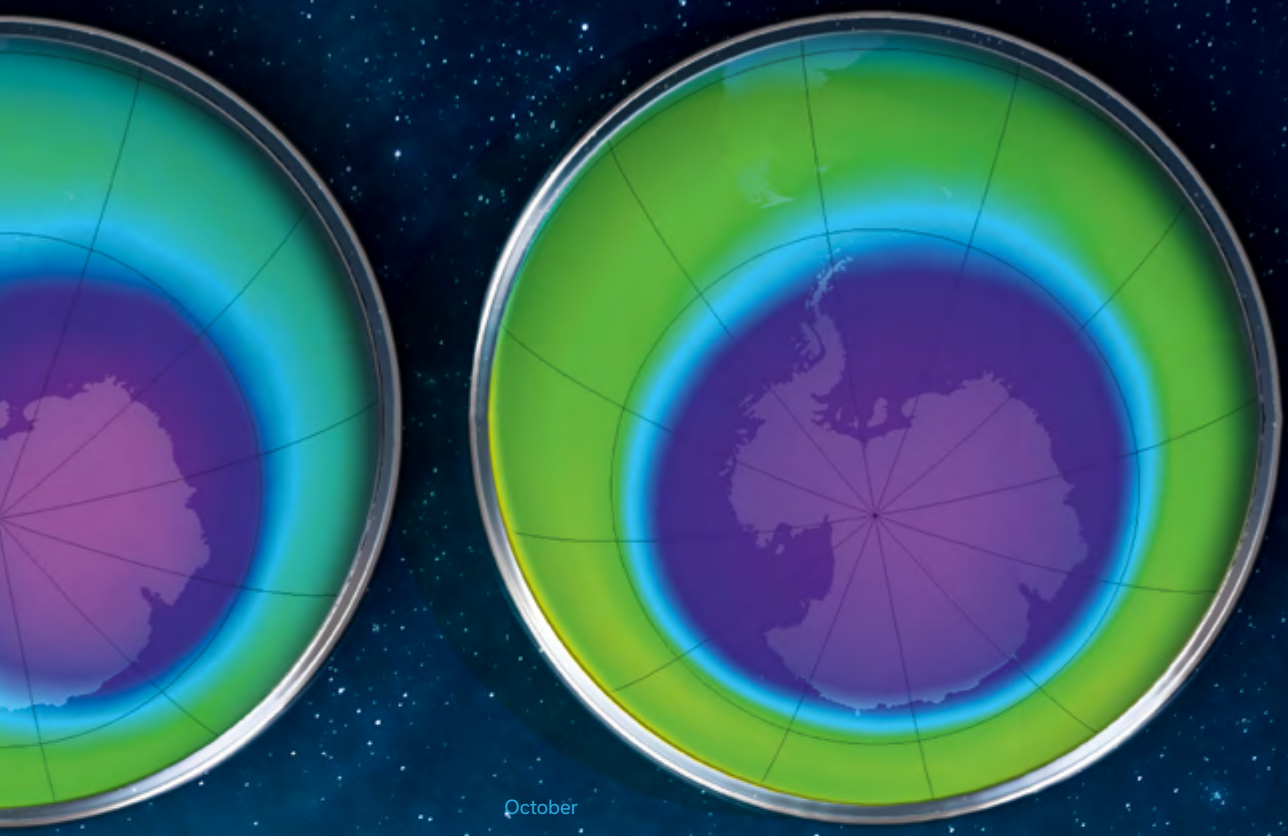
The Ozone Hole Is Shrinking – or Is It Not?

Total ozone
in Dobson units





October

2015

The ozone hole — of great concern to environmentalists and dermatologists for decades — has lately been making the headlines in a rather positive light. Observations have shown that the rate of expansion is decreasing. Some were even eager enough to mark a trend reversal and a regeneration of the ozone layer at that. If, however, we are to turn to the available data shown in our diagram, a trend reversal appears to be entirely out of sight. The year 2015 even drew close to a historic record-breaking size. Scientists nonetheless see no cause for concern. They argue that natural factors such as extreme weather fluctuations and the eruption of Chile's Calbuco volcano are to blame for the substantial depletion of 2015.

Climate. Energy. Security.

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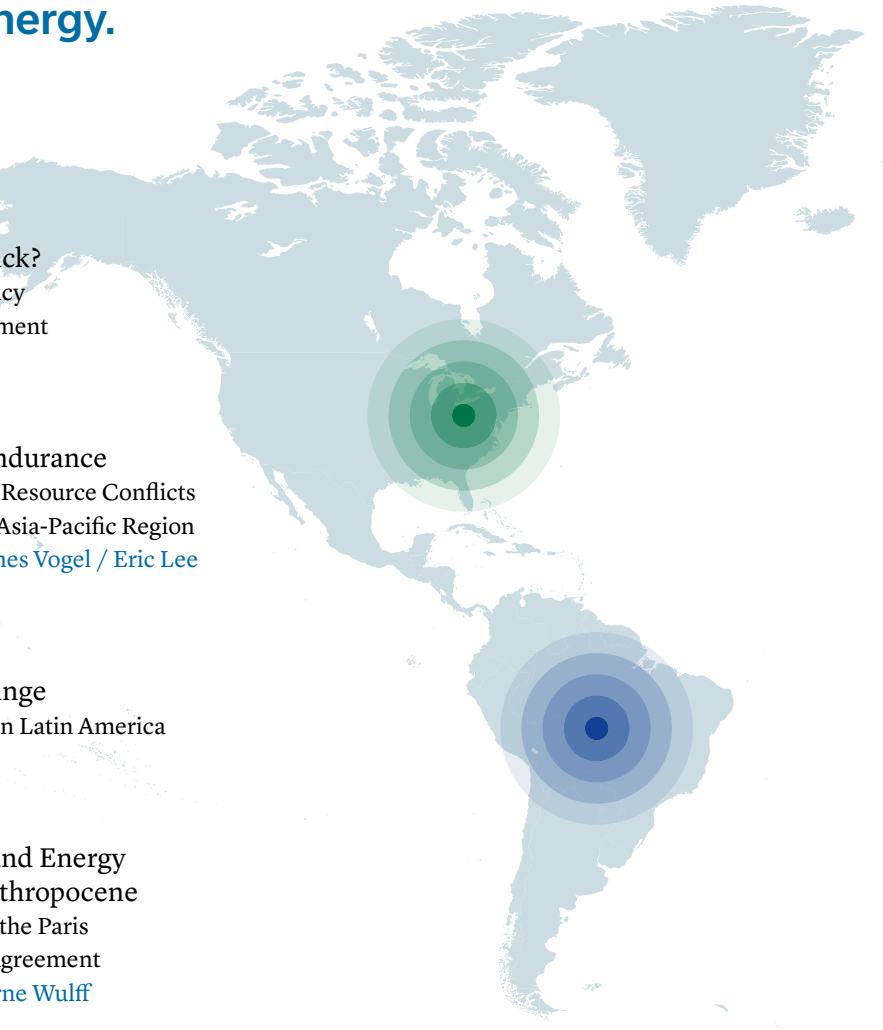
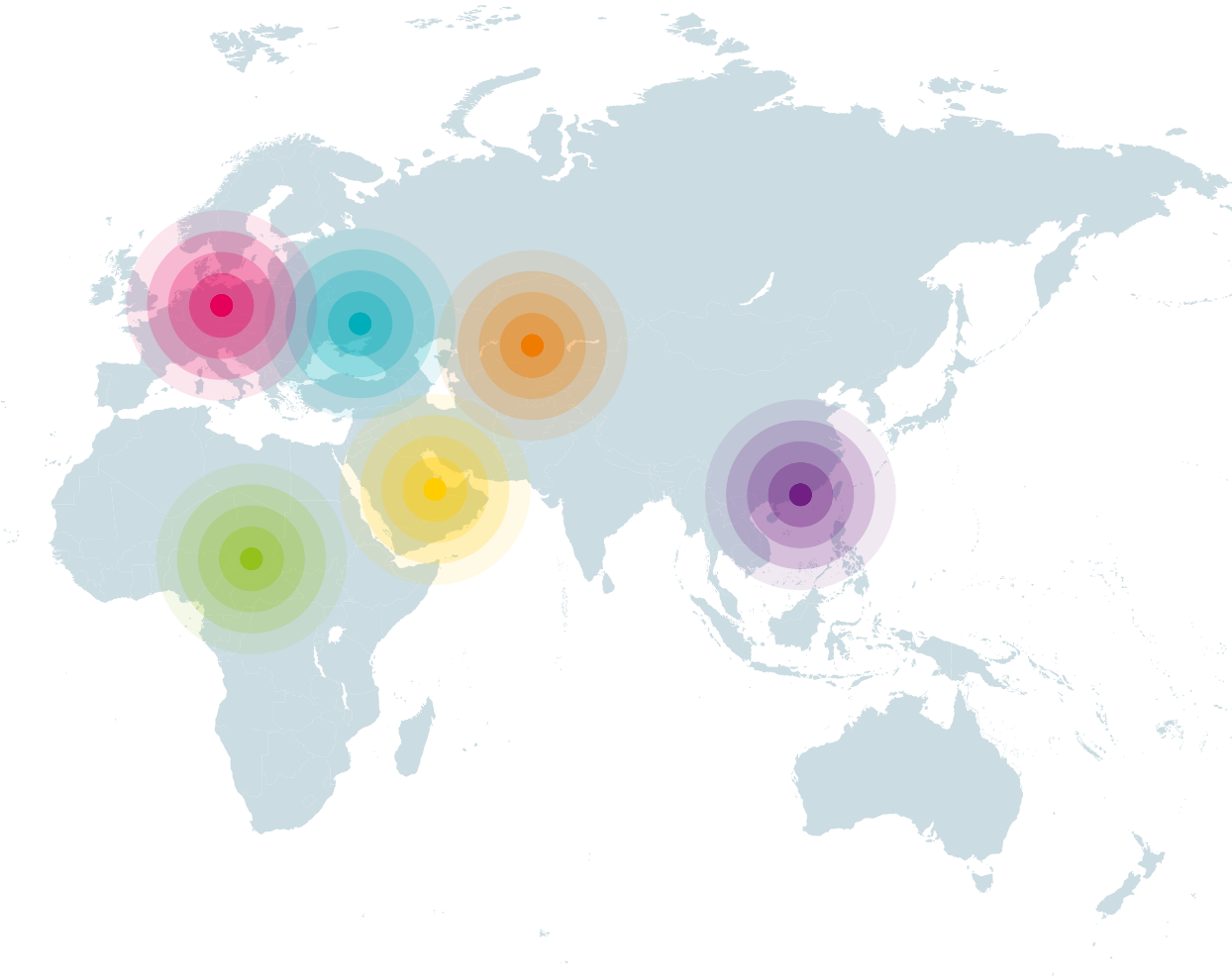


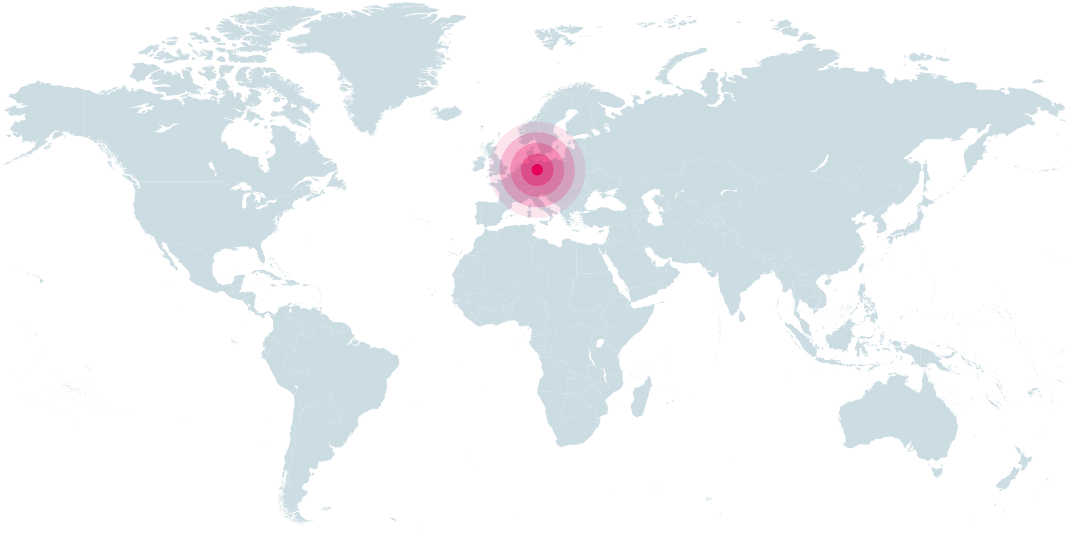


OTHER TOPICS

On the Wrong Track?

German Climate Policy after the Paris Agreement

Jasper Eitze



The Paris Agreement has stimulated the German debate about climate protection and has once more drawn further attention to issues like the *Energiewende* (energy transition) or national climate targets. But what derives from the Paris Agreement for Germany? How can Germany contribute most effectively and efficiently to the development of global climate protection – and how rather not?

Greater German measures toward countering the effects of climate change, the fastest possible exit from coal-based electricity generation in Germany as well as stronger efforts made by the German government to promote an ambitious EU climate policy – these are things the majority of the German population want to see implemented on the ground according to a recent survey commissioned by the environmental organisation WWF.[1] The Paris Climate Protection Agreement (PA) has given further impetus to expectations and demands of this sort. Many think that in its role as climate policy pioneer Germany should show the world it can achieve its national climate protection targets, master the *Energiewende* (energy transition), realise the breakthrough of e-mobility and much more. Seen from this perspective, the costs involved in the promotion of renewable energies in Germany – the total volume of the so-called EEG levy (based on the Renewable Energy Sources Act) since its introduction in 2000 is set to pass the 150 billion euro mark sometime during 2016[2] – is justified as development aid under the heading of climate and energy policy.

Anyone who doubts this view is quickly labelled a pessimist, industry lobbyist, a dinosaur belonging to the fossil world characterised by obsession with growth, unimaginative and unreceptive to the message of a sustainability narrative promising salvation. However, particularly in view of new CO_2 and temperature records increasing around the world,[3] should we not keep a cool head and consider how Germany can be most effective in serving international climate protection? There is a distinct risk that Germany could take the wrong track because of exaggerated climate-policy ambitions. This article looks at where this risk lies and what can be done to increase the effectiveness and efficiency of German climate policy. First, the content of the PA will be examined as this is meant to act as the key frame of reference for international climate protection from now on. Then, the current climate debate in Germany is looked at in greater detail before finally being put into a European and global context.

The Paris Climate Deal: Evolution instead of Revolution

The most important reason for the successful conclusion of the PA at the UN Climate Summit in December 2015 (COP21) was the non-binding and procedural character of the agreements it contains. At the COP15 in Copenhagen in 2009, a failed attempt was made to transfer the top-down approach modelled on the Kyoto Protocol, splitting a joint emissions budget into tradable emission rights to all 196 contracting parties of the United Nations Framework Convention on Climate Change (UNFCCC). Consequently, a bottom-up model was developed in subsequent years, which does away with a joint concrete emissions budget in exchange for voluntary Nationally Determined Contributions (NDCs) to achieve a reduction in greenhouse gas (GHG) emissions. The long-term common goal agreed in the PA is to limit global warming towell below two degree celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degree celsius, and correspondingly aim to reach global peaking of GHG emissions as soon

as possible, so as to achieve zero net emissions in the second half of this century. All contracting parties have undertaken to present their NDCs every five years according to a (yet to be negotiated) common standard in a transparent and reproducible manner. The NDCs are meant to be as ambitious as feasible, within each country's capabilities, and not to fall behind previously promised goals. These goals need to be translated into national catalogues of measures. This means that every country remains in charge of its own goals related to climate change and need not fear "hard" sanctions if they are not reached. The only "soft" tool for sanctioning failure is the option of naming and shaming; judging from previous experience, this did not, however, prove to be very effective.[4]

The idea that all states must take some responsibility for climate protection has won through, although the industrialised countries are meant to take the lead.

At least the fact that all states joined together in coming to a global climate protection consensus meant the long-overdue abandonment of the strict division of the contracting states into industrialised and developing countries, with only the former being assigned responsibility for climate protection. The idea that all states must now take some responsibility for climate protection has broken through, although the so-called industrialised countries are meant to continue taking the lead with absolute emissions reductions while the so-called developing and emerging countries are granted more time. In this spirit, the PA also does not pursue climate protection as the one and absolute goal, but places it in context with other development principles such as poverty reduction and food security. In this connection, the PA emphasises that the climate policy ambitions of poorer states depend on the amount of assistance they receive from richer states, particularly in terms of financial resources, technical equipment and expertise. Especially from the perspective of countries that are particularly vulnerable to the impact of climate change, it is also essential to give the aspect of mitigation the same importance as prevention.

Windpower: The north of Germany provides → great potential for electricity generation through wind power stations. Source: © Fabrizio Bensch, Reuters.

The PA therefore marks a significant evolutionary step for international climate protection, albeit not a revolutionary one because of the lack of a binding character and sanctioning mechanisms. It would, in fact, be unrealistic to have more far-reaching expectations as states are not known for being willing to restrict their sovereignty voluntarily when key political issues are at stake. Against this backdrop, it is not surprising that the entire intended contributions to climate protection would clearly fail to meet the agreed temperature target and be more likely to produce a global warming scenario of 2.7 degrees celsius.

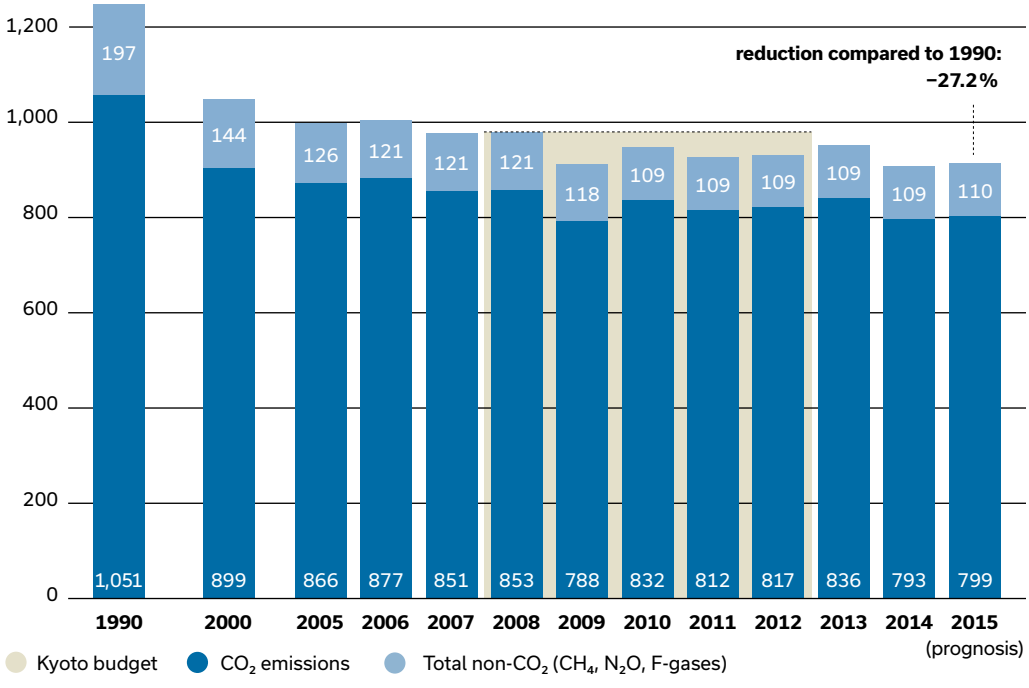
Consequently, the turning point in global GHG emissions, which had been set as an urgent goal by the PA, is not yet in sight either. On the contrary, the International Energy Agency (IEA) works on the assumption that worldwide energy demand will increase by roughly a third until 2040 compared to 2013 levels, which corresponds to a 16 percent GHG emissions increase in the energy sector.[5] Despite impressive groth rates, renewable energy currently has an estimated share of of global final energy consumption of only roughly 20 per cent.[6] The findings of the international future study entitled Delphi Energy Future 2040 of the BDEW (German Association of Energy and Water Industries) indicate that energy demand is likely to double between now and 2040.[7] At the same time, the prices for fossil fuels will probably remain at a relatively low level because of oversupply, partly due to new technical options such as fracking.[8] That said, one can assume it will be possible over time to better reconcile economic and social goals with climate-related ones. It is also likely

that climate change issues will rise to the level of high politics for an ever-greater number of states as their key significance in terms of the impacts on the economy and security will become increasingly obvious.[9] One can expect such a change of perception of global warming to take place in relation to North Africa and the Middle East, for instance, as water stress in conjunction with dysfunctional state structures in this region is likely to become more pronounced.[10]

The Climate Debate in Germany: Limits to Trailblazing

Since COP21, the climate debate in Germany has been dominated by opinion makers urging the federal government to pursue the national climate protection goals more forcefully, particularly by making greater efforts to implement the *Energiewende*. There is a demand, for instance, to facilitate the decarbonisation of the German economy, i.e. the total replacement of fossil fuels, by 2050, mainly by changing over entirely to renewable energies for electricity generation.[11] The hope is that Germany will then be perceived as a "reliable and credible partner" and an "honest broker" in international climate politics.[12] The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has elaborated the so-called Climate Action Plan 2050, which defines "the further reduction steps in light of European targets and the results of the Paris Climate Protection Conference 2015 up to the target value of 80 to 95 per cent in 2050"[13] and underpins them with respective measures. The long-term goal of the Climate Action Plan 2050 is ambitious. To achieve an emissions reduction of 80 to 95 per cent, Germany would have to reduce its CO_2 emissions by an average of 3.5 per cent a year as of now. Reductions of this magnitude have only been achieved as peak value since 1990.[14] One also needs to bear in mind that Germany was only able to reduce its GHG emissions in the course of the last 25 years mainly during the early 1990s because of the structural economic changes in

Fig. 1: Greenhouse gas emissions in Germany 1990 to 2015 forecast in millions of tonnes of CO_2 equivalent



Source: UBA 2016: Treibhausgas-Emissionen, UBA Emissions Situation, as at: 11 Feb 2016 (chart), 2 May 2016, in: http://umweltbundesamt.de/themen/klima-energie/treibhausgas-emissionen [13 Jul 2016].

Participants at the Paris Climate Change Conference 2015: The global agreement on climate change has incorporated developing countries in assuming responsibility for combating climate change.
Source: © Etienne Laurent, Reuters.

the former East Germany.[15] During subsequent years, the annual reduction rates were markedly lower, disregarding a sizeable reduction in 2009 due to the global financial and economic crisis. Since then, emissions have remained more or less steady. While GHG emissions are declining slowly but steadily in the energy sector, hardly any progress has been made in the other relevant sectors. In the transport sector and in agriculture, for instance, there have been no significant emissions reductions in the last two decades – rather the opposite. Germany will most likely fall short of its reduction target for the period to 2020.[16]

The development of emissions in Germany illustrates that uncoupling economic growth from emissions is anything but easy, even if a country possesses top-class technologies in this area. According to experts, what is needed to achieve this uncoupling is "not only a gradual transition to the use of climate-compatible energy sources in the energy system, but also the creation of the necessary political, institutional, cultural and social framework. This includes both changed behaviours at various levels as well as the need for sustained and consistent broad support as well as acceptance by the population".[17]

Whether the German population is prepared to support such fundamental changes seems all but certain. While still in the early stages rather than close to completion, the implementation of the *Energiewende* is meeting with increasing resistance among the population, be it where the further expansion of renewable energies or of the power grids is concerned or because of rising electricity prices. Of course the latter not only affects private households but also businesses. Considering the findings of the environmental awareness study conducted by the BMUB every

two years, it is unlikely that the majority of German society would be willing to endure noticeable economic disadvantages in the course of the *Energiewende*. In this survey, the respondents are divided according to their attitude to environmental issues and their environmental behaviour as follows:

- Individuals "focused on sustainability" (14 per cent of respondents), who play a pioneering role with their environmentally aware thinking and actions and who are convinced fundamental social transformation is required;
- Individuals "concerned about the environment" (22 per cent), who consider the state of the environment to be very worrying and would like to see ecological modernisation, where economic growth and sustainability should be linked;
- Individuals "seeking guidance" (20 per cent), who are convinced that "continuing as usual" is not an option. At the same time they are unsure as to what can be done in concrete terms and worry about maintaining their accustomed living standard;

Floods in Frankfurt (Oder): The German energy transition is intended to contribute to climate change mitigation.
Source: © Thomas Peter, Reuters.

- Individuals "focused on growth" (17 per cent), who have total confidence in market mechanisms and economic growth and are convinced that Germany is on the right path as regards environmental and climate protection;

- "Environmentally passive" individuals (27 per cent), who are hardly interested in environmental issues and show little willingness to engage in sustainable behaviour.[18]

The implementation of the German climate protection and *Energiewende* plans will therefore only be possible and legitimised by society if the move to a low-carbon economy is not detrimental to economic activities in Germany.

The European and International Context: Key to Greater Effectiveness and Efficiency

There is a general consensus that in order to facilitate successful implementation the German *Energiewende* must be embedded in a European context. However, hardly anything has happened at a practical level to date. As regards the envisaged integration of the internal European electricity market, the German view is that this will require above all stronger energy policy coordination as well as improved physical grid integration with the eleven "electrical neighbours".[19] The Joint Declaration for Regional Cooperation on Security of Electricity Supply in the Framework of the Internal Energy Market of June 2015 points in this direction, but now urgently needs to be underpinned by the implementation of concrete measures,[20] as the expansion of renewable energies in Germany is far ahead of the required modernisation and expansion of the electricity grid. This is causing considerable problems, not only in Germany but also across its borders, as illustrated by the current discussion about the Austrian-German electricity trading zone. Because of a lack of grid capacities to pass excess electricity generated by the wind farms in northern Germany on to southern Germany and from there to Austria, the Agency for the Cooperation of Energy Regulators (ACER) recommends splitting up the joint trading zone, which has been in existence since 2001, or at least to restrict it to prevent overloading the grid. There are also discussions about splitting Germany into two electricity price zones.[21] That certainly does not bode well for integration.

Like Germany, the EU as a whole aspires to emissions reductions of 80 rising up to 95 per cent by 2050.

Particularly from the perspective of climate policy, a coordinated European approach appears to be more promising than focusing on a national solution, if only because of the fact that Germany "only" contributes close to 2.4 per cent to global emissions, with a declining trend. The entire EU at least accounts for some ten per cent, behind the USA with just under 16 per cent and China at the top with some 28 per cent.[22] Like Germany, the EU as a whole aspires to emissions reductions of 80 rising up to 95 per cent by 2050 (as opposed to 1990). In the context of the PA, this is significant as Germany – like all EU Member States – is itself also a contracting party, but its emission reduction contributions are incorporated in the joint climate targets of the EU, which also acts as a contracting party. In other words, under the PA, there are no separate national climate protection targets of individual EU states. It follows that the most effective way for Germany to contribute to global climate protection is to provide consensus-forming leadership in the further development of EU climate policy. This is a particularly great challenge for Germany in view of the crises and disintegration tendencies in Europe (Brexit etc.) and the existence of some fundamental discrepancies between the Member States in the area of climate policy. The search for compromises is unavoidable if Germany wishes to act effectively in pursuing a progressive climate policy at a global scale. As things stand, the climate targets of the EU have been set and will probably not be reviewed until the new EU Commission takes office in 2018. According to the PA, however, the climate protection contributions of the contract-

Miners: In Germany, and also many other countries, lignite fired power plants are an important bridge technology towards a completely renewables-based energy system. Source: © Laszlo Balogh, Reuters.

ing parties are due to be reviewed with respect to their compatibility with the agreed long-term targets in 2018 and then again in 2023. The EU too will then have to ask itself once again whether the existing reduction target of minus 40 per cent by 2030 is appropriate or needs to be made more stringent. After all, the EU itself referred to the 40 per cent target as a minimum, obviously contemplating a potential future increase. The future German governments should therefore use the years between 2018 and 2023 to negotiate the possibility of increasing the target and the associated burden sharing with other EU Member States. No doubt that would be a more effective way to provide leadership in climate policy than merely playing the role of model pupil or geek no one wants to emulate. Recent history has shown that German leadership will not necessarily meet with a positive response in every case.

To look into the matter more deeply, it is worth examining the EU Emissions Trading System (EU ETS) as a central tool of European climate policy. The EU ETS covers the energy and manufacturing sectors, which jointly account for around half of all EU GHG emissions. As the total volume

of emissions certificates is matched to the EU's emissions reduction targets, the ETS represents a basically effective climate policy tool, which is also preferred by most industry representatives as a comparatively uncomplicated, market-relevant and cross-border scheme. From the business perspective, a global trade in emissions would be ideal to create a level playing field for all.[23] This could be achieved in the longer term by successively linking existing trading systems.[24] There have already been some initial efforts made in this direction. As the globally largest carbon market, which has been in existence since 2005, the EU ETS definitely has potential. Consequently, Germany should continue to make intensive efforts to maintain and improve the system and promote its expansion to further sectors.

Germany should persistently promote an expansion of the Emissions Trading System to further sectors, particularly the mobility sector.

Until this widening of the scheme has been achieved, Germany should focus its national emissions reduction efforts more strongly to the sectors not covered by the EU ETS, i.e. in particular the transport and property sectors, which harbour great savings potential.[25] The German government's "Climate Action Plan 2020", intended to help reach the self-imposed national emissions target of minus 40 per cent by 2020 despite all the difficulties, envisages additional emissions reductions totalling 62 to 78 million tonnes of CO_2.[26] However, one-third of this is covered by the EU ETS, which at least theoretically means that German emissions savings in this area would be neutralised by certificates traded elsewhere in Europe. This applies, for instance, to the so-called brown coal reserve, which provides for several large brown coal power stations to be transformed into a capacity reserve to be maintained from 2017 to 2021; this measure was discussed intensively last year and approved by the Federal Ministry for Economic Affairs and Energy in November 2015.[27] As remuneration for providing this (ultimately probably not required) reserve, the power plant operators will jointly receive up to an estimated 260 million euros a year. These costs will in turn be allocated to the grid fees and consequently paid by the electricity consumers.[28] The rising costs of the *Energiewende* put public acceptance at risk.

Notwithstanding the above-mentioned limitations, Germany, which is still the world's fourth largest economy, does have some influence of its

own in international climate policy circles, which is illustrated by the interest many other countries have shown in the German *Energiewende*. "If anybody can do it, Germany can," is a much quoted comment. However, this statement not only displays admiration but also a certain amount of scepticism and distance. Most observers consider the costs incurred in the course of the *Energiewende* to date to be very high, which only an affluent country such as Germany, if any, can cope with. In any case, Germany will only be able to make a significant contribution to climate protection with its *Energiewende* if it succeeds in presenting it as an attractive economic model for other countries as well. If the *Energiewende* degenerates into a national end in itself instead, it will not benefit climate protection. It would also be tragic insofar as Germany could benefit enormously from climate protection measures taken by other countries thanks to its excellent technological capabilities.[29]

For countries such as China and India, significant factors include environmental and health-related aspects, technological development and economic modernisation.

To provide additional contributions with an international impact, Germany should focus its cooperation efforts more on the major emitter countries. The four largest (China, USA, India and Russia) alone are responsible for roughly half of all global GHG emissions and can, thanks to their economic, political and cultural importance, become drivers for change towards lower-emission, more resource-saving economic activities and lifestyles, regionally and in the case of the USA and China even globally. Consequently, offers of cooperation from the German side should concentrate as much as possible on the predominant motivations for emissions reductions in these countries. As is generally known, the expansion of renewable energies can also have a positive impact on a country's electricity supply security – besides the climate protection effect – both internally, providing for greater decentralisation of the supply of electricity to the population and industry, and externally, through reduced reliance on fossil fuel imports. Ukraine, for instance, is focusing on this aspect in the context of its conflict with Russia, where the issue of dependence on gas plays a key role. For countries such as China and India, significant factors include environmental and health-related aspects (key term: air pollution), technological development and economic modernisation. The expansion of renewable energies is also being driven forward in the USA. It is promoted to U.S. farmers under the key phrase "homegrown economy". This involves rural development prospects, job security and questions of national security. Increasing the consumption of bio-fuels will help to reduce oil consumption and imports and may even make significant oil exports possible in the medium term. From a German perspective, another aspect is currently coming to the fore. An energy system relying increasingly on renewables, which involves greater fluctuations in electricity generation, needs intelligent control of feed-in, storage, distribution and consumption. This provides numerous possibilities for digital applications, the development of which can generate valuable expertise in Germany in this pioneering field.[30] Using and strengthening such motivations in a purposeful manner can – as something of a side effect – help global climate protection becoming a driving force and developing the necessary dynamic to ensure that the targets set in Paris have a chance of being realised.

Conclusion: Greater Pragmatism, Less Unilateral Action!

In view of the urgency of taking action to mitigate global warming, German climate policy should follow a more pragmatic course. UN climate diplomacy over the last 20 years has clearly demonstrated the practical limits of normative argumentation in the case of a complex challenge such as climate change. The current debate in Germany, however, is dominated by the idea of a pioneering role, favouring unilat-

eral action and hoping that other countries will follow Germany's example.[31] This approach harbours the risk of having the opposite effect and ultimately resulting in the failure of the German *Energiewende* and climate policy due to a lack of coordination and cooperation, within the EU and in the global context. It is precisely because so many countries look at the German *Energiewende* with interest that Germany must act responsibly and give greater thought to the question of cost. As is frequently the case, it is worth looking beyond the national horizon and engaging more intensely with European and international partners.

Jasper Eitze is Coordinator for Energy, Climate and Environmental Policy in Team Political Dialogue and Analysis at the Konrad-Adenauer-Stiftung.

1 WWF 2016: Deutsche wollen mehr Klimaschutz, 21 Apr 2016, in: http://wwf.de/2016/april/deutsche-wollen-mehr-klimaschutz [24 May 2016].
2 Cf. Federal Ministry for Economic Affairs and Energy (BMWi) 2015: EEG in Zahlen: Vergütungen, Differenzkosten und EEG-Umlage 2000 bis 2016, 15 Oct 2015, in: http://erneuerbare-energien.de/EE/Redaktion/DE/Downloads/eeg-in-zahlen-pdf.pdf?__blob=publicationFile [24 May 2016].
3 According to statistics of the US NOAA (National Oceanic and Atmospheric Administration), 2015 was the warmest year since 1880, with the average global temperature being 0.90 degrees celsius above the 20th century average. In parallel, the CO_2 concentration in the atmosphere rose to approximately 400 ppm (parts per million), compared to a value of around 280 ppm in the pre-industrial era. Cf. Umweltbundesamt (UBA) 2016: UBA misst neue Rekordwerte für Kohlenstoffdioxid, 22 Apr 2016, in: https://umweltbundesamt.de/presse/presseinformationen/uba-misst-neue-rekordwerte-fuer-kohlendioxid [24 May 2016].
4 The Canadian government, for instance, went on to withdraw from the Kyoto Protocol after its first phase in 2013, causing worldwide outrage. Realistically, while binding under international law, the PA is therefore ultimately non-binding and risk-free in the eyes of the signatory states.
5 Cf. International Energy Agency (IEA) 2015: World Energy Outlook 2015. Factsheet. Global energy trends to 2040, in: http://www.worldenergyoutlook. Cf. Renewable Energy Policy Network for the 21st Century (REN21) 2016: Renewables 2016. Global Status Report, S. 17, in: http://ren21.net/wp-content/uploads/2016/06/GSR_2016_Full_Report_REN21.pdf [10 Jul 2016].website/2015/WEO2015_Factsheets.pdf [10 Jul 2016].
6 Cf. Renewable Energy Policy Network for the 21st Century (REN21) 2016: Renewables 2016. Global Status Report, S. 17, in: http://ren21.net/wp-content/uploads/2016/06/GSR_2016_Full_Report_REN21.pdf [10 Jul 2016].
7 Cf. German Association of Energy and Water Industries (BDEW) / Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) / PricewaterhouseCoopers (PwC) 2016: Delphi Energy Future 2040. Delphi-study on the future of energy systems in Germany, Europe and the world by the year 2040, p. 8, in: http://delphi-energy-future.com/site/assets/files/1/6_2016_delphi-energy-future-2040_studienband_de_final.pdf [5 Jul 2016].
8 Ibid., p. 6 f.
9 Ibid., p. 10.
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At the Limits of Endurance

Climate Change and Resource Conflicts as Challenges to the Asia-Pacific Region

Peter Hefele / Johannes Vogel / Eric Lee

What is feared in Europe is already a reality in Asia: Up to 30 million people have had to flee their homes. Climate change, energy shortages and competition over resources have exacerbated conflicts among states – a vicious circle that threatens to nullify all developmental progress made thus far, the consequences of which even Europe will be forced to bear.

According to all forecasts,[1] Asia-Pacific is one of the regions that will be, and in some cases already are, most strongly affected by the impacts of climate change. At the same time, this region is itself already contributing massively to climate change: rising sea levels, desertification, landslides on the one hand; large-scale slash and burn, urbanisation, the wasting of energy and resources on the other, to mention just a few aspects.

Anyone taking a closer look at the links between energy production and consumption, climate change and security will quickly find that these involve a complex mixture of factors that are difficult to disentangle and whose causes and effects are frequently long-term and in many cases correlated. They will also realise that solutions are often not feasible within the framework of existing socio-economic institutions, political cycles and piecemeal approaches to intervention. There is a need for new conceptual approaches, out-of-the-box thinking and better supraregional cooperation as well as new "actor alliances", at a regional and global level.

Under the general theme of climate change and its impacts, this article will examine three phenomena that are closely interlinked and already clearly apparent in the Asia-Pacific region today: first, a weakening or even breakdown of statehood (fragility); secondly, increasing (voluntary or forced) migration, mostly within and between the states in the region but in part also beyond the region; and thirdly, the central importance of natural resources – and not just sources of energy – for the stability and development prospects of this region. However, it is generally difficult to ascribe the partly dramatic impacts on politics and economies to a direct cause, let alone to quantify the effects. It would be better to borrow a term from medicine and speak of a stress "syndrome".

Climate Change as a New Cause of Fragile Statehood

Many states in South and Southeast Asia are already characterised by the fact that their state institutions have inadequate or no capabilities to perform key public service functions, such as ensuring public safety, functioning social security systems and effective implementation of the rule of law. The causes include a high level of

Tsunami: In 2004, Southeast Asia was struck by one of the most devastating natural disasters in history. The Tsunami killed 230,000 people in 14 countries. Source: © Arko Datta, Reuters.

corruptibility, inadequate infrastructure, low tax revenues, political despotism and ethnic-social conflicts.

According to the classification used by the Department for International Development of the UK (DFID),[2] this fragility currently applies in particular to the states in South and Southeast Asia (Cambodia, Myanmar, Timor-Leste, Afghanistan, Bangladesh, Nepal, Pakistan and Sri Lanka as well as North Korea, Tajikistan and the Solomon Islands).

The stress "syndrome", which is already affecting these countries today, will only be exacerbated by the various direct and indirect consequences of the impending climate change. It will increase the vulnerability of these states and societies further and weaken their already poorly developed governance capabilities: initially directly, with respect to their capability to combat the causes of climate change (mitigation) and to adapt to them (adaptation); but also in terms of the need to overcome existing systematic development deficiencies.

Some of these disastrous correlations, which can be observed in many Asian countries in some form or another, will be described below.

1. *The existing political and administrative structures are poorly differentiated and their implementation and monitoring capabilities are weak.*

   Due to weak governance, these countries lack a holistic environmental or climate policy that covers all policy areas. This is not least due to the fact that there is insufficient consensus among the political elites about the desirable goals and means in the area of climate protection. But even if the political will to actively pursue a climate protection policy and external resources (e.g. funding and expertise from international donors) exists, the effective implementation of measures frequently does not materialise because of a lack of "vehicles" to promote climate protection within society. Consequently, the steps that would be necessary to prompt innovation and investment in environmentally-friendly technologies and resilient infrastructures are not taken. Nor have the states created effective structural incentives for individuals and businesses to change their behaviour. This will hardly be conducive to closing the (putative) divide between material prosperity and climate protection.

The increasing degradation of the environment is superimposed by climate change phenomena such as storms, droughts, flooding and heatwaves.

2. *Adaptation to the effects of inevitable climate change is becoming ever more important, yet is not given sufficient priority.*[3]

   Not only are these countries taking insufficient action to mitigate climate-damaging behaviours and promote the change to a different, sustainable development path. The states should also already be making substantial efforts to protect the population against the future impacts of climate change and to strengthen the resilience of the infrastructure. The increasing degradation of the environment, e.g. by air pollution, drinking water pollution and toxic waste, is superimposed by climate change phenomena such as storms, droughts, flooding and heatwaves, which are occurring with increasing frequency and intensity. Climate change is thus turning into a serious threat to "human security". In the period from 1970 to 2011, almost three-quarters of all natural disasters worldwide occurred in the Asia-Pacific region.[4] People living in this region are affected by natural disasters at twice the rate of people in Africa and as much as thirty times as frequently as those living in Europe or North America. Fragile states usually suffer the largest numbers of casualties. Between 1990 and 2008, half the population of South Asia was affected by extreme weather events, leaving some 60,000 people dead and causing 45 billion dollars in structural damage.[5] The negative impacts of climate change are particularly strong in fragile states such as Pakistan and Bangladesh: "Glacial retreat in the Himalayas will jeopardize the water supply for millions of people, changes to the annual monsoon will affect agriculture, and sea-level rise and cyclones will threaten human settlements around the populous Bay of Bengal."[6]

3. *Climate change has a particularly strong impact on the countries, regions and societies that lack domestic and inter-state conflict resolution mechanisms. This increases the risk of conflict and aggressive tendencies.*

   International Alert, an NGO based in London, has identified some 50 states worldwide as political conflict trouble spots, including eleven countries from Asia.[7] Competition for natural resources within a country and between countries represents a major source of conflict. Extreme weather events triggered by climate change and rising sea levels have a direct influence on the availability of resources. There are indications that the fight

Floods: Pakistanis desperately attempt to escape the crisis zone. The poorer classes are known to settle on lands most susceptible to natural disasters. Source: © Adrees Latif, Reuters.

over fresh water in particular is a potential and underestimated source of conflict in the Asia-Pacific region. In addition, the land available for cultivation is shrinking (due to salinisation and soil erosion, for instance), which is causing greater dependence on imports and driving up the prices of staple foods. The supply of electricity obtained from hydropower is also under threat, particularly in countries along lower river courses. Added to this are potential large-scale changes to ecosystems (e.g. along the Mekong). As described in points 1 and 2 above, there is a lack of capacity to perform effective resource management within and between the states of the region. This fragility also provides an ideal breeding ground for terrorist and criminal activities, such as the drug trade and human trafficking, and for extremist networks, whose actions add to the breakdown of the rule of law and pose a threat to regional security.

Climate Change and Migration

"You think migration is a challenge to Europe today because of extremism, wait until you see what happens when there's an absence of water, an absence of food, or one tribe fighting against another for mere survival."[8] These were the dramatic words used by U.S. Secretary of State John Kerry to warn the world against further delays in taking steps to counter climate change.

This link appears plausible at first sight. But it is not easy at all to determine which and how many cases of migration can, in fact, be attributed to

climate change. Particularly where the indirect consequences of climate change are involved, one cannot seriously maintain that reliable links can be made. Depending on the factors assumed to be at the root of migration, estimates about the migrant numbers in recent years differ greatly. Where the Asia-Pacific region is concerned, people often cite figures from the Asian Development Bank (ADB),[9] which include both temporary and permanent migrants. According to these figures, there were over 13 million climate migrants on the continent in 2009.[10] The following year, the figure surged to almost 32 million, dropping back down to just under eleven million in 2011. These huge fluctuations were due to sudden natural disasters. In 2011, the migrants were distributed relatively evenly across East, Southeast and South Asia, while countries in Central Asia and the thinly populated islands in the Pacific hardly figured at all as migration destinations up to that time. The majority of migrants moved relatively short distances *within* a country, and only a minority across national borders. There is currently hardly any climate migration *from Asia to other continents*, such as Europe, in evidence.

However, this may change in the future if the impacts of climate change continue to worsen as temperatures rise. In that case, it is likely that ever-increasing numbers of people in Asia will decide to undertake a temporary or permanent migration – some potentially to a destination outside Asia.

Heavy rainfall – as in Kurigram, Bangladesh – is on the rise with higher intensities and frequencies, thus rendered a high-alert security threat. Source: © Andrew Biraj, Reuters.

It is currently not possible to make accurate statements about the way flows of migration will actually develop. Greenpeace forecasts up to 200 million migrants globally by 2050; other estimates put the figure as high as a billion.[11] One needs to bear in mind that some 90 per cent of the people (potentially) threatened by climate change currently live in the Asia-Pacific region.

People's willingness to consider migration is affected by a complex set of factors. Historically, climate-related and environmental migration is not a new phenomenon in Asia. That said, there are indications of new and fundamentally more far-reaching impact chains. A basic distinction can be made between slow-onset events and sudden-onset events where migration incentives are concerned. Migration statistics frequently do not differentiate between these two types of trigger, although the required response is totally different in the two cases.

Higher temperatures and heavier rainfall result in the proliferation of disease carriers and an increased risk of sudden deluges with devastating consequences.

There is one basic trend that can be assumed to continue: further population growth in South and Southeast Asia. The resource shortages this will cause and the fact that areas already under threat (in coastal regions and along transnational river systems) are set to become even more heavily populated will increase the migration pressure in several ways. It is a well-known fact that even small rises in temperature cause changes in established ecosystems. This frequently manifests in changes to the hydrological balance in the affected areas, where subsistence farming is also frequently widespread. Higher temperatures and heavier rainfall result in the proliferation of disease carriers (malaria, dengue fever, diarrhoeal diseases) and an increased risk of sudden deluges with devastating consequences (landslides, flooding). The intensity of tropical storms and the damage they cause are also on the rise (e.g. in the Philippines and in the Bay of Bengal).

Climate-related domestic migration exacerbates existing demographic inequalities and fuels social, ethnic and religious tensions in the frequently multi-ethnic states in Asia. In the regions people are leaving, the loss of mostly younger, more mobile groups can set off a devastating downward spiral, which is detrimental to development. Most governments have insufficient expertise and means available to be able to control increasing flows of migration; there is generally no proactive migration policy in place.[12] The land most at risk tends to be inhabited by people from the poorer sections of society, who depend on agricultural production and have fewer means available to protect themselves against the effects of climate change. And the economic and social integration of migrants into their new surroundings is also significantly more difficult due to a lack of manpower and funding. Uncontrolled transnational migration places even more strain on the frequently already tense relations between the different Asian states and poses a serious security risk. Climate change also generally has the effect of deepening the inequalities that exist within the affected societies.

Climate migration therefore poses existential challenges to the countries in the Asia-Pacific region, which the states and societies are inadequately equipped to cope with. Migration has also been slow to receive attention in interregional cooperation, which is surprising considering how many states in South and Southeast Asia have had to deal with migration dynamics for a long time. Sudden natural events do trigger short-term reactions in the affected countries and by the international donor community, but opportunities for structural adaptation opened up by the situation are frequently not used.[13]

In some regions, adaptation to the unavoidable consequences of a climate-related deterioration of the living environment is given top priority.

The intention is to minimise incentives for people to move away and to ensure that the areas under threat remain permanently habitable, for instance through technical/infrastructure measures (e.g. protective installations) or by providing compensatory benefits to families (e.g. in the event of failed harvests). However, it will become increasingly more difficult to prevent people from having to relocate. In the areas people migrate to, efforts will therefore have to be stepped up to expand the systems for providing the necessities of life and social services.

Drought: The upsurge in extreme → weather conditions has a direct impact on the availability of resources in general.
Source: © Ajay Verma, Reuters.

Resource Conflicts: New Challenges to National Sovereignty and Regional Security

Fragile governance and uncontrolled domestic migration weaken public order in the affected states as well as having detrimental effects on the relationships between states in many cases. A further "classic" source of conflict involves claims for energy sources and natural resources, frequently located in disputed territories.

Pressure on resources encourages the tendency of states to try and enforce their claims to territorially disputed areas.

To advance their economic development, many Asian states have begun to exploit their own resources on a grand scale. However, the rapidly rising demand for various natural resources and energy frequently exceeds national reserves. In the case of rare natural resources, such as the so-called rare earths, there are only a small number of deposits around the globe, which means that there is a great dependence on imports. This pressure on resources encourages the tendency of states to try to enforce their claims to territorially disputed areas. This is frequently the case in maritime zones, such as the South and East China Seas or the waters bordering Thailand and Cambodia. In these cases, general sovereignty claims overlap with the desire for access to (assumed) oil and gas reserves. In the case of the Senkaku/Diaoyu Islands, a conflict that had simmered for decades has heated up in recent years because of speculations about extensive undersea oil and gas reserves in the area. A resolution is not expected any time soon.[14]

The dispute in the South China Sea, on the other hand, is comparatively recent, but harbours a much greater conflict potential. Once again, large undersea fossil fuel deposits are thought to be present. China considers the disputed area part of its sovereign territory and has sought to support its claims by constructing airfields with military bases on artificial atolls in recent years and massively increasing the presence of its naval forces in the area. This has further worsened the already tense regional and geopolitical relations with its neighbours and the USA.

But even the use of resources within a country's borders can become the source of cross-border conflict. The states of South and Southeast Asia in particular are still "hydraulic societies" (Karl A. Wittvogel), whose survival depends on the large river systems originating in the glacier regions of the Himalayas.

Water extraction and the use of kinetic energy through hydropower plants cause massive changes to the hydrological balance and biodiversity in the land supplied by the lower river courses. The most widely known example is the Láncāng Jiāng/Mekong, whose water power China is already using intensively. Laos, located further downstream, also covers its electricity demand almost entirely from the Mekong and considers itself the "battery of Southeast Asia". This has caused considerable changes already apparent in Cambodia and Vietnam. Fish stocks have declined dramatically, because the animals have great difficulty crossing the barrages. The flowrate of the river fluctuates greatly, which is

Earthquake: Message wall in Seoul for the victims of the April 2011 Fukushima Earthquake. An earthquake followed by a tsunami resulted in the death of 20.000 people. Source: © Truth Leem, Reuters.

particularly detrimental to the extensive (wet) rice cultivation in the two countries. Another major river in South Asia, the Tachog Tsangpo / Brahmaputra, possesses one of the world's largest hydropower potentials in its upper course on Chinese territory. China is planning to construct a huge dam there, which would have a large impact downstream, affecting both India and Bangladesh.[15]

While states may enter into formal arrangements regarding the joint exploitation of resources, these can also result in political and social tensions between the societies concerned. P.R. China plays a central role in the resource conflicts in Asia.[16] To cite just one example, China has leased huge swathes of agricultural land in several Central Asian countries, displacing local agricultural producers on a massive scale. China has further made extensive and long-term agreements on joint resource extraction with countries rich in fossil fuels. China promotes the expansion of oil and gas production and is investing strongly in various areas of development in its smaller neighbouring countries, simultaneously securing access to the resources.[17] Once again, the interests of the local population are frequently given little regard.

Proactive policy approaches are required both in the regions from which migrants originate and the destination areas.

The above-mentioned examples outline a landscape of regional and geopolitical conflict potential, with disputes over resources forming a key element. The greatest conflict potential is inherent in territorial disputes and in transnational

"remote impacts" from events that transcend traditional concepts of sovereignty, such as large-scale ecological changes. Global climate change will exacerbate the competition for resources further, including the availability of and access to key resources such as water and land. In addition, international pressure to reduce the use of fossil fuels is increasing.[18]

Conclusions for German and European Foreign Policy

So far, Europe and Germany have not been affected directly by climate-related migration in and from Asia.[19] But this could change rapidly. The current refugee problems in Europe already demonstrate that single-state solutions are increasingly reaching their limits. Proactive policy approaches are required both in the regions from which migrants originate and the destination areas.[20] There are a number of different approaches for German development policy to improve the capability of poorer sections of society to adapt to the impacts of climate change and thereby mitigate climate migration indirectly.[21] That said, Europe's ability to take direct action remains limited. This is partly due to the fact that there are no transnational approaches being pursued in the regions of origin to combat the causes of migration and deal with the flows of migrants.

While energy security and climate protection have become established as the key cross-policy tasks for German – and European – foreign relations, there is a lack of "early warning systems" for identifying incipient energy and climate-related conflicts and analysing their potential consequences. There are hardly any means available to influence resource-related conflicts – the distribution of natural resources and the demand of individual countries – from the outside. The best chance for prevention therefore lies in strengthening intraregional cooperation.

Germany and the EU can make important contributions to the development of regional and global governance systems. Particularly in the post-COP21 phase, Europe is called upon to supply both ideas and funding to help realise the opportunities offered by the Paris Climate Agreement even before 2020. The importance of adaptation and resilience is highlighted in the agreement and should also be given greater priority in the development of new instruments of climate protection funding.

While UN and regional development organisations began examining fragility and climate migration scientifically in greater detail some years ago, for instance with respect to the small Pacific island states, there is still no consensus on appropriate concepts and terminology, nor are reliable empirical data available. To date, the topic has not played a significant role in regional organisations such as ASEAN.

Migration is currently seen mainly in a negative light. However, the Asian Development Bank has rightly pointed out that climate-related migration pressures also entail opportunities as long as a holistic, forward-looking approach is pursued.[22] These challenges could, for instance, be used to reform social and education systems and to make local communities more resilient. This is an area where personnel active in German and European foreign and development politics can draw on years of experience as well as achievements.

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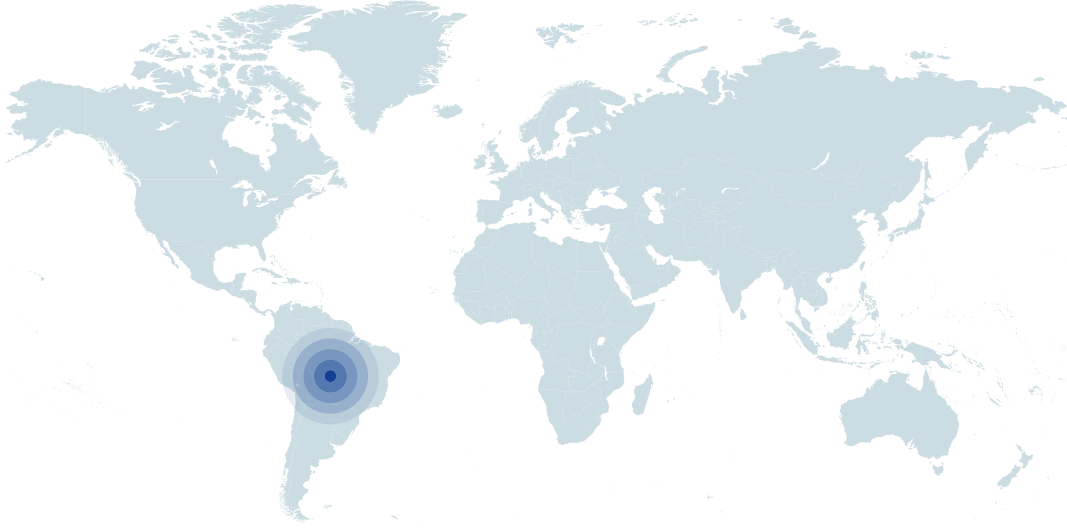
Security Risks from Climate Change

New (Old) Conflicts in Latin America

Christian Hübner



Climate change has gained a firm hold on Latin America. Hurricanes, melting glaciers, droughts and flooding are the aspects that grab the media spotlight. The increasing risks to the electricity supply and the growing adaptation pressure in the megacities are slower to come to public attention. In addition, worsening conflicts over water and land use pose new security policy challenges.

In Latin America and in the countries of the Caribbean, climate change has become an ever-present challenge to politics and society. Hurricanes, melting glaciers, droughts and flooding are issues that grab the media spotlight. The socio-economic implications resulting from changes to production conditions in agriculture or increasing energy insecurity are slower to come to public attention.

In a time when conflicts are being reignited in trouble spots around the world, climate change is also becoming a security policy issue. It is generally not seen to be the root cause of crises, but to have an exacerbating effect. Fragile government structures are believed to provide the breeding ground for climate risks and conflicts that are already apparent today. On the one hand, this applies to countries that are undergoing the transition from authoritarian to democratic structures and on the other to those that only have limited legislative and administrative problem-solving powers. This frequently goes hand in hand with a relatively low level of economic development in combination with rapid population growth and a high rate of urbanisation.

There are numerous countries in Latin America and the Caribbean that match this picture in one aspect or another. However, seen from a democratic perspective and by comparison with other developing regions such as Africa, the structural framework provided by the states is relatively stable. There have consequently been no "hot" inter-state conflicts in the region over the last few years. Against this backdrop, it is therefore not so much fragilities at state level that underlie climate risks or the climate conflict potential in the region, but rather a lack of political problem-solving expertise in recognising climate-related changes in good time and introducing appropriate countermeasures. Climate risks in Latin America mainly relate to the supply of water, power supply security, land use and urbanisation.

Water Security and Environmental Conflicts

Climate change impacts the water supply most strongly. While Latin America possesses the most extensive natural water resources in a global comparison, the climate-related dry periods in the rural areas, heat waves in the cities and retreating glaciers in the Tropical Andes are already having a dramatic impact on water availability.

While Central America and the island states of the Caribbean have very few water sources of their own, the Andean states are still receiving large volumes of glacier water. However, global warming is exerting a constant negative impact on the situation. Since the 1970s, the glaciers in Bolivia, Ecuador, Peru, Argentina and Chile have shrunk by between 20 and 50 per cent.[1] The Cotacachi glacier in Ecuador has completely disappeared. The icecap of the Santa Isabel volcano in Colombia has shrunk by 44 per cent.[2] The supply of water in the non-Andean areas is also diminishing. In the Amazon Basin, more frequent droughts and incidents of extreme flooding are a strain on existing water supply structures. Generally, it is becoming apparent that the arid and desert-like coastal regions of Chile and

Submerged: A banana leaf as a feeble attempt in protection against the torrential rains on the outskirts of Colón city in Panama. Source: © Carlos Jasso, Reuters.

Peru on the Pacific are having to manage with even less water than in the past, while the areas receiving more abundant rain in the Amazon and La Plata Basins in Uruguay, in Paraguay, northern Argentina and southern Brazil are facing more extreme levels of precipitation.

The climate-related melting of the glaciers is having a particularly strong impact on existing environmental conflicts all around the Tropical Andes. Here, access to water and water quality are the main points of contention. Peru is currently probably the country most affected in this respect. Over 90 per cent of the water supplying Peru, which includes drinking water, service water and water used in the production of hydropower, originates from the glaciers in the Tropical Andes. However, these glaciers have already shrunk by more than 20 per cent. The Coropuna glacier in southern Peru has lost as much as half its volume.[3] According to forecasts, it will have melted completely by 2025. This means dramatic changes for the people living in the Andes, most of whom are very poor. Not many of them will be able to rely on the traditional subsistence farming of the past. Local family farm structures will disappear. Consequently, the depopulation of the countryside will accelerate and urbanisation pressures on the cities in the region will increase. But the larger areas under cultivation closer to the coast are also feeling the loss of glacier water. 80 per cent of the water flowing from the Andes is used there for irrigation. It is highly likely that this type of water usage will increase considerably in price. This will result in substantial reductions in the profits from Peruvian exports of agricultural products and threaten the income security of the people employed in the sector.

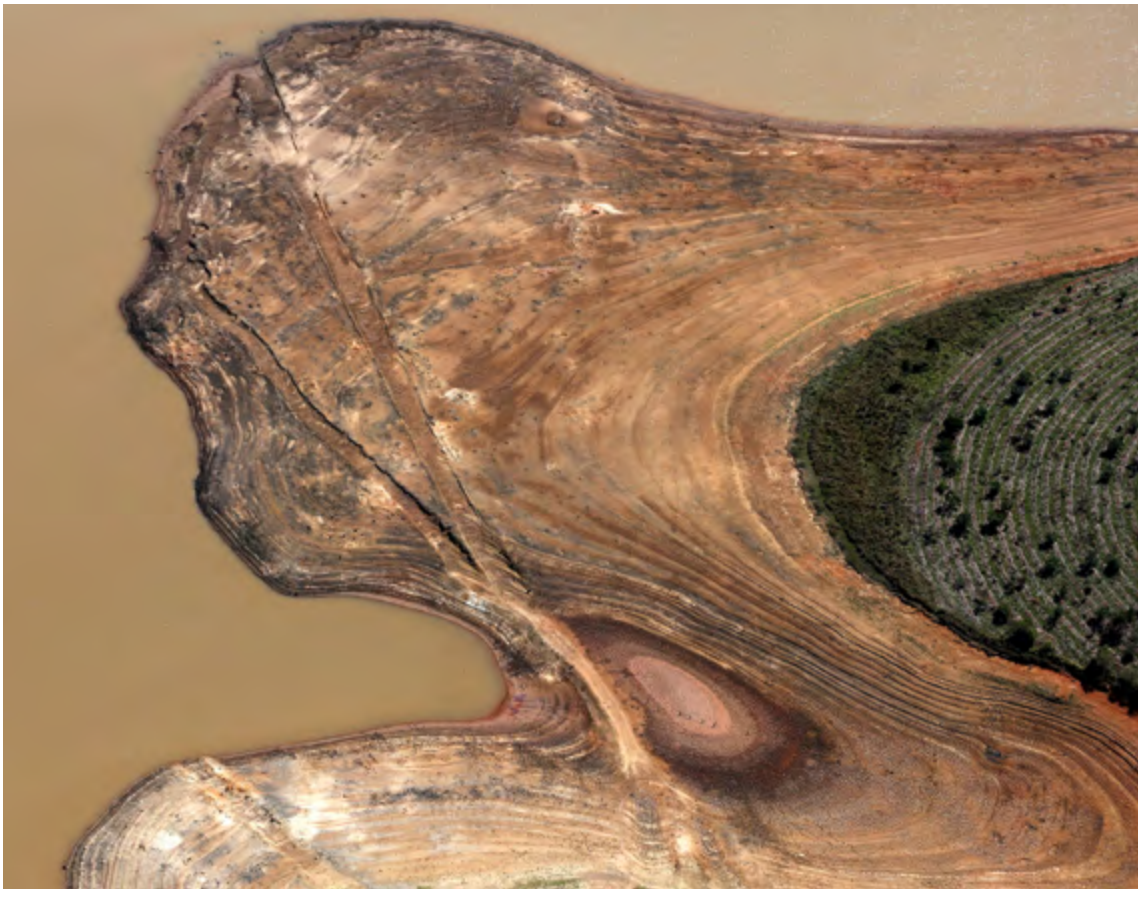
But the sector where the largest environmental conflicts relating to water play out is mining. This industry makes extensive use of chemicals such as mercury and produces oil residues from machine utilisation; these contaminants are frequently dumped in nearby rivers and freshwater lakes. The water contamination exacerbates the problems created by climate-related water shortages, resulting in considerable social conflicts. Peru is a country rich in natural resources, which benefits greatly from its copper, silver and gold exports. However, the mining areas are often located in remote regions where the state is not strongly represented. There, an unregulated, informal mining industry has become established, which exploits resources without any control whatsoever. 90 per cent of the goldmines in the *Madre de Dios* region in northern Peru, close to the borders with Brazil and Bolivia, are thought to be illegal.[4] Local communities and agricultural businesses are frequently powerless against the mine operators with the result that conflicts often boil over into violent confrontation. Furthermore, the illegal mines are often linked to the proliferating structures of the drugs trade in the Amazon Basin, which means that protests often do not even come to public attention. The informal mining sector represents a considerable security problem for the Peruvian government, which the recent reinforcement of local police forces or the short-term deployment of military units can do little to overcome.

Against this backdrop, various institutional structures have been set up in Peru for countering such conflicts early on by raising public awareness, publishing environmental expert reports and holding hearings. In the Arequipa region in southern Peru, for instance, there is the *Autoridad Regional Ambiental*, i.e. regional environmental authority, which has been equipped with extra capacities and responsibilities for con-

Table 1: Impacts and Risks Associated with Climate Change in Latin America

Impacts	Risks	Climate factors
Agriculture	Declining yields and quality, lower sales and rising prices	Extreme temperatures, extreme and changed rainfall patterns, CO_2 concentration
Water	Supply of water in arid areas and areas depending on glacier water, flooding and extreme rainfall in cities	Rising temperatures, longer dry periods, shrinking glaciers
Biodiversity and forests	Changes in land use, deforestation, coral bleaching, loss of biodiversity and ecosystem services	Logging, CO_2 concentration, rising temperatures, ocean acidification
Health	Spread of diseases	Rising and more extreme temperatures, more extreme rainfall
Tourism	Loss of infrastructure, rising sea levels, extreme weather events in coastal regions	Rising sea levels, extreme temperatures, extreme rainfall and flooding
Poverty	Loss of income for particularly vulnerable groups (specifically in agriculture), increasing income gaps	Extreme temperatures, extended dry periods, extreme rainfall

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Intergovernmental Panel on Climate Change (IPCC), Chapter 27, Central and South America, in: Barros, V.R. et al. (eds.), Climate Change 2014: Impacts, Adaption, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the IPCC, Cambridge, 2014.



Drought: This aerial view shows the Atibainha dam, part of the Cantareira Reservoir, during the worst drought in 80 years and the lowest water level on record in the year 2014. Source: © Nacho Doce, Reuters.

flict resolution and prevention. However, these institutions are set up inadequately in terms of funding and available expertise, as was illustrated in the case of the protest that erupted in 2015 at the *Tia Maria* copper mine owned by the Mexican mining company Southern Copper Corporation. The mine is located south of Arequipa in Tambo Valley, an area where the land is used by industrial agriculture operations for the cultivation of rice and sugarcane as well as olives on a smaller scale. The local farmers complain about the contamination of local water reserves by the mine operators. This is not a new conflict; the first protests, which took the form of road blocks set up by farmers between the city of Arequipa and Tambo Valley, took place back in 2011. In April 2015, the situation escalated when a face-off between local farmers and armed police left three farmers and one policeman dead. Subsequent attempts to resolve the dispute at the political level took the issue into the Peruvian Congress; however, because of the clashing interests of mining supporters and opponents, Congress did not succeed in devising a solution. As the protests continued, Peruvian President Humalla decided at short notice to declare a state of emergency in the area and sent in the military to back up the local police.

Electricity Supply under Threat

The correlations between climate change and the use of hydropower feature increasingly in deliberations on energy policy. Global research indicates that climate change will considerably reduce the hydroelectric output from dams

over the long term.[5] For Latin America, which obtains over 60 per cent of its entire electricity from hydropower, much of which is dependent on glacier water, this presents a serious threat to its electricity supply security.

Today, the great majority of dams are located in the Amazon Basin. In the Brazilian part alone, there are over 400 hydroelectric power plants. Roughly one-third of these are directly dependent on water from the glaciers in the Tropical Andes. Among the largest dams in the world is the Itaipú Dam on the Paraná River on the border between Paraguay and Brazil. Operating at full capacity, the hydropower plant supplies approximately 15 per cent of Brazil's power and approximately 70 per cent of Paraguay's power. Another of Latin America's major facilities is the Guri Dam in the Orinoco Valley, which supplies over 70 per cent of Venezuela's power.

The decreasing power output from dams is due on the one hand to the ever-faster melting of the glaciers, which are swelling the rivers in the short term to such an extent that the dam installations cannot cope with the volumes of water. On the other hand, the glaciers will supply less water in the long term, which will reduce the power production capacity of the dams. In Argentina, studies predict a 32 per cent reduction in the power production capacity of the Camahue River in Cuiyo Province in the northwest of Patagonia.[6] Just considering the contribution of this one river for Argentina as a whole, this means that eight per cent of the country's current power production will have to be replaced from alternative sources in the future.[7] Energy supply risks linked to drier conditions are also already becoming evident today. The city of São Paulo has suffered extreme drought over recent years. The volume of water in the nearby reservoirs of the Cantareira system, which links five reservoirs and supplies around nine million São Paulo inhabitants, dropped below five per cent full capacity in 2015. The situation is even more serious when you consider that this is also the city's source of drinking water. Furthermore, the enduring drought has required the temporary suspension of the use of river links to prevent the operation of nearby hydropower plants being jeopardised; this affected, for instance, the Tietê-Paraná waterway in the federal state of São Paulo, which is of considerable economic importance for the transportation of agricultural products,[8] Venezuela is currently experiencing a particularly extreme water shortage situation. An unusually intense and long-lasting dry period ascribed to the *El Niño* weather phenomenon is causing extreme power shortages, which are in turn further exacerbating the already disastrous economic situation in the country. To maintain the capability of supplying power in spite of the problems, the Venezuelan government took a number of decisions, one of which was to require shopping centers to generate their own electricity for four hours during workdays and another to introduce a four-day working week.[9] One can also assume that the *El Niño* effect will intensify further in future as a result of climate change.

The Belo Monte Dam is attracting criticism and opposition from local – particularly indigenous – groups as well as from international civil society initiatives.

Despite the consequences of climate change, developing hydropower still plays a major role in many regions of South America in view of rising demand for energy. However, climate change is not the only factor jeopardising these plans. One of the largest dams in the world is currently under construction in the northeast of Brazil. The Belo Monte Dam will divert the flow of the Xingu River – an Amazon tributary – and create a reservoir the size of Lake Constance in the Amazon. During the course of its implementation, the dam project has triggered a comprehensive debate within society about major building projects and the intrusion into the living spaces of indigenous groups. The some 20,000 people living within this area will probably need to be resettled. Furthermore, the intrusion will have a detrimental

effect on biodiversity. Against this backdrop, the entire project is attracting criticism and opposition from local – particularly indigenous – groups as well as from international civil society initiatives.

Reductions in the production capacities of the dams in Latin America are already raising questions about how to address the problem in the long term. The entire energy supply infrastructure in Chile is currently undergoing fundamental restructuring, with domestic renewable energies expected to play an important role. Costa Rica and Uruguay are expanding renewable energies such as wind energy, photovoltaics and geothermal heat to a considerable degree, attracting a great deal of media attention. Mexico's government recently approved a comprehensive liberalisation of the energy sector, envisaging not only the privatisation of state enterprises but also the development of a renewable energy sector. In addition, Mexico, Brazil and Argentina are investing massively in the exploitation of previously unattainable / unconventional fuels such as marine shale gas and shale oil. This development is, however, curbed by the current low oil price. But one can safely assume that countries such as Brazil and Mexico will consider fossil fuels such as gas and oil as alternatives to hydropower for electricity generation. This could result in one of the most CO_2-neutral power generation systems in the world turning into a CO_2-intensive one.

Expansion of Agriculture

Climate change is having a particularly strong impact on agriculture in the Latin American countries. Lengthy droughts, heat waves and torrential rainfall are affecting crop production and cattle rearing. Technological innovations, improved agricultural management, the expansion of land under cultivation, as well as more intensive land use plus genetically modified plants have so far been able to counter this effect and even raise outputs substantially in recent years. The extent to which agriculture will be able to continue adapting to new weather conditions will therefore depend mainly on further changes in temperature. If temperatures continue to rise, as is to be expected, Brazil and Argentina, which produce the bulk of agricultural products such as soya, maize, sugarcane, wheat, coffee beans and beef in Latin America today, will face considerable economic risks. The impact could even be global. Latin America currently supplies some 16 per cent of all food globally. Regional production slumps in Latin American agriculture could therefore exacerbate the tense situation of rising global demand for food even further. One issue that has not yet been investigated properly is the effect of sugarcane and wheat cultivation to produce ethanol. Since the oil crises of the 1970s and 1980s, the transport sector in Brazil has been adding considerable volumes of ethanol produced from biomass to its fuels. If these biomass yields were to diminish, climate change would have a negative effect on energy supply security in the transport sector in addition to its negative impact on energy generation by hydropower plants.

Climate change accelerates manmade deforestation further through more frequent heatwaves, which cause the virtual desertification of entire swathes of land.

The expansion of agricultural production in recent years has mainly been achieved by clearing forest in the Brazilian part of the Amazon Basin. In cooperation with the logging industry, unique forests are being felled for this purpose on a continuous basis. In Brazil, this is mainly done to facilitate the expansion of the large cattle farms, which are particularly vulnerable to climate change; the area they cover is now larger than that used to produce crops. Climate change accelerates manmade deforestation further through more frequent heatwaves, which cause the virtual desertification of entire swathes of land. At the same time, the climate is losing a natural global CO_2 regulator due to the decimation of the Amazon rainforest.

The climate-related expansion of areas under cultivation also has the potential of exacerbating existing violent disputes over land. The Brazilian part of the Amazon Basin is a well-known case in point. The background involves unclear land ownership, social inequalities and the weakness or even absence of state institutions in rural areas. These conflicts involve international agricultural corporations, regional big landowners, agricultural labourers and indigenous groups. In a typical scenario, people occupy fertile land that belongs to a big landowner or an agricultural corporation, which has been left unused. These parcels of land frequently serve for speculation purposes and are thus left fallow. In many cases, such instances of land occupation then lead to local unrest when the owners attempt to regain possession of their land, occasionally with the use of force. There have been occasions where such occupied pieces of land in fact legally passed into the possession of agricultural labourers as a result of legal proceedings. To add to the problems, the expansion of land under cultivation takes place in remote areas of the Amazon, intruding into the living space of indigenous groups. In 2015, the Brazilian *Comissão Pastoral da Terra* (CPT) counted 49 deaths as a result of disputes over land use. Most of these occurred in the federal states of Rondônia (21) and Pará (19).[10] Such deaths are thought to have totalled

High and dry: Intense droughts afflict Latin America's flora and fauna and pose frequently new challenges to the population in coping with everyday life. Source: © Nacho Doce, Reuters.

over 1,100 since 1985. As few as twelve cases have been dealt with in a court of law to date.[11] Climate change will increase the pressure on land use even more. This could well lead to an increase in the number of trouble spots in rural areas.

Pressures from Increasing Urbanisation

Today, close to 80 per cent of people in Latin America live in cities. The largest by far are Mexico City and São Paulo with a population exceeding 20 million each. For decades, megacities have been struggling to cope with the challenges of urbanisation, namely environmental problems, illegal settlements, poor transport infrastructure, crime as well as inadequate water supply and sewage systems. Climate change is exacerbating these problems by encouraging the migration to the cities because of deteriorating conditions in the rural subsistence economy. This massively increases the pressure on the responsible city authorities and the politicians to take measures to mitigate the risks.

Climate change also has a direct impact on life in the city. Flooding due to extreme rainfall, for instance, and lengthy heat waves are on the increase in virtually all major cities in Latin America and the Caribbean countries. The coastal cities in Central America and in the Caribbean are also faced with the prospects of more extreme storms and rising sea levels. Given this outlook, the inhabitants of smaller islands off the north-eastern coast of Panama, such as Carti Sugdub, already have to ask themselves today whether they should stay or leave. In São Paulo, there are more frequent occurrences of dangerous landslides from the slopes close to the city's suburbs. In Mexico City, water supply security is worsening to a dramatic extent. In the Chilean capital Santiago de Chile, over four million households were recently without power and water due to flooding. The economic costs for restoring buildings and transport infrastructure damaged through the effects of climate change are already running into several billions of euros. The health risks from contaminated water and from the spread of diseases such as dengue fever and malaria and the proliferation of disease carriers such as rats and mosquitos are also on the increase. In the cities themselves, the changes mainly affect the poorer sections of the population, who live mostly in informal settlements, the slums and favelas.

While cities are particularly vulnerable to the impacts of climate change, they do have great adaptation capability. In recent years, numerous cities – including the capitals Mexico City, Lima, Santiago de Chile, Buenos Aires, Bogotá and São Paulo – have launched legislative initiatives, set up authorities and institutions and developed strategies and plans to respond to the worsening climate risks. They are also joining international networks of cities committed to mitigating climate change, such as the C40 Cities Climate Leadership Group. This development illustrates the growing political sensitivity to climate risks among local government officials.

The concrete form that adaptation measures will take at the local level depends on the institutional responsibilities. Mexico City, for instance, has some very progressive climate protection legislation, which provides for an information pool on local impacts of climate change and simultaneously provides a framework for close interaction between the different authorities involved in disaster management in the area of potential climate risks. However, Mexico City only includes eight million of the city's 20 million inhabitants in these measures. The rest come under the responsibility of the federal state of Mexico, which has hardly made any political progress in developing adaptation measures of its own so far. Such institutional barriers can be seen in many Latin American cities and increase the climate risks in the cities.

Outlook

In Latin America, the impacts of climate change in all their manifestations have already become reality. Where its relevance to security policy is concerned, there are indications that risks in the areas of electricity supply and urbanisation, which are already elevated, are set to increase further. Climate change also exacerbates violent

Megacity: Aerial view of São Paulo's skyline. About twelve million people live in South America's biggest city, the metropolitan area Grande São Paulo has even more than 20 million inhabitants. Source: © Paulo Whitaker, Reuters.

regional disputes over water and land. When looking at the big picture, it is striking that climate risks and climate conflicts do not appear to pit countries against each other. Instead, they remain within national borders, affecting areas where state control is frequently only present in a rudimentary form. A lack of local government structures and competences prevents climate adaptation strategies from being devised. Major cities, on the other hand, are capable of preparing for the impacts of climate change, and most of them are already taking appropriate measures. Particularly in the context of climate security, crucial prerequisites for dealing with the proliferation of security policy risks in Latin America must include the establishment and further development of local government structures in the form of administrative institutions, climate-sensitive policies and effective structures of the rule of law.

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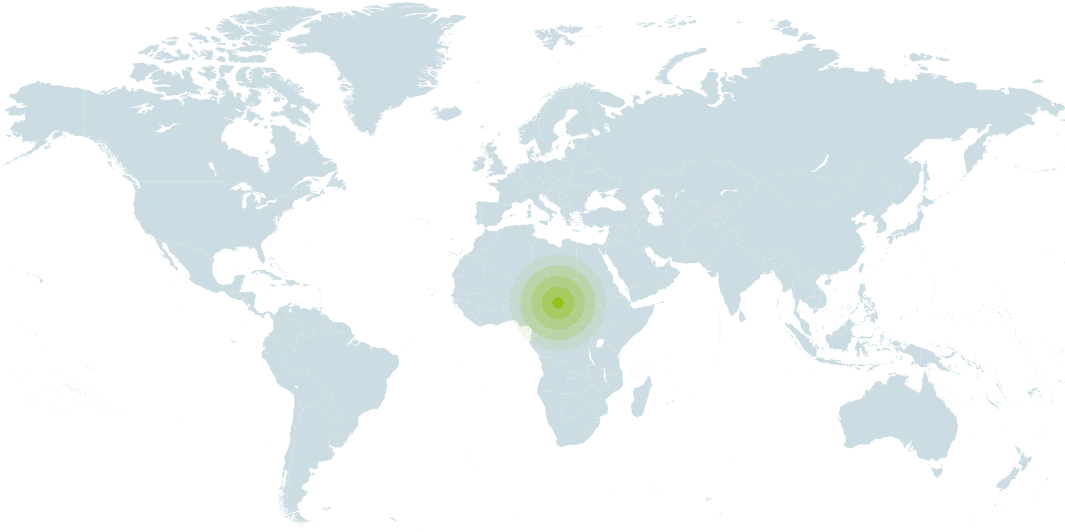
Climate Change and Energy Security in the Anthropocene

Africa in the Light of the Paris Climate Protection Agreement

Oliver C. Ruppel / Arne Wulff



Africa is affected particularly strongly by the impacts of climate change. The continent, home to 1.2 billion people, many of whom live below the poverty line, is experiencing more frequent instances of drought and torrential rain. The implementation of the Paris Climate Protection Agreement of December 2015 will depend substantially on the steps African states will be prepared to take to drive their further development while making efforts to minimise the emission of greenhouse gases.

In an era shaped mainly by human activity, the so-called Anthropocene,[1] the consequences of human activities are intimately linked to the observable changes in the climate.[2] With respect to Africa, the Intergovernmental Panel on Climate Change (IPCC) stated in its Fifth Assessment Report that there is likely to be a two degree Celsius increase in temperature compared to the average global surface temperature in the late 20th century. It is also likely that there will be a steeper rise in surface temperatures in Africa compared to global average, particularly in the more arid regions.[3] There, the impacts are already being felt today across national borders.[4]

Key Risks from Climate Change for Africa[5]

Figure 1 comprises some of the key risks from climate change for Africa. The information illustrates that lower agricultural yields due to heat and aridity have a strong negative impact on food security and that the existing stress on water resources due to overexploitation and degradation will be exacerbated further through future increases in demand and more frequent droughts. There is a further key risk associated with changes in the incidence and geographic range of vector and water-borne diseases caused by changes in temperature and precipitation. Drivers of the above-mentioned key risks include in particular the warming trend, extreme temperatures, rising sea levels, as well as extreme precipitation events. One of the key statements of the Fifth IPCC Assessment Report is as follows: The higher the rise in temperature, the greater the risk. Figure 1 also shows that the more numerous and effective the measures to adapt to climate change will be in future, the greater the chance of minimising the risks.

Climate Change, Human Safety and Migration

In Africa, climate change poses a particular risk not only to economic growth but also to sustainable development and various aspects of human safety. It therefore represents a threat to the health, food security and the very existence of people in Africa.

It is difficult to prove a direct correlation between climate change and armed conflicts, particularly as such conflicts are always driven by different and partly linked country-specific, socio-political, economic and cultural factors. That said, it is clear that the climate-related loss of natural resources and the associated overexploitation of remaining alternative resources can cause massive distribution conflicts in Africa. There are indications of this particularly in the Sahel Region, in the Horn of Africa and in East Africa.[6] And the question as to who controls access to water has frequently played a role in armed conflicts throughout human history. Added to this is the fact that the impacts of climate change cannot be excluded as factors motivating people to migrate – although the ultimate drivers of urbanisation and migration in Africa generally entail interacting social, demographic and economic factors.[7]

Fig. 1: Key regional risks from climate change and the potential for reducing risks through adaptation and mitigation

Key risk	Adaption issues and prospects	Climatic drivers	Time frame	Level of risk and potential for adaption (very low – medium – very high)
Compounded stress on water resources facing significant strain from overexploitation and degradation at present and increased demand in the future, with drought stress exacerbated in drought-prone regions of Africa *(high confidence)*	• reducing non-climate stressors on water resources • strengthening institutional capacities for demand management, groundwater assessment, integrated water-wastewater planning and integrated land and water governance • sustainable urban development		present near term (2030–2040) long term (2080–2100)	2°C 4°C
Reduced crop productivity associated with heat and drought stress, with strong adverse effects on regional, national, and household livelihood and food security, also given increased pest and disease damage and flood impacts on food system infrastructure *(high confidence)*	• technological adaptation responses (e.g., stress-tolerant crop varieties, irrigation, enhanced observation systems) • enhancing smallholder access to credit and other critical production resources; Diversifying livelihoods • strengthening institutions at local, national and regional levels to support agriculture (including early warning systems) and gender-oriented policy • agronomic adaptation responses (e.g., agroforestry, conservation agriculture)		present near term (2030–2040) long term (2080–2100)	2°C 4°C
Changes in the incidence and geographic range of vector- and water-borne diseases due to changes in the mean and variability of temperature and precipitation, particularly along the edges of their distribution *(medium confidence)*	• achieving development goals, particularly improved access to safe water and improved sanitation, and enhancement of public health functions such as surveillance • vulnerability mapping and early warning systems • coordination across sectors • sustainable urban development		present near term (2030–2040) long term (2080–2100)	2°C 4°C

warming trend · extreme temperature · drying trend · sea level · precipitation · extreme precipitation

potential for additional adaptation to reduce risk

risk level with high adaption · risk level with current adaption

Each key risk is characterised as "very low" to "very high" for three timeframes: the "present", "near term" (here: 2030 to 2040), and "longer term" (here: 2080 to 2100). In the "near term", protected levels of global mean temperature increase do not diverge substantially for different emission scenarios. For the "longer term", risk levels are presented for two scenarios of global mean temperature increase (two and four degrees Celsius above preindustrial levels). These scenarios illustrate the potential for mitigation and adaptation to reduce the risks related to climate change. Source: Own illustration based on IPCC, n. 5.

Starvation: In 2005, a devastating drought destroyed most crops in Niger. Consequently, 3.6 million people suffered from starvation, including tens of thousands of children. Source: © Finbarr O'Reilly, Reuters.

As the effects of climate change in Africa increase in intensity, this will also have an effect on the number of climate-related migration processes. Unfortunately, international politics still lack suitable tools and regulatory frameworks to deal expediently with cross-border environmental migration.[8]

What Is Required in Concrete Terms?

Unfortunately, Africa is among the continents most at risk from climate change because of inadequate adaptability, low levels of innovation and technological progress, political deficiencies and ineffective diplomacy.[9] Consequently, effective measures will be required to cope with the current and future challenges of climate change more successfully.

The risks resulting from climate change need to be minimised. The risk mitigation strategies used in Africa to alleviate the impacts of natural disasters on households, communities and the economy, include in particular early-warning systems, mechanisms for the transfer of anticipated risks, the development of social networks, the setting up of disaster funds and budgeting systems, livelihood diversification and the control of migration movements. Other aspects in need of urgent attention are sustained financial support and technology transfer to address adaptation deficits, the vulnerability of people in rural and urban areas, as well as the weak economic systems.[10] In addition, there is a need to strengthen institutional capabilities and good governance mechanisms in order to strengthen governments and research institutions and to identify and imple-

ment suitable effective adaptation measures.[11] One particular challenge arises from the fact that the risks from climate change are not distributed equally and are generally greater for individuals and societies in less developed regions.[12]

While it is now widely accepted that the total of human activities is one of the causes of climate change, the question of how the law deals with it is only just beginning to receive serious consideration. One thing seems clear: the law is reliant on the opinions and warnings of scientists, particularly on their warnings of impending risks. While governments in Africa have already embarked on systematic courses of action to optimise adaptability, for instance through the development of strategies for putting disaster risk reduction on a permanent footing, the adaptation of technologies and infrastructure, the implementation of approaches based on ecosystems, and the introduction of measures to improve the public health system, etc., there is still a great deal more to be done. This includes measures to promote adaptive learning as well as the continuous enhancement of in-depth scientific expertise and training facilities. Consequently, both consultancy and dialogue are essential for initiating political decision-making processes and sensitising those in authority.

Urban development and climate adaptation are also increasingly coming to the fore in the African climate agenda, including the issue of migration movements. In view of the fact that Africa is forecast to experience the largest waves of urbanisation in the world, this is a topic of particular importance in the ongoing development dialogue as well as in connection with financing options and investment interests relating to the improvement of infrastructure and housebuilding, for instance.

The increasing competition for land and water resources in Africa represents a further area where there is a need for developing environmental management expertise, promoting technology transfer and improving competences in extrajudicial conflict resolution and disaster risk reduction. The growing food shortages that are linked directly to the water issue are exacerbated by the rising demand for biofuels and animal feeds as well as the actions of foreign agricultural companies, which use large tracts of agricultural land particularly in the food-growing region for supplying markets outside Africa. It is estimated that the demand for purchasing African land or for leasing it for lengthy periods will continue to rise. Tracts of agricultural land in Africa are also increasingly attracting foreign direct investments as objects of international speculation. This situation needs to be included in the political debate and questioned, particularly in view of the challenges of climate change in interaction with the issues of climate justice, food security and poverty. This represents a crucial nexus for Africa's future. After all, climate change does not only have an impact on the environment, but also on (virtually) every other sector on the political agenda, which is why climate policy needs to pursue a cross-sector approach. To what extent the African population will be consulted is questionable. The fact is that to be effective, climate policy requires multi-stakeholder processes. Rivalling institutional arrangements are detrimental in this situation, as are lack of transparency and exclusion of the media, lack of expertise among the media with respect to reporting on climate-related issues, as well as the debate being dominated by the economic interests of only a few political African elites.

Climate Change and Energy Security

The issue of energy security in Africa has come under the spotlight of political discussions of late.[13] Not least because the renewable energies sector is generating an increasing number of jobs.[14] Energy plays an important role in all aspects of daily life; it is, for instance, essential to the smooth running of social and political systems as well as to economic growth and sustainable development. Ensuring a reliable energy supply, which will also be able to satisfy the growing demand in Africa,[15] is one of the greatest challenges for the African continent today. Furthermore, energy security is an essential factor impacting on competitiveness, sustainable development and poverty reduction in African states. The goals of energy security and climate

change mitigation require the use of innovation and technology, smart climate policy-making, high-level government intervention, effective diplomacy and international cooperation.[16] This approach can yield enormous opportunities and synergy effects for accelerated development in Africa. The challenge now is to think with new correlations in mind and to develop climate policy incentives and instruments influenced by development policy goals, which will lead to sustainable economic and social models. The law can be a helpful instrument in this endeavour.[17]

The Declaration on the Right to Development represented a new approach to the realisation of the United Nations' goals.

Energy Security as a Right to Development?

As far back as 1986, the international community recognised the need to obtain a comprehensive overview of the issue of human rights and development. The Declaration on the Right to Development represented a new approach to the realisation of the United Nations' goals. In Article 3, the declaration emphasises that states have the duty to co-operate with each other in ensuring development (for the people) and eliminating obstacles to development. Development and law are consequently intrinsically linked, particularly where energy security and climate justice are concerned.[18]

Article 22 of the African (Banjul) Charter on Human and Peoples' Rights, for instance, also states that

1. All peoples shall have the right to their economic, social and cultural development [...]

2. States shall have the duty [...] to ensure the exercise of the right to development.

How important is energy for ensuring the exercise of this right? After all, the lack of a reliable, affordable and sustainable energy supply is one of the largest barriers to economic growth and development in Africa. Only some 20 per cent of the African population currently have an electricity supply. The African continent lags far behind other regions around the world as far as advances in electricity generation are concerned.

According to United Nations forecasts, the African population is set to grow to some two billion by 2050, which means that increased energy demand, besides poverty reduction, food security, water security and measures to adapt to the impact of climate change, is at the very top of the agenda. Energy security is an indispensable prerequisite for economic growth in Africa, for securing the right to development and, not least, for the stabilisation of democracies. A reliable, efficient and sustainable energy supply should be the goal of both national governments and regional communities. Ensuring an adequate energy supply is also seen as one of the means to overcome poverty and achieve the following Sustainable Development Goals (SDGs):

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation

Goal 10: Reduce inequality within and among countries

Goal 13: Take urgent action to combat climate change and its impacts

Access to energy is a human right. Article 22 of the African (Banjul) Charter on Human and Peoples' Rights should therefore be interpreted to mean that African states have the duty to protect individuals' and peoples' right to development. Indeed, every African state must take measure to ensure that the right to development is guaran-

Havoc: Apocalyptic scenario after a gas pipeline explosion in Nigeria in 2006. Promoting the development of renewable energies provides an opportunity to prevent catastrophes of this kind in the future.
Source: © Akintunde Akinleye, Reuters.

teed for people throughout its territory. Energy security is a must for this goal to be achieved, and this is also in line with Article 1 of the African Charter, which states that the "Member States of the Organization of African Unity parties to the present Charter shall recognize the rights, duties and freedoms enshrined in this Chapter and shall undertake to adopt legislative or other measures to give effect to them". The fact that millions of people in Africa have no access to electricity and are therefore condemned to live in abject poverty is not a natural phenomenon but the consequence of them being denied their right to development.[19]

COP21[20] in Paris 2015: An Agreement as the Solution?

In December 2015, a new global climate agreement was concluded. The "Paris Agreement" (COP21), which had taken UN diplomats years to prepare, is to be ratified nationally by all UN member states, rich and poor. Some observers have described the situation succinctly as follows: COP21 offers the world the best chance of jointly managing the impacts of global climate change. It remains to be seen, however, what the Paris Agreement will ultimately mean for Africa.

According to the agreement, every state is to publish a national greenhouse gas report on a regular basis. It thus only sets out a legally binding obligation with respect to the procedure, without any concrete obligations regarding content or outcomes. While the 1997 Kyoto Protocol laid down binding reduction targets for the industrialised countries, the Paris Agreement, while more comprehensive in that it includes all countries, is much less stringent with respect to its binding character.

Some people are of the opinion that the Paris Agreement means phasing out coal, oil and gas. However, the current reduction commitments (INDCs) are insufficient to achieve this goal in the foreseeable future. There are also still some African (and other) states that wish to continue extracting and using fossil fuels. The challenge is to derive concrete decarbonisation strategies from the Paris Agreement and to implement these gradually and globally.

Seeing things from an African perspective, it remains important to mention that the agreement includes (the continued) obligation on the industrialised countries to support developing countries financially in the fight against climate change. Many developing countries (in Africa and elsewhere) only accepted the renunciation of the binary distinction (between developed and developing countries) with great reluctance.

There has been some criticism of the fact that the Paris Agreement does not include any substantial binding commitments regarding emissions reductions. The only binding obligation the agreement comprises is that all states are duty-bound to notify new contributions every five years. The Paris Agreement is to create a framework to allow the regular setting of new national targets. Before the Paris climate summit, 186 states had presented voluntary national climate targets (Intended Nationally Determined Contributions, INDCs) to be achieved by 2025 or 2030.

The Paris agreement is by no means static, but subject to gradual, active and ambitious reshaping by the signatories.

Theoretically, the Paris Agreement can evolve into a global climate constitution. However, like any national constitution, the "Paris Agreement" still needs to be fleshed out. The agreement is by no means static, but subject to gradual, active and ambitious reshaping by the signatories. Only then will it be able to develop the qualities necessary for protecting the entire global community,

Top priority: French President Francois Hollande among African leaders at a preliminary meeting at COP21 in Paris, November 2015. Source: © Philippe Wojazer, Reuters.

the strongest and weakest peoples alike, from the consequences of advancing climate change. One issue that is already irritating some African countries is that of the finance pledges, which are still rather nebulous. While billions of dollars have been promised, it is still unclear whether and to what extent these pledges can be honoured in the future. It remains to be seen whether the industrialised countries will succeed in facing up to their historical responsibility and whether they have the political will and economic wherewithal to assume the necessary responsibility. Whatever the circumstances, in view of the climate-related damage and costs to be expected as well as the enormous development potential – particularly in Africa – failure to act in the southern hemisphere is not an option.

The question now is how to go about realising the goals agreed in Paris. The INDCs represent the self-imposed national "implementation directive" of the Paris Agreement. The next step will be to begin implementing measures to achieve the Intended Nationally Determined Contributions (INDCs). In Africa in particular, this will require national governments to develop the firm political will to act, the African Union and African regional communities to develop and implement means of continental and regional cooperation that will consolidate national goals, and – not least – the world to provide the required support to Africa for its journey towards a green development revolution.

Excursus: Examples from Real Life in South and East Africa

Anyone looking out of the window of the GAUTRAIN, the ultra-modern, electric, high-speed train connecting Johannesburg and Pretoria, will see the innumerable carports for employees and visitors of the retail and manufacturing businesses located along the track. In the glaring sunlight one is struck by the fact that hardly any of the roofs are equipped with solar panels. Just along this stretch of railway, there would be thousands of square meters available for this purpose, but all those hours of sunshine are totally wasted. Instead, South Africans experience regular power cuts imposed by the state-run operator ESKOM as the aging coal-fired power stations can no longer cover demand

reliably. While there are also plans to rely more on renewable energies in future, nuclear power is to become the most important electricity resource.[21]

In Kenya and Tanzania, a substantial proportion of electricity is already generated from environmentally-friendly sources.

The situation in East Africa is similar. The use of solar energy is absolutely underdeveloped in this region. Although the geographic location near the equator means that the region is ideal for installing photovoltaic elements for energy generation and for placing solar thermal collectors on the roofs of people's houses, these forms of energy generation still have far too few supporters.[22]

Instead, the businesses have to purchase the electricity at high prices and use diesel generators during power cuts, adding to the existing considerable air pollution from vehicle exhausts. In other African countries, however, a substantial proportion of electricity is already being generated in an environmentally-friendly manner,[23] and Kenya in particular is making great strides. 66 per cent of the 2.2 gigawatts of capacity installed in Kenya is already covered by renewable energies today, mainly from geothermal sources. East Africa's largest biogas plant is also located in Kenya (2.6 megawatts installed capacity).[24] In Tanzania, renewable energies contributed 45 per cent to the energy mix in 2014,[25] the majority generated from hydropower.[26]

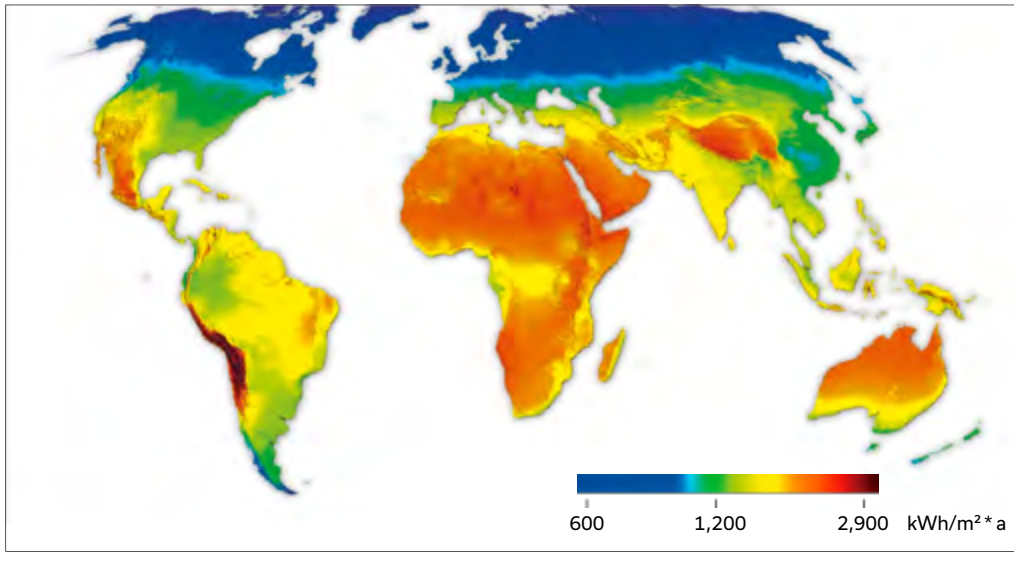
Both countries are planning to continue this development. However, and this is not so encouraging, to a lesser extent than previously. While the countries' political visions for 2025 (Tanzania) and, respectively, 2030 (Kenya) foresee an eightfold increase in electricity generation compared to today, renewable energies will then drop to 24 per cent of the energy mix in Tanzania, and to 45 per cent in Kenya.[27] Tanzania will rely more strongly on generating electricity from coal instead, which does not play any role currently,

and Kenya intends to generate electricity from nuclear power as well.[28] No one can be certain as to whether the envisaged volumes of electricity will actually be required in ten or 15 years' time, particularly as economic development has slowed down. Nevertheless, the programs should take their cue from the Paris COP21 targets. A revision of the energy mix in favour of more renewable energies would be desirable.

The increase in daily traffic volumes and the associated climate-damaging emissions represent an even greater challenge for the East African Community.[29] Nairobi sources maintain that the number of vehicles doubles every six years. As the majority of vehicles is not new, but imported second-hand from industrialised countries, most of the vehicles do not conform to modern environmental standards. In addition, many of them are SUVs with large engines, as smaller cars are neither suitable for off-road conditions nor capable of coping with the numerous deep potholes in the roads. Greenhouse gas emissions are consequently high. As the registered vehicles are not subject to any emissions checks either, the CO_2 burden increases year by year. The East African Community is attempting to counter the problem by imposing import restrictions. There is now a ban on the import of vehicles older than eight years in Kenya and Rwanda (ten years in Tanzania, no age restriction in Uganda and Burundi),[30] and an import tax on a sliding scale is payable depending on the age, starting at 20 per cent of the value for new vehicles.[31] Whether this measure will, in fact, succeed in reducing CO_2 emissions is open to doubt, considering the huge number of new registrations every year. The new middle class in East Africa, which is growing slowly but steadily, will probably simply bite the bullet and pay the tax. Car ownership is such a status symbol that most people are willing to bear the cost. However, at least the regulations will put money into the cash-strapped state coffers, and one cannot help thinking that that is the predominant motivation.

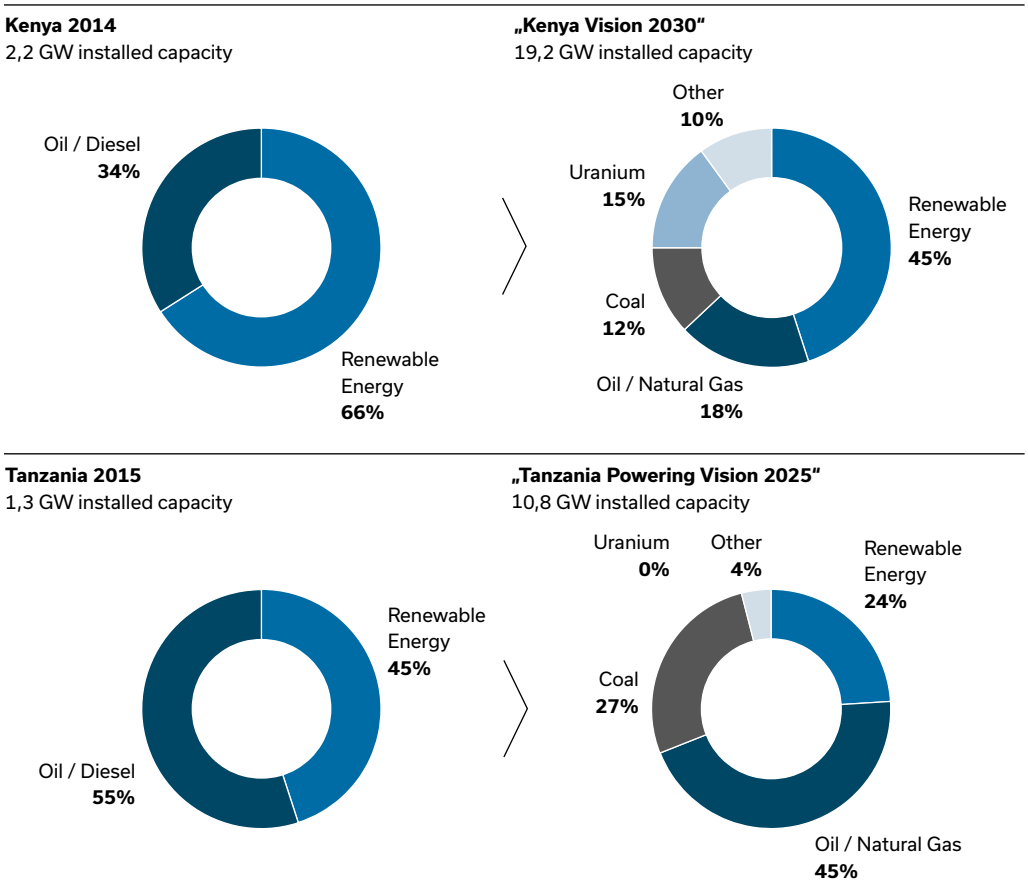
The only way to reconcile the conflicting goals of providing better mobility to people on the one hand and simultaneously minimising the associated burden on the environment on the other is to establish a well thought-out local public transport system that conforms to the latest technological standards. However, the East African states are nowhere near realising such systems. Instead, the streetscape is still dominated by old busses and vans that trail clouds of soot behind them. Ethiopia is the only country that has succeeded

Fig. 2: Global irradiation – Optimal conditions in East Africa



Source: Kaiser, n. 24.

Fig. 3: Energy supply in Kenya and Tanzania – Resource mix 2015 and national expansion plans



Source: Kaiser, n. 24.

in putting a new urban railway into operation in September 2015 with assistance from the Chinese. Along its 17 kilometer stretch, the hybrid of underground and tramway offers a low-cost alternative to the considerably more expensive use of minibuses.[32] Particularly once it has been expanded, it will help to reduce the country's CO_2 emissions, especially as the electricity for operating the trains is intended to be generated from hydropower.

Of course, the above examples are just some of many. Cutting down on waste[33] and waste recovery as well as better building insulation can be mentioned as further means to help achieve the climate protection targets. Not only East Africa but all states in Sub-Saharan Africa have the opportunity of making essential contributions to the protection of the environment and of mitigating the increasing global warming with the help of the industrialised countries, utilising the existing technological advances.

Expectations and Outlook

In the 2012 Report to the Club of Rome entitled "2052 – A Global Forecast for the Next Forty Years", the following are listed among the prerequisites for a sustainable, just and "happier" world:[34] social values reflected in all economic decisions, a more equitable income distribution between as well as within countries, and ways of

interacting with the environment that are consistent with its biophysical and ecological significance. The world should never again go into "overshoot".[35] To express it in the words of Pope Francis: "The effects of the present imbalance can only be reduced by our decisive action, here and now. We need to reflect on our accountability before those who will have to endure the dire consequences."[36]

Due to the inequitable income distribution, almost three-quarters of the 850 million Africans living in Sub-Saharan Africa[37] (excluding South Africa) live below the poverty line of two U.S. dollars (1.51 Euros) per day as defined by the World Bank, and 51 per cent even live on less than 1.25 U.S. dollars (0.94 Euros) a day.[38] Combating poverty while simultaneously increasing general prosperity in Africa through participation in developmental progress will hardly be possible without detrimental effects on the climate. One cannot deny the Africans these aspirations, neither from a humanitarian and Christian perspective nor in view of the wish to stem the flows of migration. The conflict is obvious – yet the situation offers opportunities for entering a new, ecologically better-balanced era.

Realising further development in Sub-Saharan Africa on the proviso that the general goal should be to limit further global warming to 1.5 degrees will need one thing above all: leadership. African presidents and their governments as well as private enterprise are called upon to make decisions today that will shape tomorrow. In an era when humankind has the knowledge and technical means to counter global warming, these should be deployed without delay. Developing Africa into a continent of the future with assistance from the industrialised countries and private enterprise engagement will be a huge challenge, but also a huge opportunity. Are Africa's governments prepared for this, and are they, who have frequently shown a lack of good governance, in fact capable of this feat? In Paris, they signed an agreement in which they committed themselves to play their part. The implementation through national measures will now show how serious Africa's leaders were when they made the commitments. At a time when urgency is called for, a policy of small steps will definitely not be adequate to meet Africa's challenges in the Anthropocene in good time.

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1 The term was coined in 2000 by the famous Dutch atmospheric chemist and Nobel laureate Paul Crutzen and has its roots in ancient Greek: *anthropos*, "man" and *cene*, "new". In 2000, Crutzen established that we are living in an era dominated by human activity and that anthropogenic actors have become essential factors driving the changes on our planet. Crutzen proposed the term Anthropocene for this era – the "the epoch of mankind". See Crutzen, Paul J. / Stoermer, Eugene F. 2000: The Anthropocene, Global Change Newsletter 41, pp. 12–13.

2 For greater detail see Ruppel, Oliver C. 2013: Intersections of Law and Cooperative Global Climate Governance – Challenges in the Anthropocene, in: Ruppel, Oliver C. / Roschmann, Christian / Ruppel-Schlichting, Katharina (eds.): Climate Change: International Law and Global Governance Volume I: Legal Responses and Global Responsibility, Baden-Baden, pp. 29–93.

3 Niang, Isabelle / Ruppel, Oliver C. 2014: Africa, in: IPCC 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability – Part B: Regional Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Barros, Vicente R. / Field, Chris B. / Dokken, David J. et al. (eds.), Cambridge, pp. 1199–1265, here: p. 1202.

4 The consequences of climate change include the impacts of extreme weather conditions on human and natural systems. "Consequences" generally refer to the impacts of climate change on life, livelihoods, health, ecosystems, economic systems, societies, cultures, services and infrastructure within a certain period and the vulnerability of a weak society or weak system. "Impacts" are also defined as consequence and outcomes. The impacts of climate change on geophysical systems through flooding, drought and rising sea levels are a subset of the so-called physical impacts. Cf. the definition of impacts (consequences, outcomes) in IPCC 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, in: IPCC, ibid., p. 1767.

5 IPCC 2014: Summary for Policymakers, in: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, in: IPCC, ibid., pp. 1–32, here: p. 21.

6 Niang / Ruppel, ibid., p. 1214.

7 Ibid., pp. 1238–1240.

8 To close these gaps, the Nansen Initiative has investigated legal aspects relating to migration and refugee movements due to climate change. See https://nanseninitiative.org [2 Jun 2016].

9 Niang / Ruppel, n. 3, p. 1205.

10 IPCC, n. 5, p. 13.

11 Niang / Ruppel, n. 3, pp. 1238–1240.

12 Ibid.

13 For greater detail, see Ruppel, Oliver C. / Althusmann, Bernd (eds.) 2015: Perspectives on Energy Security and Renewable Energies in Sub-Saharan Africa – Practical Opportunities and Regulatory Challenges, Windhoek, in: http://kas.de/wf/doc/kas_42170-1522-1-30.pdf [2 Jun 2016].

14 According to a recent publication by the International Renewable Energy Agency (IRENA), there are currently already 8.1 million people working in the renewable energies sector, representing a year-on-year increase of five per cent; see IRENA 2016: Renewable Energy and Jobs – Annual Review 2016, http://irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=36&CatID=141&SubcatID=2729 [27 May 2016].

15 Ruppel, Oliver C. 2015: Sustainable Energy Solutions for Southern Africa: Powering Growth and Prosperity, Discussion Paper 3/2015, The Brenthurst Foundation, in: http://thebrenthurstfoundation.org/Files/Brenthurst_Commisioned_Reports/Brenthurst-paper-2015-03-Sustainable-Energy.pdf [2 Jun 2016].

16 Cf. also World Economic Forum 2012: White Paper on Energy Security and Global Warming, p. 12, in: http://www3.weforum.org/docs/WEF_GAC_WhitePaperEnereySecurityGlobalWarming_2012.pdf [2 Jun 2016].

17 For greater detail see Ruppel, Oliver C. / Roschmann, Christian / Ruppel-Schlichting, Katharina (eds.) 2013: Climate Change: International Law and Global Governance Volume I: Legal Responses and Global Responsibility, Volume II: Policy, Diplomacy and Governance in a Changing Environment, Baden-Baden.

18 See also Ruppel, Oliver C. 2015: Climate Change, Law and Development in Africa: A Reflection on Selected Aspects, Relations and Responses, in: König, Doris / Koch Hans-Joachim / Sanden, Joachim / Verheyen, Roda (eds.): Legal Regimes for Environmental Protection, Governance for Climate Change and Ocean Resources, Leiden, pp. 89–130.

19 Pillay, Navi (UN High Commissioner for Human Rights) 2013, in: Realizing the Right to Development, OHCHR, http://ohchr.org/Documents/Issues/Development/PamphletsRealizing_for_TransformativeDevelopment_en.pdf [2 Jun 2016].

20 21st session of the Conference of the Parties from 30 Nov to 11 Dec 2015 in Paris.

21 Scheen, Thomas 2015: Finanzminister für drei Tage, Frankfurter Allgemeine Zeitung, 15 Dec 2015.

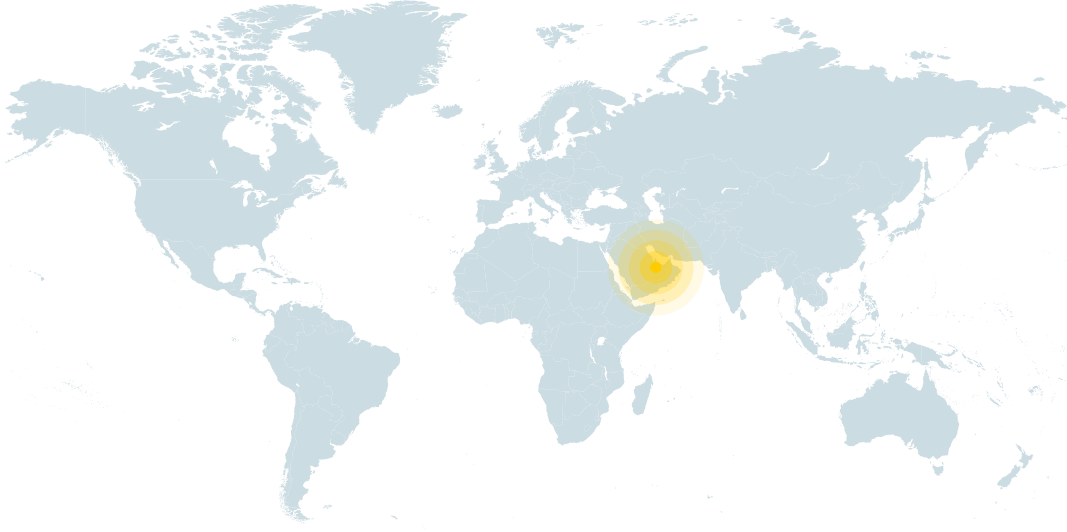
22 At the "Garden City Mall", Nairobi has, in fact, recently acquired the largest solar carport in Africa. It generates enough electricity to regularly supply 550 individual households with power. Cf. Guy Lawrence 2016: Solar the answer to EAs energy demand, Daily Nation, 10 Mar 2016, p. 46 DN2.

23 In 2012, South Africa only generated just over five per cent of its electricity from renewable energies. Over 90 per cent came from fossil fuels. See LEXAS Länderdaten 2016 in: http://laender-daten.de/energiewirtschaft/elektrische_energie/stromproduktion.aspx [2 Jun 2016].
24 Kaiser, Andreas 2016: Challenges and Opportunities in the Energy Sector vis-à-vis the Paris Agreement – COP21 and the Private Sector in East Africa (presentation), in: http://kenia.ahk.de/uploads/media/2016_02_11_COP21_and_the_Private_Sector_AHK_Kenia__Energy_Desk.pdf [28 Jun 2016]. Presentation at AHK Kenia on 11 Feb 2016 in Kigali, Ruanda.
25 Ibid.
26 USAID 2015, Investment Brief for the Electricity Sector in Tanzania, in: http://usaid.gov/sites/default/files/documents/1860/Tanzania%20_IG_2015_05_03.pdf [2 Jun 2016].
27 Kaiser, n. 24.
28 Ibid.
29 The East African Community (EAC) comprises the states of Kenya, Tanzania, Uganda, Burundi and Rwanda.
30 Ligami, Christabel 2016: New law seeks to ban used clothes, shoe imports into EA, The EastAfrican 27 Feb – 4 Mar 2016, p. 4.
31 Uwanziga, Appolonia 2016: Why govt raised taxes on used cars, The New Times, 12 Feb 2016, in: http://newtimes.co.rw/section/article/2016-02-12/197020 [2 Jun 2016].
32 van der Wolf, Marthe / Bätz, Jürgen 2015: Jeder testet die neue Tram, Spiegel online, 29 Sep 2015, in: http://spon.de/aeAFd [2 Jun 2016].
33 In Rwanda, there is a ban on plastic bags, for instance. In Kenya, by contrast, they are actually given out for free. They block sewage channels and constitute a blight on the environment, as fly tipping does. A new bill has been put forward intended to prevent this in future, at least for Nairobi County.
34 Randers, Jorgen 2012: 2052 – A global forecast for the next forty years, Munich.
35 The term ecological overshoot refers to the mismatch between the consumption of the environment and its resources. When the world's countries consume more of the environmental resources than Earth can regenerate, they are in a situation of overshoot. One could say that they are living on credit that Earth grants them from its resources. However, these are finite.
36 Pope Francis 2015: Encyclical Laudato si' 2015, p. 161.
37 Federal Ministry for Economic Cooperation and Development 2016: Sub-Saharan Africa. Fostering regional cooperation, in: http://bmz.de/en/what_we_do/countries_regions/subsahara/index.html [2 Jun 2016].
38 Global Growing 2014: Ten Facts about Agriculture in Sub-Saharan Africa. Fact 7: Income & Poverty, in: http://global-growing.org/en/content/ten-facts-about-agriculture-sub-saharan-africa [2 Jun 2016].

From Opposition to Adaptation

Energy Security and Economic Change as Drivers of a New Climate Policy in the Gulf?

Gidon Windecker / Sebastian Pfülb



For a long time, the conservative position of the Gulf States in international climate diplomacy was considered an obstacle to climate protection, as the profits from the lucrative trade in oil and gas ensured economic prosperity and political stability. The breakthrough of the COP21 negotiations in Paris, however, has provided indications of cautious change, driven above all by increasing concerns about the countries' own energy security and falling returns from oil.

Introduction

Higher, larger, more expensive – for a long time, this has been the maxim driving development in the Gulf States. Funded by the vast revenues from oil and gas, the monarchies underwent transformation from nomadic tribal societies to states with sophisticated infrastructures in just a few decades. They can consequently offer their populations living standards unmatched in the rest of the Arab world (and beyond). They also appeared to compete with each other with increasingly spectacular mega projects in order to firmly establish themselves as global players. Be it a skiing facility in the desert, luxury residences on artificial designer islands or vast airports and shopping malls – there were hardly any limits to the rulers' imagination.

It therefore comes as no surprise that the Gulf States have not exactly been regarded as pioneers in matters of environmental protection and climate policy. On the contrary: the air-conditioned glass palaces in Dubai, Doha and Riyadh have become the epitome of a wasteful lifestyle, which is considered to be one of the main causes of global climate change. While the emissions of Bahrain, Qatar, Kuwait, Oman, Saudi Arabia and the United Arab Emirates (UAE) may historically be marginal compared to Western industrialised nations, all six Gulf States figure among the largest climate transgressors today. Besides the highest per capita CO_2 emissions worldwide, amounting to ten times the global average, they also account for the largest per capita energy and water consumption.[1] However, there has been very little public debate on environmental protection to date, and its added value has not been considered. However, inexorably progressing climate change, water and soil contamination, the reduction in biodiversity as well as air pollution from construction and traffic are demonstrating the limits of sustainability to the monarchies.

Also, due to their virtually total economic dependence on revenues from the sale of crude oil and gas, which has continued unabated until today, the Gulf States have a vital interest in the continued existence of a global energy order based on fossil fuels. The six countries of the Gulf Cooperation Council (GCC) jointly control close to 30 per cent of global oil reserves and a quarter of all gas reserves.[2] With an average share of close to 50 per cent of the countries' total GDP, these natural resources not only represent the dominant industry sector by far, but also account for almost 90 per cent of state revenues.[3] But more than that, the export revenues also provide the foundation for political stability in the Gulf. They fund the large handouts to the local population, thus guaranteeing the ruling dynasties their hold on power. Generous social benefits and salaries for public employees as well as highly subsidised energy and water rates prop up this "social contract". To date, environmental

Aiming high: Oil and gas revenue transformed the Golf States from tribal societies into developed states with a super-modern infrastructure within a few decades only. Source: © Jamal Saidi, Reuters. →

and climate protection therefore almost always had to take a back seat despite the fatal long-term consequences.

The Gulf States in the International Climate Regime

The priority given to political and economic stability has also affected the role the Gulf States play in international efforts to combat climate change. Although the monarchies have taken an active part in international negotiations since the establishment of the global climate regime in the early 1990s, they have not figured prominently as active players in connection with the "United Nations Framework Convention on Climate Change" (UNFCCC). On the contrary: The monarchies have always perceived efforts to establish an internationally binding climate protection agreement as more of a threat than worsening climate change itself, due to the reduction in oil and gas use this would entail.[4] The long-standing former Saudi oil minister Ali Al-Naimi, who was also responsible for climate policy, commented only briefly on the historic agreement made in the Kyoto Protocol of 1997, pointing to its costs of at least 19 billion U.S. dollars in lost revenues per year.[5]

The oil states feel unjustly pilloried as climate sinners as their share in the historical total volume of emissions since the beginning of industrialisation is negligibly small.

This focus on the potential economic losses is also reflected in repeated demands for financial compensation from the Western industrialised nations. The oil states feel unjustly exposed as climate sinners as their share in the total historical volume of emissions since the beginning of industrialisation is negligibly small.[6] From their point of view, in public discourse, the negative influence of oil and gas is exaggerated compared to coal, which produces considerably higher emissions and is still in part highly subsidised in the West. They maintain that using clean combustion methods and technological innovations such as Carbon Capture and Storage (CCS), oil and gas could, in fact, be part of a sustainable climate solution and should therefore replace coal as fuel to a large extent.[7]

What was even more important to the Gulf delegations gathering behind Saudi Arabia than having their own demands incorporated into the agreement was to delay a binding agreement for as long as possible and to water down the reduction targets it would contain. The Saudi negotiators in particular became notorious for repeatedly blocking the negotiations, thus slowing down the efforts to find a global solution to the climate issue.[8] The Gulf States also publicly questioned the reliability of the scientific data supporting the theory of anthropogenic climate change on many occasions, which gained them powerful allies not only in the other OPEC countries but also in Western lobby groups affiliated to industry.[9] By engaging in these clever tactics, they were able to exert considerable influence over the architecture of the global climate regime.

From Climate Transgressor to Climate Pioneer?

It was thus all the more significant when the Gulf monarchies finally showed themselves willing to consider a binding global climate change agreement for the first time at the Paris Climate Conference in December 2015 (COP21), even submitting reduction targets of their own. After all, in the run-up to COP21, there had still been indications that the wrangling about a binding follow-up agreement to the Kyoto Protocol may well fail due to opposition from Saudi Arabia.[10]

This apparent departure of the Gulf States from blockade policies reflects a slow change in awareness that had been developing for some time on the level of pragmatic, national policy. While the smaller Gulf States handed over the lead to Saudi Arabia in the climate negotiations of the 1990s and did not display much interest

Desert penguins: Skiing in shopping malls, where outside temperatures easily register beyond 40 degrees Celsius, has become part and parcel of a lifestyle long acknowledged to be the root cause for climate change.
Source: © Mohamed Al-Sayaghi, Reuters.

otherwise, they underwent a cautious rethink in the mid-2000s. The subsequent revaluation of climate policy and renewable energies is not least due to the fact that the Gulf States have come to recognise their own vulnerability to uncontrolled climate change. They are already suffering from severe heat and drought in the summer, and climate change is exacerbating the extreme conditions in the region even more. Life-giving rainfall will become even rarer, groundwater levels will fall steeply and the salt content of the remaining water tables will rise. There will be further desertification in already arid areas and rising sea levels will threaten the densely populated coastal regions.[11] Scientists are warning that if greenhouse gas emissions continue unabated, temperatures will regularly rise to between 60 and 70 degrees Celsius in the summer by 2100, rendering most of the region unsuitable for human habitation.[12]

With the threatened loss of local biodiversity, the negative implications for food security, health problems due to heat and more frequent sandstorms as well as the potentially politically destabilising effects of unmitigated climate change, the Gulf States are therefore put to the test, making a sustainable and diversified climate policy crucial to their future survival.[13] The UAE and Qatar in particular are making pioneering efforts in the right direction. They have discovered green technologies and climate policy as clever tactics to step out of the shadow of their overly powerful neighbour Saudi Arabia in the international arena and to position themselves as green pioneers in the Gulf. Due to their small populations and a relatively diversified economy (UAE) and, respectively, large gas reserves (Qatar), these two states are finding it relatively easy to strike a more progressive note in matters of climate policy. The UAE was thus the first Gulf

Progress: The monarchies of the Gulf have realised by now that the rapid technological developments of the region have their own downsides as well. Source: © Fadi Al-Assaad, Reuters.

State to sign up to the Kyoto Protocol as well as the informal, progressive Cartagena Dialogue.[14]

To communicate this reorientation effectively to the public and to make the subject part of their nation branding, the two countries are using a number of highly symbolic lighthouse projects, such as Masdar City in Abu Dhabi, which is the first to achieve zero-carbon and zero-waste results. In 2009, the UAE landed a coup when Abu Dhabi won the competition to host the global headquarters of the International Renewable Energy Agency (IRENA), generous funding promises having benefitted it in preempting Bonn, which had been the agency's indisputable favourite.[15] Similarly, catching the media's interest, Quatar declared its intention to make the 2022 World Cup the first climate-neutral world cup and announced its application to host COP18, which it succeeded in despite international criticism.[16] During the climate conference in Doha in 2012, the Qatari government further announced that it intended to establish a new climate research institute as well as a dialogue forum on climate protection in Doha.[17] Since the mid-2000s, interest in the funds available under the Clean Development Mechanism (CDM) has also grown massively in the UAE, Qatar as well as Saudi-Arabia, and between 2006 and 2009, all three states set up dedicated authorities for approving CDM projects.[18]

Following on from these developments, there were first indications of a rethink in Saudi Arabia in 2012. Oil minister Al-Naimi, who had expressed doubts about the verifiability of climate change for years, suddenly declared it to be among "humanity's most pressing concerns".[19] Roughly at the same time, the long-time head negotiator of the Saudi delegation was replaced. Mohammed Al-Sabban, who had represented the kingdom in every single round of negotiations since 1991, had in fact been a main contributor to the success of the Saudi strategy.[20] Saudi-Arabia also slowly departed from its demands for financial compensation for potential eco-

nomic losses and has been concentrating more strongly on knowledge and technology transfer instead.[21] The big surprise then came three years later, when all six Gulf States submitted so-called Intended Nationally Determined Contributions for COP21. While these are still rather vague in an international comparisons and subject to the important proviso that the targets could only be realised if solid economic growth as well as robust revenues from the sale of crude oil could be maintained, the political symbolism made an impact.[22] At the same time, the promises also uncovered the true driving force behind this diplomatic about-face.

Climate Policy Overshadowed by Energy Security

The slow but steady softening of the blockade policies is driven primarily by concerns about each country's own energy security and economic viablity. The rapid modernisation has led to a fast increase in energy consumption in the Gulf States over recent years. Per capita consumption today is already twice that of significantly more industrialised Germany and it is growing by seven per cent each year on average, which means that it is set to virtually double within the next decade.[23] This development is driven by rapid population growth in the Gulf States, particularly since the early 2000s. In the decade to 2015, population figures in the Gulf monarchies grew roughly ten times as fast as those in the eurozone. This is consequently one of the fastest growing regions in the world. Experts expect this trend to continue. The Saudi population alone could double to close to 50 million people by 2050.[24]

This population surge is not only the cause of an exponentially rising demand for electricity, it also places greater strain on the water supply, which is already under pressure. Due to falling groundwater levels and fresh water sources running dry, almost the entire water demand is now covered by seawater desalination, a very ener-

gy-intensive process. Furthermore, the region's governments followed the policy of offering low energy prices as a locational advantage to attract international companies with the aim of diversifying their economy. However, the establishment of energy-intensive industries such as metal processing and the petrochemical industry has only driven consumption up further.[25] Due to the extremely low energy prices compared to international standards, industry and private consumers were hardly given any incentives to strive for efficient use of energy either, which has meant that energy-saving technologies – and behaviour patterns – have hardly been cost-efficient in the past. On the contrary: cheap or even free energy is seen by many in the Gulf States as an inviolable birth right.[26]

For a long time, the Gulf States were able to fulfil the growing demand for energy by expanding their gas production capacities. However, for some time now all of them (except Qatar) have had to import gas to cover their energy demand, at least during the summer.[27] This development has led to the paradoxical situation that they are increasingly forced to use parts of the valuable export commodity of oil to generate electricity, thus diminishing their main source of revenue. A quarter of the entire Saudi oil production thus never reaches the lucrative world market, but is burnt directly in the kingdom.[28]

Domestic demands thus represent a double financial burden. For one, the Gulf States are losing vital export revenues. In addition, energy prices are still highly subsidised and only cover a fraction of production costs. Due to rising energy consumption, the costs involved are considerable even for the formally rich Gulf States. In Bahrain, for instance, they accounted for 4.6 per cent of GDP and 19 per cent of state expenditure in 2015.[29] The expansion of renewable energies and measures to increase energy efficiency therefore represents an attractive means for the Gulf States to combat the rising energy insecurity and to increase the revenues from oil exports (and gas exports). The fact that these investments will improve their carbon footprint and international reputation is a welcome side effect.

The Gulf States have indeed invested large amounts of money in expanding alternative sources of energy and in measures to increase efficiency. By establishing the King Abdullah City for Atomic and Renewable Energy (KACARE) in 2010, Saudi Arabia has created an independent institutional hub for the intended energy transition; the Saudi government has plans to install plants with a total output of 54 gigawatts by 2040, predominantly using photovoltaics and solar thermal.[30] In the UAE, the largest solar plant worldwide, SHAMS-1, with an output of 800 megawatts was connected to the grid in 2013, and the government is planning to increase the proportion of zero-emission energies in the electricity mix to 24 per cent by 2021.[31]

Aside from ambitious plans to expand and conduct research on renewable energies and put in place measures to increase energy efficiency, Saudi Arabia and the UAE are also pursuing civilian nuclear programs to safeguard their energy security and maintain the oil and gas export volumes. Both states have made a number of cooperation and research agreements with leading exporters of nuclear technology in recent years.[32] Saudi Arabia is planning the construction of 16 nuclear power stations by 2040 with a total output of 17 gigawatts, intended to cover some 15 per cent of its entire energy demand. In the UAE, a total of four reactors with a joint output of 5.6 gigawatts have been planned and are already under construction.[33] On the other hand, Bahrain, Qatar, Kuwait and Oman have shelved their nuclear ambitions for the time being, especially after the reactor disaster of Fukushima in 2011 and due to rising doubts about the capability to fund the high investment costs. Due to the considerably larger energy demand in the UAE and Saudi Arabia, nuclear energy may well be a financially viable proposition for these states, even though some studies have concluded that nuclear power will not be competitive in the Gulf in the end due to the falling costs of solar technology.[34] That said, maintaining the nuclear power option is not purely an energy policy consideration, but also a strategic one, as the civilian nuclear programs could also serve as a deterrent against the archenemy Iran.[35]

The Gulf States' financial dependence on fossil fuels makes them extremely vulnerable to fluctuations in demand and therefore to developments in the global economy.

In the long term, the Gulf States are hoping that their investments in green technologies and alternative energies, which go into the billions, will not only ameliorate the tense energy security situation, but also provide impulses for the diversification of their economies. Despite all the efforts made to open up new industry sectors, the majority of GDP is still derived from the revenues from trade in fossil fuels. This dependence makes the states extremely vulnerable to fluctuations in demand and therefore to developments in the global economy, as the slump in oil prices since 2014 has illustrated so impressively.

The Slump in Oil Prices as an Opportunity?

In February 2016, the price for a barrel of crude oil fell to under 30 U.S. dollars, which corresponded to a 70 per cent decline in price since the summer of 2014. For a national budget based on revenues at a price level of around 100 U.S. dollars a barrel, this has meant huge losses for the Gulf States. In Saudi Arabia, for instance, 90 per cent of exports and 40 per cent of GDP are still derived from crude oil and oil-based products, as are close to 80 per cent of state revenues. In addition, 80 per cent of the workforce are employed by the state. State expenditure has quadrupled since 2003, not least due to the rise in population and the associated energy demand.[36]

After the breakthrough in Paris, there remains the question as to the extent to which the Gulf States will adhere to their planned policy of energy diversification in light of the fact that oil prices are set to remain low in the long term. The current budget problems and the low oil prices could mean that further investment in green technologies will become unattractive, at least in the short term, as alternative energy no longer has much of a price advantage over fossil fuels. This could cause major green energy projects to stall.[37] The expansion of renewable energy sources and nuclear energy planned by Saudi Arabia has thus already been postponed by eight years.[38] At the same time, the costs for solar and wind energy have declined drastically over the last few years, and alternative energy is becoming an attractive option for domestic consumption in order to boost export volumes, particularly in view of rapidly declining state revenues and steadily increasing domestic demand. In addition, the UAE, for instance, envisage their Green Growth Strategy producing 160,000 new jobs as well as an increase in GDP of five per cent from investments in green technologies.[39]

While the slump in prices is ultimately due to a decline in global demand because of a slowdown in economic growth in the newly industrialised countries and increased supply from the fracking industry, the Gulf States' recent conduct is helping to keep prices low. Under the leadership of Saudi Arabia, OPEC decided in December 2015 to reject the proposals by the smaller states to scale back production.[40] As an exporter with relatively low production costs, the kingdom is attempting to thereby undercut more cost-intensive methods such as shale oil production.[41] Moreover, Iran has been able to increase its oil and gas exports considerably since the beginning of the year after the lifting of the international sanctions. The Iranian government has made it clear that it has no intention to adhere to a production freeze that had been negotiated between the OPEC states and Russia in Doha in February.[42] This led to Saudi Arabia also ruling out export cuts again. After the Qatar agreement, oil minister Al-Naimi spoke out again, stressing that no market shares would be yielded to Iran.[43] One of the important issues critics take into consideration as regards this strategy is the conflict in Syria, where Iran and Russia support the Assad regime, which Saudi Arabia regards as an enemy.[44]

Even though the low energy prices are boosting consumption globally, private households in the Gulf have not been benefiting from the

Energy transition: Dubai's ruler Sheikh Mohammed bin Rashid al-Maktoum lays foundation stone for a solar plant for generating clean energy in Dubai. Source: © Ashraf M. M. Alamra, Reuters.

plummeting prices because of the high subsidies granted in the past. This is precisely where an opportunity has opened up for the monarchies through a revision of their pricing policy. The subsidies, which had been taken for granted for many years, have been reduced gradually since the autumn of 2015, which has in practice meant price rises for consumers. Petrol prices in Saudi Arabia have thus increased from 16 to 24 U.S. dollar cents a liter, corresponding to a price increase of 40 per cent. There have been similar increases for electricity, water and gas.[45] As people have to bear a greater proportion of the costs for running their household for the first time, it is quite possible that the population will develop an increasing awareness of awareness of economic responsibility and frugality in budget in the medium term.[46] Consumers are now also asked to pay elsewhere. In mid-February, the Gulf States agreed on the introduction of VAT of up to five per cent; the UAE have scheduled the introduction for January 2018. The state hopes to receive additional annual revenues of approximately 3.2 billion U.S. dollars from this measure.[47]

However, the size of the budget gaps is on a much larger scale and these measures are hardly adequate to provide serious compensation. In 2015, Saudi Arabia found itself forced to make up for budget deficits by using 115 billion U.S. dollars from its international currency reserves.[48] The seriousness of the situation was illustrated very clearly when international financial institutions

downgraded the credit rating of some Gulf States.[49] At the same time, Saudi experts are not concered the situation. They maintain that the oil price had also dropped below 30 U.S. dollars a barrel in the 1990s and that the kingdom had to battle large budget deficits then as well. The difference now is, however, that expenditure has gone up, not least because of the war in Yemen. Consequently, budget cuts of 14 per cent have been announced for 2016.[50]

During the 2011 protests, King Abdullah disbursed 128 billion U.S. dollars to his citizens in direct and indirect payments. Such generosity will, however, become largely unfeasible due to dwindling reserves.

However, of the greatest challenges lies in the growing, predominantly young population of the Gulf States, particularly in Saudi Arabia. Over 60 per cent of the 21 million Saudis are under 30.[51] They are used to the benefits of generous subsidies, exemption from taxes as well as enjoying free education and well-paid government jobs. In March 2015 alone, King Salman authorised bonuses totalling 16 billion U.S. dollars to be paid to government employees when he came to office.[52] Young people take cheap energy for granted, which is why the government had not dared to touch the subsidies in the past. After all, financial benefits for the population represented an essential component of the unwritten social contract: "No taxation. No representation." Similarly, the state's response to demands for economic reforms and greater co-determination during the 2011 protests was supported financially. King Abdullah disbursed 128 billion U.S. dollars to his citizens in direct and indirect payments.[53] Such generosity will, however, become largely unfeasible due to dwindling reserves, as has already manifested in the subsidy cuts. The younger generation will have to pay to maintain its living standards, earn less than its parents' generation and no longer be able to rely on virtually unconditional job security in the public sector. Youth unemployment has already risen to approximately 29 per cent.[54] The governments in the Gulf consider the "nationalisation" of the labour market to be an important part of the solution, as over 90 per cent of the workforce in private industry in most Gulf States consists of foreign workers. However, a large proportion of these are unskilled workers, whose jobs are not acceptable to young Gulf State citizens.[55]

In Saudi Arabia, there are plans for large-scale economic reform to turn the country's fortunes around. Deputy Crown Prince Mohammed bin Salman announced the plans to the world on 25 April 2016 in an interview with *Al Arabiya*.[56] Under this "Vision 2030", millions of new jobs are to be created by 2030 in sectors such as mining, the petrochemical industry, tourism and production engineering. The goal is to double GDP and to increase the proportion of non-oil products in exports from 16 to 50 per cent. This transformation is to be driven by the partial privatisation of the national oil producer Saudi Aramco, which will be restructured to become an industry holding. The state enterprise is the largest oil company in the world, estimated to be worth over two trillion U.S. dollars.[57] The planned sale of five per cent of the state-owned shares would therefore represent the largest IPO ever.[58] There are also plans to privatise the large airports of Jeddah and Dammam and the national airline as well as several healthcare providers and telecommunication companies within just a few years.[59] The revenues will be combined in the worldwide largest sovereign wealth fund of two trillion U.S. dollars, intended to secure the future prosperity of Saudi Arabia through well-placed foreign investments. There are further plans to bolster the budget by cutting expensive subsidies, imposing new taxes as well as introducing stricter efficiency standards in public administration.

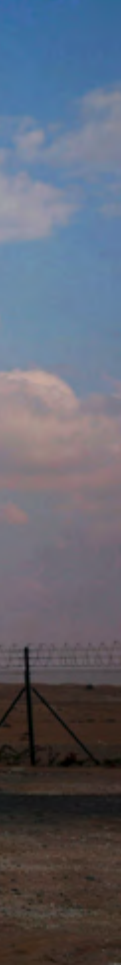
At the same time as reforms were announced, the cabinet was reshuffled. Presumably, the reshuffle's purpose was to assign assigning key

Solar future: In 2013, the world's largest solar power station went on grid in the UAE, as the government aims to reach its ambitious goal of 24 percent renewable generation by 2021. Source: © Ashraf M. M. Alamra, Reuters.

positions to reform-oriented associates of the Deputy Crown Prince. As a result, the influential and long-term oil minister Ali Al Naimi has been superseded by Aramco's long-standing CEO Khalid al Falih. Furthermore, the ministry's authorities were enhanced by the sectors "Energy" (before now oil alone) and "Industry". Likewise, up to now Minister of Water and Electricity Abdullah Al Hussayen lost his position after he was heavily criticised for the way new, increased tariffs were introduced. Equally, the Ministry of Trade and Investment is now led by former social minister Majed Al Qasabi, who immediately drew attention to himself by means of a company law reform.[60]

But the vision of society underlying the plans of the King's son is probably even more significant than the economic reforms. To survive in the future, the kingdom will need to reinvent itself and address issues that had previously been viewed as taboo. This includes not least measures to make the country more welcoming to foreigners, a renegotiation of the social role of Saudi women, and restrictions to the privileges of the thousands of members of the royal family.[61]

"The whole mentality of our people will have to change, and I think in the upcoming ten years we will see a major shift in the whole region," said Thani Ahmed Al Zeyoudi, Director of Energy and Climate Change at the UAE foreign ministry, summarising the situation of the Gulf States.[62] As Saudi Arabia's recent plans indicate, this will definitely not be limited to fundamental changes in climate and labour market policies. Social change is also on the cards, moving away from privileges and the inherent right to state welfare



and towards personal economic responsibility. "Vision 2030" could lay the foundation for this social change, offering future prospects to young Saudis, which have not not been present so far.

Outlook

While the Gulf monarchies used to be seen as the epitome of stability based on maintaining the status quo, the challenges in the economic and energy sectors are putting this strategy into question. As the Paris negotiations have shown, climate protection and green energy will without doubt come in to play in the future. It is however striking that the urgency of energy policy reform is driven less by the threatening impacts of climate change and more by the desire for energy security and economic stability. The political future of the Gulf States depends precisely on that stability. The end to the generous system of subsidies has initiated a gradual disintegration of the "social contract". The intended change in mentality is not limited to greater environmental awareness and the willingness to consider less lucrative jobs, but in the end, structural change will also have to be accepted in the political and social spheres. Under these circumstances, more citizen rights giving a voice to young Saudis in shaping their future will not be long. The new strategy will inevitably have to be "stability through change".

The oil price crisis could thus be the trigger for developments that the "Arab Spring" was not able to bring about: long-lasting reforms not just in the energy sector, but also in education, the labour market and society. After all, the successful diversification of the economy and of the electricity supply, beyond the state-managed oil trade, will require innovative ideas and initiatives independent from the government. This will in turn require people to take more personal responsibility as well as greater environmental awareness and "social diversification". A development that the Gulf States were able to largely evade in the past through handouts and grandiose mega projects. However, such reforms no longer represent luxuries, but will be crucial to economic survival in the medium term. It appears that it was the price slump that projected the spectre of a post-oil age, thereby heralding the long-overdue change. Should this change not materialise, the words of Sheikh Rashid Al Maktoum, former ruler of Dubai, could turn into reality: "My grandfather rode a camel, my father rode a camel, I drive a Mercedes, my son drives a Land Rover, his son will drive a Land Rover, but his son will ride a camel." [63]

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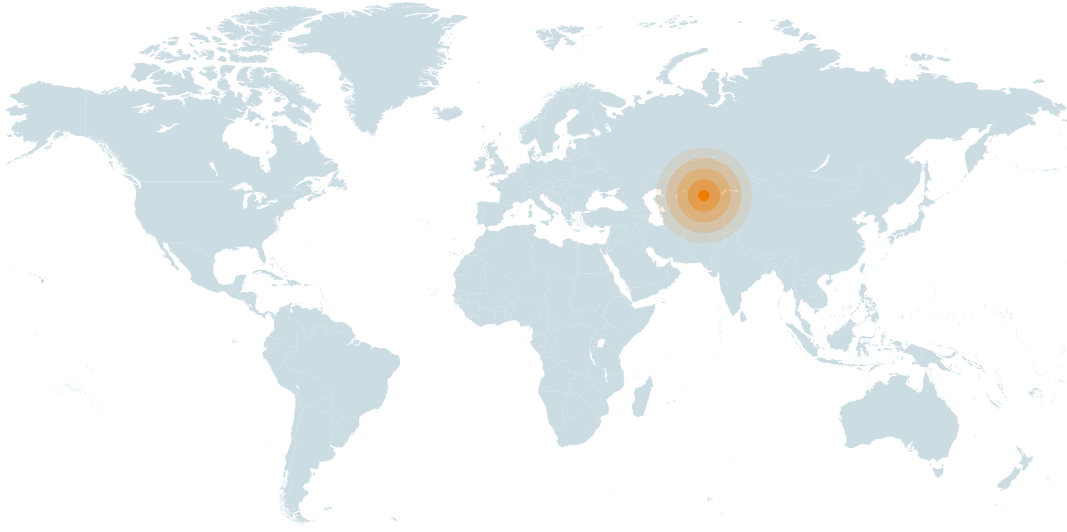
At the Crossroads

The Role of Renewable Energies in Kazakhstan's Macroeconomic Development

Thomas Helm / Nicolas Scholz



For many developing countries and states undergoing the transition to a market economy, the promise of vast natural resources has long since become a burden. Initially, the traditional economy was sacrificed to the "lure of the fast buck", but the wealth based on natural resources came to benefit only a select few. Ultimately, the country missed the right time to utilise its natural resource wealth to develop the economy in a way that would secure future prosperity. Is Kazakhstan going a different way?

Oil workers: The end of the oil boom will not only affect those working in the oil and gas industry, but the economy of the entire country. Source: © Shamil Zhumatov, Reuters.

After a period of frenetic economic growth, based mainly on gas and oil, the declining fossil fuel prices have led Kazakhstan to a crossroads. Will the Central Asian country succeed in changing course? What should and would need to happen? Can Kazakhstan become a good example or even provide a blueprint for many others?

The End to the Oil Boom

Kazakhstan's rise to become an economic "beacon" and anchor of stability in Central Asia over the last decade and a half was due mainly to the country's vast reserves of natural resources. Oil, gas, uranium and "rare earths" brought the former Soviet state not only a higher per capita income than that of "big brother" Russia but also remarkable social and political stability, based among other things on greater prosperity. For Germany and the European Union, Kazakhstan became the most important country in the region and a reliable partner, including for issues pertaining to the region as a whole. The so-called "multi-vector" foreign policy pursued by President Nursultan Nazarbayev has played a major part in this; at the heart of this policy is a strategy of seeking to mediate between the power centers in the immediate neighbourhood, particularly Russia and China, between the different interests in the region as well as between Asia and Europe. In the area of energy security, Kazakhstan has become one of the EU's most reliable partners worldwide.[1] 80 per cent of Kazakh oil exports go to the European Union, for instance.[2]

The surge in oil prices from the middle of the last decade onwards, access to new transport pipelines as well as its foreign policy strategy meant that Kazakhstan was able to increase its oil production to 1.7 million barrels a day, with an official production target of 3.5 million barrels a day. The government plans to export around 85 per cent of this volume in future.[3]

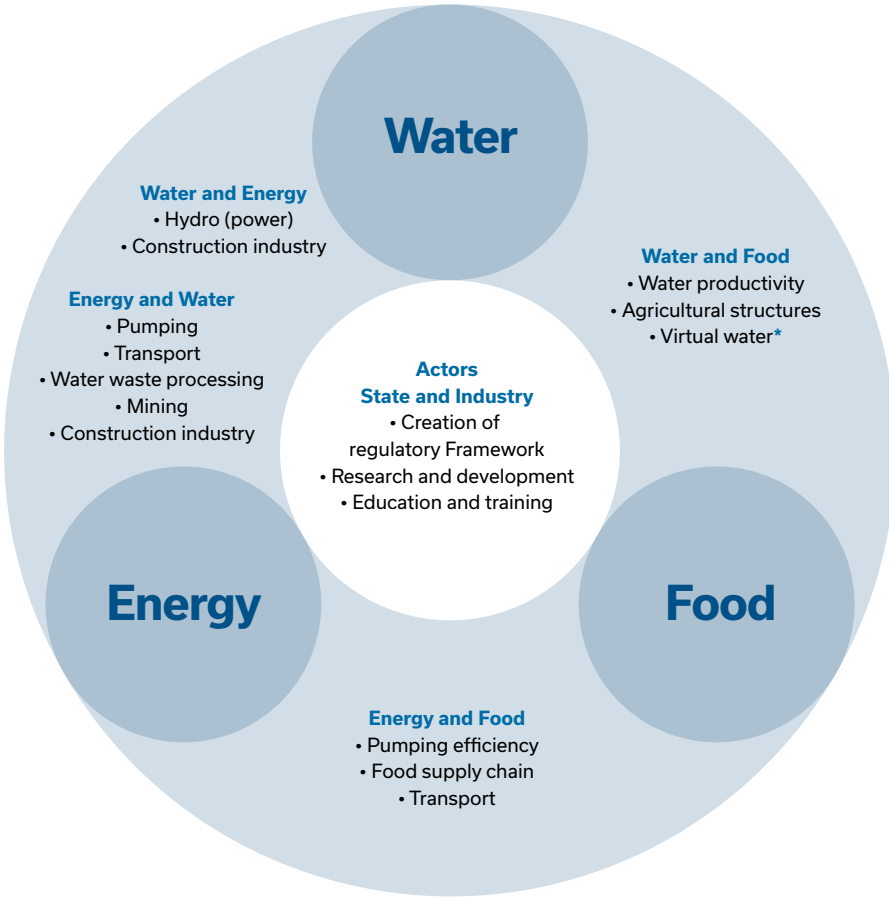
Besides bringing greater prosperity to swathes of the population, this also swelled the state coffers, gave a boost to the construction industry and provided for a healthy national fund of over 100 billion U.S. dollars.Those times are now a thing of the past.

Kazakhstan's Economy Facing New Challenges

The Kazakh economy has suffered a great deal from the price slump in the energy and natural resource markets over the last two years, resulting in a steady decline of economic growth. While the economy grew by six per cent in 2013 and by 4.3 per cent in 2014, growth was down to 1.3 per cent in 2015. The financial and debt crisis in the European Union, the economic depression in Russia and reduced demand from the People's Republic of China are having a direct impact on Kazakhstan's foreign trade. Kazakh goods exports, for instance, declined by 73 per cent during the first six months of 2015.[4]

The slump in prices on the international oil market in particular is having a significant detrimental effect on Kazakhstan. Oil exports expanded greatly as a proportion of total exports between 2000 and 2014, rising from approximately 55 per cent to over 80 per cent.[5] This development increased Kazakhstan's dependence on oil revenues for financing its budget. Furthermore, the price per barrel has dropped by 70 per cent since June 2014. The situation is exacerbated by the fact that Kazakhstan is currently not capable of increasing oil production and thereby at least securing international market shares for the future. It is likely that technical problems at the Kashagan oil field will delay the boost in oil production until 2017.[6]

Fig. 1: Correlations between Water, Energy and Food



* The term virtual water or embedded water is used to describe the volume of water that goes into the production of a product, directly and indirectly.
Source: Own illustration.

The impact of declining demand for natural resources and the oversupply of crude oil on the world market is not limited to Kazakhstan's energy sector. These developments are also affecting the Kazakh economy as a whole, which is in turn reflected in the country's buying power. While the Kazakh tenge was still traded at 230 per euro in August 2015, the current exchange rate makes one euro worth 377 tenge.[7] This is making imported goods more expensive, while making locally produced goods cheaper abroad. With a total population of just 17 million and consequently a relatively weak domestic market, this development also provides opportunities for the government to promote its export-focused economic model. In this context, the government would be well advised to encourage particularly those sectors that suffered from the high oil prices and the associated high currency value between 2001 and 2013. Particularly agriculture and the manufacturing industry offer substantial potential and can make great progress particularly in the country's southern and eastern areas because of the proximity to sales markets and high population figures.

Despite all its efforts, the government has so far failed to diversify the Kazakh economy with long-lasting effect. Technologically advanced industry products, for instance, make up some 25 per cent of all imports. While the proportion of industrial products in the country's total imports

has declined slightly from 2000 to 2013 (2000: 27 per cent; 2005: 28 per cent),[8] the import structure clearly demonstrates that the Kazakh economy depends on the extraction of natural resources[9] and that the size of its own industrial production is inadequate.

It is therefore essential that Kazakhstan gives the modernisation of its economy top priority. To establish Kazakhstan successfully in the circle of the most competitive countries of the world will require a transformation towards an economy characterised by sustainability and driven by innovation. With this goal in mind, President Nursultan Nazarbayev has called upon the Kazakh government to implement a number of programs, including the "100-Step Programme"[10] and the strategy paper "Kazakhstan 2050".[11] The latter describes the path Kazakhstan will need to take to raise it up into the circle of the 30 highest-developed countries. While the "100-Step Programme" can be interpreted not so much as providing long-term strategic orientation but as a tactical response to the country's economic depression, the two programs cover a great deal of common ground in the areas of innovation, education, energy, infrastructure and agriculture. In addition, the "Kazakhstan 2050" strategy paper lists five important challenges for the country's socioeconomic development:[12]

1. Food security,
2. Water shortage,
3. Energy security,
4. Exhaustion of natural resources,
5. Third industrial revolution.

These challenges are linked closely to the food-water-energy security nexus; the correct response for Kazakhstan will be to expand and promote renewable energies, modernise agriculture and promote high-quality industrialisation.

While these goals cannot be regarded in isolation from each other, the transformation of the energy sector will play a key role in overcoming the above-mentioned challenges. The energy sector produces 80 per cent of the country's greenhouse gas emissions. With annual CO_2 emissions of 200 million tons, Kazakhstan is the largest emitter in Central Asia, ranked 30th globally.[13]

Particularly in view of the country's topography, with large swathes of grassland as well as deserts and semi-arid regions, this has an impact on water resources and agriculture that must not be underestimated. According to experts, an estimated 70 per cent of potential negative climate change impacts would affect agriculture and particularly hit wheat production.[14]

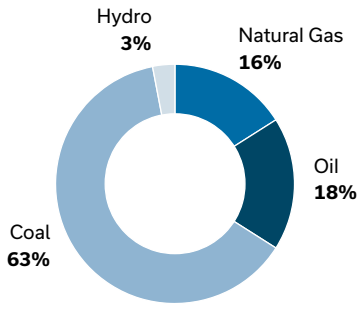
Kazakhstan is the largest CO_2 emitter in Central Asia, ranked 30th globally. 70 per cent of potential negative climate change impacts would affect agriculture.

Increasing incidences of drought in northern Kazakhstan have caused significant fluctuations in annual grain yields. In 2013, for instance, only 12.5 million tonnes of grain were produced, while it was still 22.7 million tonnes the previous year.[15] For one of the world's largest grain producers, climate change therefore represents a great threat to the country's food security.

Renewable Energies in Kazakhstan's Development

Around the world, the expansion of renewable energies goes hand in hand with the hope of increasing energy security as well as reducing dependence on fossil fuels, energy intensity and greenhouse gas emissions. The "Kazakhstan 2050" strategy paper includes the goal of covering half of the country's entire energy demand from renewable energies by 2050.[16] The motivation comes partly from the impact of climate change on agriculture and from the country's potential in the area of renewable energies. Another component is the prospect of being able to reduce domestic consumption to release export potential of conventional energy sources.[17]

Fig. 2: Kazakhstan's Energy Consumption by Energy Source



Source: Own illustration.

This is perfectly understandable from a Kazakh perspective as energy from fossil fuels in Kazakhstan is very cheap by international comparison, which poses a challenge for renewable energies in terms of competitiveness. As the income and wealth disparities are very large in this country in transformation, the burden of subsidising renewable energies until they become competitive cannot be placed mainly on the shoulders of end consumers such as private households as this would lead to undesirable social tensions.

It would also further throttle the country's efforts to transform into a modern industrialised society. With the international competitiveness of the manufacturing sectors having suffered for years from the strong tenge and high pay rates, which were based on high resource prices, a strong increase in energy prices would impact on competitiveness yet again. A "Kazakh energy transition" will therefore need to be funded in part by revenues from the sale of conventional resources if it is to succeed. In addition, there are some forces working behind the scenes that are hostile to a stronger drive towards renewable energies. Powerful actors from the oil, gas and coal sectors, some parts of which are state-owned, are exerting influence to secure extremely lucrative deals from the resource sales for year to come.

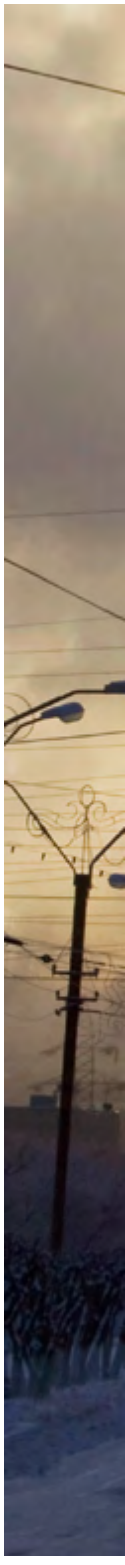
That said, the Kazakh government is pursuing plans to gradually increase the proportion of renewable energies according to its "Kazakhstan 2050" strategy, namely to three per cent by 2020, to 30 per cent by 2030 and to 50 per cent by 2050. However, one needs to bear in mind in this context that nuclear energy is considered one of the "green" types of energy in Kazakhstan because of the low emissions it entails. As one of the world's largest uranium producers, Kazakhstan is interested in boosting the use of nuclear power and intends to increase its share in energy production from zero today to 4.5 per cent by 2030.[18] By then, wind, solar and hydropower are to account for ten per cent of total energy production.

The required restructuring of the energy sector over this period will require enormous efforts and cost 64 billion U.S. dollars by 2030 alone.[19] After all, over 60 per cent of energy consumption is currently still covered by coal.

The Potential of Renewable Energies in Kazakhstan

Kazakhstan offers excellent conditions for the expansion of renewable energies. Particularly in rural areas that are not connected to the national grid, the proliferation of small-scale solar, wind and hydropower plants can help to ease the local energy deficit. The long transport distances and the burning of fossil fuels not only place a disproportionately large burden on the environment, they also have a detrimental effect on productivity in agricultural businesses and the manufacturing industry, thereby hindering prospects for economic growth. Renewable energies can make an important contribution to resolving these problems.

Kazakhstan has tremendous potential where renewable energies are concerned. Considering the climatic and geographic conditions, the estimated potential of wind energy, for instance, which can be economically developed, is about 760 gigawatts.[20] But these potentials are still for the most part unexploited. Currently, hydropower dominates in the area of renewable energies, accounting for 98 per cent of total capacity.



Exhaust emissions: The Temirtau steel plant is Central Asia's biggest steel producer and one of its biggest polluters. Source: © Shamil Zhumatov, Reuters.

← Lights off: The Baiterek monument moments prior to Earth Hour in Kazakhstan's capital Astana. The event is held annually, encouraging people worldwide to turn off their lights for one hour, in an attempt to raise environmental awareness. Source: © A J Sisco, Reuters.

Hydropower

At a total annual output of 7.78 gigawatts, the use of hydropower is most advanced. It contributes some 13 per cent to total electricity generation, accounting for approximately three per cent of Kazakhstan's total energy generation.[21] The 15 large hydropower plants currently in operation have a total energy generation capacity of 2.248 gigawatts.

However, the Kazakh government is also intent on supporting smaller projects in rural areas. 112 of 257 projects are being implemented in Southern Kazakhstan and 77 in Zhambyl. This means that over 70 per cent of the hydropower projects with a total production capacity of 2.5 gigawatts are located in the south of the country.[22]

Wind Power

While wind power is much less developed than hydropower, it offers significant potential. The German company Fuhrländer, for instance, has built 22 wind farms in a joint venture with a Chinese company in the Akmola Region (at a distance of some 150 kilometres from Astana). The areas with the greatest potential for the expansion of wind power are Western Kazakhstan (close to 30 per cent of the countrywide potential), Central Kazakhstan (19 per cent), some eastern areas (four per cent) and Southern Kazakhstan (approximately 50 per cent).[23] While air speeds are highest in Central Kazakhstan and on the Caspian Sea at an average eight to ten meters per second, 30 per cent of the entire annual production capacity could be generated in the south alone. In the south, wind power plays the second largest role in the area of renewables after hydropower, although this type of energy generation is hardly affordable for private households and small agricultural businesses. The cost for a turbine with an output of ten kW (conventional size to produce enough energy for one household) is between 22,000 and 29,000 U.S. dollars.[24]

Solar Power

The proportion of solar power in the energy mix is currently less than one per cent. But particularly in Southern Kazakhstan, the use of solar power is a cost-efficient option for optimising energy availability and decentralising supply. There are between 2,200 and 3,000 hours of insolation a year in this region, yielding 1,300 to 1,800 kilowatts per square metre of solar panel area.[25] In Germany, by comparison, solar panels only produce some 1,000 kilowatts per square metre a year. There are currently three large solar power plants located near Astana and Almaty City. Six further large-scale solar plants are under construction in Zhambyl.

Barriers to the Expansion of Renewable Energies

In the past, the use of renewable energies was frequently not cost-effective. This was mainly due to the high requirements with respect to battery storage and low feed-in tariffs. But the recent devaluation of the national currency has also had a major impact on the profitability of investments in renewable energies as the equipment generally needs to be imported. The situation is not helped by the fact that hard data on the benefits of different energy sources is scarce, which hampers well-founded investment decisions.

To obviate these problems in the future, the Kazakh government drafted a renewable energies bill in early 2016, which envisaged the following reforms and which was adopted by the newly elected parliament in May 2016:

- Creation of a national development model for the regional expansion of renewable energies,
- Feed-in tariffs pegged to the dollar,
- Scrapping of the regulations on battery storage,

- Ministry of Energy to be established as key institution,
- Reimbursement of 50 to 80 per cent of capital cost when purchasing locally produced energy generation equipment.[26]

In addition, the Kazakh government will be able to use EXPO 2017 in Astana as a platform to showcase best practices in the area of renewable energies to promote research and technological development relating to "green" energy, to sensitise the public for the opportunities offered by renewable energies and to speed up the know-how transfer between all relevant stakeholders.[27]

Conclusions and Outlook

The decline in prices on the international natural resource markets, particularly for crude oil and gas, has caused the Kazakh economy to slide into crisis. There is now a growing realisation in the country that it has relied on the sale of fossil fuels and other mineral resources for too long. The government has wasted valuable time.

The political will to restructure the country's economy is now being voiced more clearly in Kazakhstan. Such a transformation can succeed as long as the right course is set right now. After all, the country does have great potential.

The energy sector will play a key role in Kazakhstan's economic transformation; particularly renewable energies. Their expansion can solve several problems simultaneously, mostly linked to the food-water-energy security nexus. The expansion of renewable energies can, for instance, increase energy security while allowing the environmentally damaging use of coal to be phased out.

Nevertheless, Kazakhstan will not be able to do without the extraction of fossil fuels until such time that renewable energies for domestic use have reached a point where they can compete on the energy market and the transformation of the economy has succeeded in producing a modern industrial society. It will require the revenues from oil and gas exports and the local manufacture of important oil products for the construction, automotive and food sectors to enable the government to succeed in its transformation efforts. Otherwise, it will be virtually impossible to avoid social unrest and overcome the existing barriers. Seen from this perspective, the crisis in the international natural resource markets and its impact on the Kazakh economy offer a good opportunity to look to the future and take proactive steps to overcome the crisis sustainably and secure a prosperous future.

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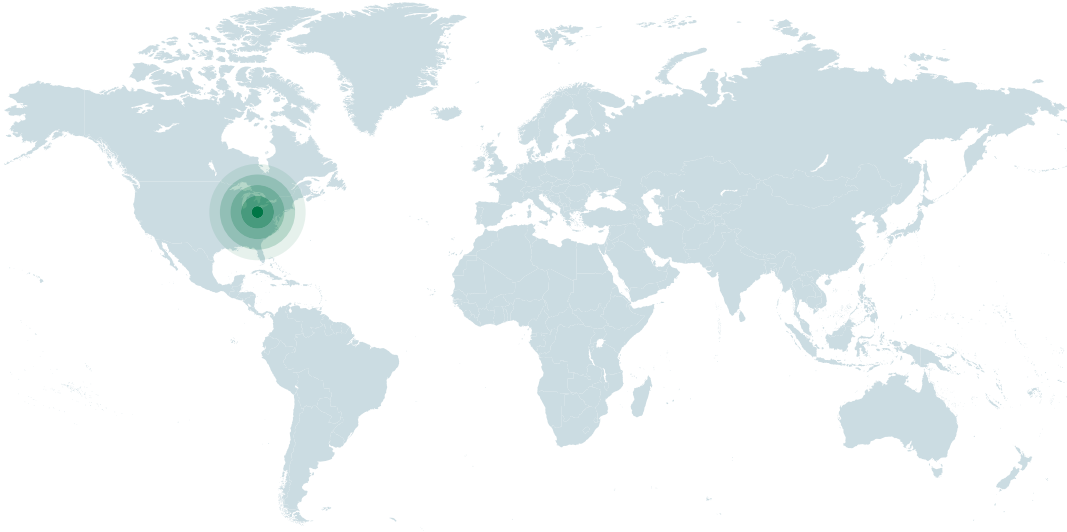
Trump is Simply the End Product

The Polarisation of U.S. Politics Is the Culmination of Long-Term Trends

Céline-Agathe Caro



At the beginning of the U.S. primaries, the candidacies of political outsiders Donald Trump and Bernie Sanders invoked laughter among the political establishment in Washington. But the possibility of a candidate such as Trump actually ending up in the White House can no longer be ruled out. This article addresses a number of factors in the polarisation of U.S. politics and society and will illustrate that this is the result of long-term trends.

In early summer 2015, the political establishment in Washington laughed about it; billionaire real-estate mogul Donald Trump had entered the race for the White House in mid-June. Most political observers rated his chances of being nominated as the Republican Party candidate as extremely slim, and his poll ratings were still very low. At that point, Trump, the businessman with no political experience who "tells it like it is", was the unlikely candidate of the 2016 presidential elections. The general feeling was that he would at least provide some entertainment during the summer slump, but that his campaign would fizzle out sooner or later.

The situation seemed equally clear on the Democrat side: after losing to Barack Obama in 2008, former Secretary of State, Senator from New York and First Lady Hillary Clinton portrayed herself as her party's only viable candidate. Bernie Sanders, at that time still an independent Senator from Vermont and a long-serving Member of the House of Representatives, had announced his candidacy in late April. However, at that stage barely any mention had been made of this self-professed "democratic socialist". His positions were considered far too left of center to present any serious challenge to the favourite, Clinton. Political commentators in the capital considered Sanders to be an extremely unlikely candidate as well.

Just a few weeks later, the situation had already changed radically. Trump and Sanders soon achieved good poll ratings as anti-establishment candidates, which led to them being increasingly seen as a serious alternative to the traditional candidates of both parties by the start of the Presidential primaries in February 2016. Since early May, we have been witnessing an unprecedented situation in the United States. Trump is now the only Republican candidate in the race following his victory in the State of Indiana. His main rivals, Senator Ted Cruz from Texas (an ultra-conservative Tea Party representative) and moderate Governor of Ohio, John Kasich, have thrown in the towel. In addition to that, as of May, Trump has reached the necessary number of delegates. As a result, it is highly likely that he will be nominated as his party's Presidential candidate at the Republican National Convention in July.

What makes this situation all the more astounding is that the billionaire is not in fact a "true" Republican at all: several points on his platform are highly unorthodox for the GOP.[1] His lifestyle also fails to fit the traditional conservative mould (for instance, Trump is not very religious and has been divorced several times). His derogatory comments about various sectors of the population (Mexicans, Muslims, migrants and women) and his simple solutions to all manner of political issues show that, whatever else he is, he is certainly a populist. His nationalistic and xenophobic remarks and his hostility towards Islam evoke clear parallels with right-wing extremists in the EU.

This inevitably begs the question as to why extreme candidates such as Trump and Sanders are faring so well in the current U.S. primaries. What is giving rise to the trends of radicalisation, populism and anti-establishmentarianism that

The improbable candidate: The unthinkable has now become a reality – Trump is the Republican Party's nominee for President of the United States in the 2016 election. Source: © Brian Snyder, Reuters.

are currently found in both political camps and are dominating the 2016 election campaigns (elections for the House of Representatives are also due to be held in November)?

The fierce debates and controversies that have accompanied the rise of Trump and Sanders illustrate once more just how polarised U.S. politics and society have now become. This polarisation is proving to be a decisive factor in the elections, as it is benefitting the outsiders most of all. It would appear that this phenomenon has long exceeded the critical threshold, as the possibility of a candidate such as Trump actually ending up in the White House can no longer be fully ruled out.

Against this backdrop, this article seeks to shed light on the polarisation taking place within U.S. politics and society and to explain the factors contributing to the success of Sanders and, more especially, Trump. To this end, it outlines five factors, all of which were contentious before the current presidential elections. Indeed, the polarisation of both political camps has not suddenly come about in recent months and years, rather it is the result of long-term trends in the political, economic, social and cultural life of the United States.

Factor One: Gerrymandering

Gerrymandering has been identified as the first factor because it is an institutional element that has been contributing to the polarisation of U.S. politics and society for decades now. It describes a political practice readily used by Republicans and Democrats alike to improve their chances

of success in local and parliamentary elections. While the practice is an effective one, it has the side effect of increasing competition *within* the parties during the primaries, thereby encouraging the radicalisation of their respective positions.

Gerrymandering involves modifying the boundaries of electoral constituencies in order to optimise the election results of one party.

The goal of gerrymandering is to modify the boundaries of electoral constituencies so as to optimise the election results of one party.[2] This practice is permitted every ten years following the national census and has been commonly employed in U.S. politics since the 19th century. The strategy is used by both Democrats and Republicans when they are in power in a given state to increase the number of their mandates in the House of Representatives of the United States Congress and in the lower houses of each state.[3] One of the key strategies, packing, involves cramming as many opposition voters as possible into small, politically homogeneous districts in order to secure victory for one's own camp in the other more numerous constituencies. Another strategy, cracking, involves spreading opposition voters across several constituencies in which they have no prospect of success. At the same time, both parties may choose to agree on the constituency boundaries, for instance, if they wish to facilitate the re-election of their respective incumbents.[4]

In 2004, the U.S. Supreme Court confirmed that gerrymandering was not unconstitutional, provided that there were no underlying racist motives.[5] This ruling has consolidated a trend that began to emerge some 30 years ago. After the last census in 2010, Democrats and Republicans employed this instrument once more. One of the main results of this is that the boundaries of most electoral constituencies for elections to the House of Representatives are drawn based on this principle. Due to a lack of geographical unity and/or the amalgamation of strongholds of uniform voter profiles, there is talk in some states of the balkanisation of constituency boundaries (see fig. 1).

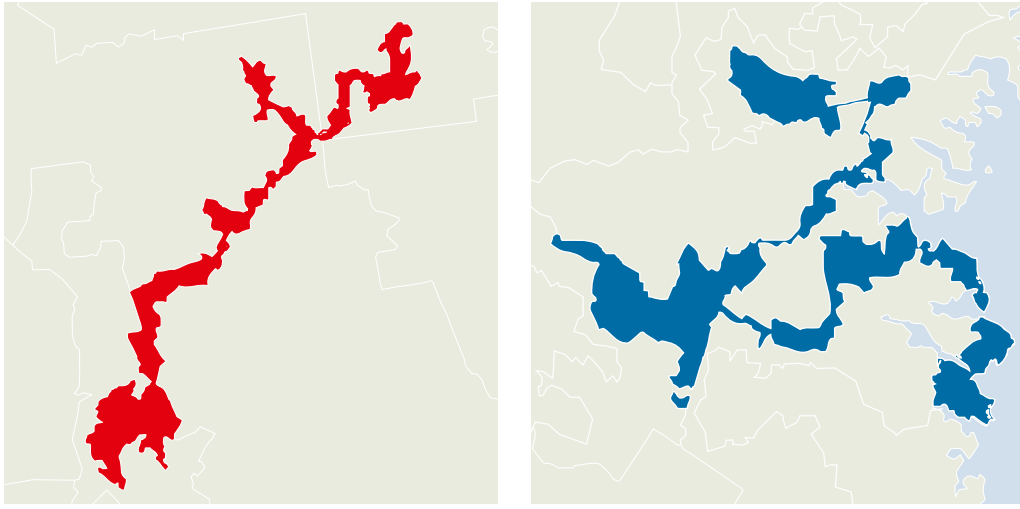
Against this backdrop, the result of the House of Representatives elections is only open to a limited degree. According to the projections of the Cook Political Report, 86.6 per cent of seats are already secured for the Republicans or Democrats. Due to weak competition from the other party, it should be relatively easy for one side or the other to win in eight per cent of cases. A real election battle and an open race is only expected for 5.2 per cent of seats.[6] The system creates similar conditions at the state level.

As a consequence of these trends, election campaigns in the United States are often fought *within*, rather than *between* parties, since in many cases, the nomination of one's own party guarantees subsequent electoral victory. At the national level, this situation leads to less competition of ideas between the two political camps and instead to greater rivalry between party colleagues. For politically moderate candidates, this means they are primarily competing with others from different wings of their own party.

Such internal competition is a factor in the radicalisation of the political discourse, as candidates do not need to take account of swing voters in the moderate center ground if they wish to win. Rather than appealing to a broad electorate and representing positions acceptable to the majority of voters, they attempt to outdo one another in appealing to their own clientele. The goal is frequently to portray oneself as the most authentic candidate for one's own party. While this can encourage the loyal defence of the ideological positions and principles of one's political family, the need to compete with the election pledges of more radical opponents also promotes the adoption of more hard-line, if not extreme positions.

For elected representatives, the highest priority after elections are over is to ensure internal com-

Fig. 1: Electoral Constituencies in North Carolina and Maryland



The 12th electoral constituency in North Carolina (top, Republican boundary) and the 3rd electoral constituency in Maryland (bottom, Democratic boundary) for the House of Representatives elections represent extreme examples of gerrymandering. Source: Own illustration based on Ingraham, n. 4.

petition within parties in relation to the next election is kept in check (for example, House of Representatives elections take place every two years). This also encourages these representatives to adopt positions that are clearly identifiable as right wing (for the Republicans) or left wing (for the Democrats) in order to guard against attacks from the party fringe. At any rate, in all districts considered to be safe (for one or the other political camp), politicians do not have to fear that their party will be reprimanded by voters for their failure to deliver on election pledges.

While gerrymandering does not play a role in the presidential elections themselves, since the voting rules are different, this year's national elections still reflect the centrifugal tendencies that have been fostered nationally in recent decades as a result of this practice.

Factor Two: The Role of the Media

The media play an important role in politics generally, but their room for manoeuvre varies from country to country. In the United States, the influence of the media is relatively great. As forums for initiating discussion and conducting debate, they have a considerable impact on public opinion. Consequently, the media also have a hand in the polarisation of politics and society. This has been especially true since the 1990s.

1987 saw the Fairness Doctrine abolished. Adopted in 1949, this policy was designed to prevent politically one-sided coverage of issues of public interest and applied to radio and television stations broadcasting on public frequencies. It required stations to "afford reasonable opportunity" for the discussion of controversial matters and conflicting views.[7] In 2000, two corollary rules of the Fairness Doctrine – the personal attack rule and the political editorial rule – were also abolished. In both instances, during one of their programs the stations were required to contact any individuals who had been personally attacked or targeted for political criticism, to inform these individuals accordingly and give them airtime to respond.

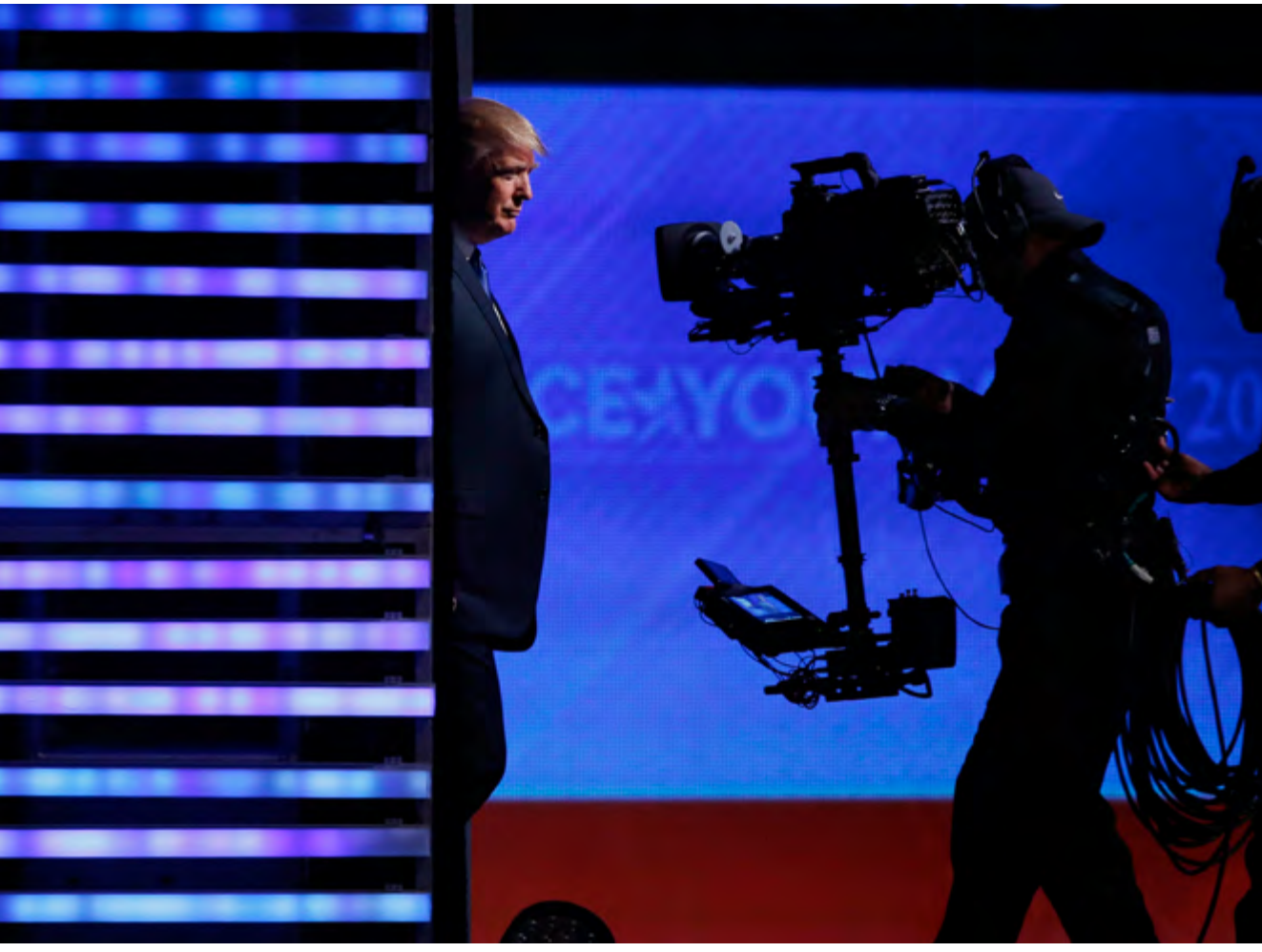
The abolition of the Fairness Doctrine contributed to a general sharpening of the political tone in the U.S. media from the 1990s onwards. This has facilitated the politicisation of news and societal debate.

This trend is particularly marked on a number of private television stations and radio talk shows. It is leading to the use of one-sided rhetoric and the separation of the world into good and evil to the benefit of one of the two political camps, with discourse often veering far to the left or the right as a result. Examples of this trend in the conservative camp include the political talk shows hosted by Sean Hannity, Bill O'Reilly and Glenn Beck on radio or on the TV channel Fox News, broadcasts by talk-radio host Rush Limbaugh, and news websites such as Breitbart.com. Examples on the left of the political spectrum include programs on the MSNBC television channel, such as "The Last Word" with Lawrence O'Donnell and the "Ed Show" with Ed Schultz, as well as broadcasts by Progressive Radio. Given the nationwide popularity of several of these programs (for example, many commuters listen to the radio shows in their cars), they are playing a particularly prominent role in the polarisation of public opinion.

Alongside this journalistic genre, which involves a strong combination of news and opinion, mainstream media can also contribute to the polarisation of politics during election years by giving disproportionate coverage to candidates on the political margins who gain attention with their polemical remarks. This can create an impression in the minds of the general public which, although not actually reflecting political realities in the country, can help to influence those realities in a corresponding direction.

While the media can be observed to have a polarising effect in many places, the connection between this phenomenon and the success of Donald Trump has raised a new set of questions. The key question concerns the extent to which the U.S. media have helped to turn the real estate mogul into the favourite in the Republican primaries. Particular reference is made in this context to the role of the 24-hour news stations. These channels use live broadcasts to attract views

A caricature published in the Boston Gazette in 1812 has led to the coining of the portmanteau "Gerrymander". The district was created by Massachusetts legislature to favor the incumbent Democratic-Republican party candidates of Governor Elbridge Gerry over the Federalists. The shape of the contorted districts was said to resemble a salamander.
Source: Elkanah Tisdale ⓜ / PD-US, overworked by Chowbok, Wikimedia.



The media's favorite: 24-hour television news channels are granting Trump excessive attention, in an attempt to garner more and more viewers. Source: © Carlo Allegri, Reuters.

and advertisers willing to pay for airtime. They began to focus on Donald Trump at a very early stage in the election campaign without giving his jarring statements any serious scrutiny, not least due to a fear of being boycotted by him. Already famous in the United States before the election and promising high entertainment value, Trump was precisely what many media outlets had been looking for.

For example, the conservative Media Research Center calculated that news station CNN had devoted 80 per cent of its coverage of the Republican primaries to Donald Trump between 24 August and 4 September 2015,[8] even though there was no way of knowing at that time how well the billionaire would fare with voters in those elections. This "Trumpmania" was also reflected in the sector of the U.S. press which is permanently seeking to attract new readers on smartphones and tablets and is therefore currently reporting on an almost daily basis on what the GOP favourite is up to and what he is tweeting (Trump has over eight million Twitter followers).

This trend of polarisation in U.S. media coverage of political events has been particularly marked since the 1990s and is also related to the fact that U.S. elections, and the White House race

especially, are strongly personality driven. The first reason for this is that the parties are mainly active at local level, where they develop most of their programs, and do not play such a central role nationally. Secondly, the U.S. election campaign system allows individuals to run for election under the banner of a party without necessarily needing to have that party's blessing to do so. As such, the leadership of each party does not control who runs for election in its name. This means that the various candidates from one political camp may adopt very different positions to one another in an attempt to raise their profile in the primaries. In this respect, the media are particularly focused on the statements the candidates make and tend, as one would expect, to give the majority of coverage to those candidates who stand out the most. This creates an especially strong media presence for outsiders such as Trump, giving the public the impression that they are more politically influential than is actually the case and at the same time supporting their election campaign for free.

Factor Three: Campaign Finance

The system for financing election campaigns in the U.S. allows for substantial donations to be made. This too plays a role in the polarisation of the political landscape, but not because candidates who raise the most funding for their campaign automatically win. Rather, it is because this system is now giving rise to a great deal of mistrust on the part of the population. This has been especially true since the adoption of new regulations as a result of the Citizens United vs. Federal Election Commission (FEC) case. This mistrust is directed principally against the establishment candidates who gain the most from campaign financing legislation, and in turn benefits protest candidates on the right and left of the political spectrum who claim they have not been bought by the system.

Following the Citizens United vs. FEC case in 2010, companies, trade unions and associations in the United States can now fund individual candidates. This Supreme Court ruling based on the principle of freedom of speech states that donations from the private sector and organised interest groups fall under this category. It also allows individuals to avoid the otherwise applicable 2,500 U.S. dollars limit per election and donate large amounts of money to campaigns. This trend has led to the formation of highly flexible super PACs:[9] Donors are not subject to any upper limit for donations and can remain anonymous until the end of an election campaign. However, donations cannot be made directly to candidates' campaign kitties. This is why they are usually managed separately by individuals whom the candidates trust. This fund is used primarily to finance election advertising.

Large donations are not a new development in U.S. elections and have long been discussed in this context. The difference is, however, that, since 2010, the donations collected by the super PACs are considerably larger than the direct donations collected by candidates. By early 2016, this year's presidential and House elections had already generated the highest volume of private-sector donations since 2010. A large proportion of this funding has been provided by a small number of multi-millionaires and billionaires via their companies. Over half of donations made up to summer 2015 came from some 400 families, most of them in the financial, energy and real estate sectors.[10]

The fact that major donors can fund a range of initiatives through their networks makes it more difficult to track their political activities. For example, donations can be made to super PACs via "501 (c) (4) organisations". These social-welfare lobby groups are not required to publish the names of their donors. Election observers also point out that many super PACs in both political camps are receiving funding from potential ghost corporations and pop-up groups this year, a phenomenon that makes the campaign finance system appear even less transparent.[11]

This means that, unlike in Germany and, in particular, since the Citizens United case, wealthy donors and companies can use large donations to gain influence in U.S. politics. It is difficult to gauge their impact on candidate discourse, as it

is not clear whether the candidates are receiving support from certain donors on the basis of the specific convictions they hold to or vice-versa. For example, we may wonder about the extent to which Ted Cruz's critical stance on the human dimension of global warming[12] and his support for fossil fuels are influenced by his loyalty to a number of his major donors.[13] Hillary Clinton's opponents on the right and the left repeatedly ask her how she can claim with any credibility that she would curb the power of Wall Street as President when she has benefited considerably from its generosity in the past.

With the U.S. campaign finance rules the way they are, it is certainly possible that elected representatives could face conflicts of interest. This issue is the subject of regular public discussion and many voters view this system critically, especially as they consider it to lack transparency. According to a survey by the Pew Research Center, 76 per cent of the Americans currently believe that money is a more significant factor in politics than it used to be. 77 per cent believe that, generally speaking, limits should be placed on campaign donations by individuals and companies.[14]

This mistrust on the part of voters with regard to the current campaign finance system is a disadvantage to traditional Republican and Democrat candidates who generally benefit from private-sector donations. Since 2010, they have also been the main recipients of the super PACs. This close link between money and politics lends further support to the assertion made by critics of the financing rules that the elites in both political camps are primarily concerned with promoting the interests of the country's rich and powerful, if necessary even at the expense of the rest of the population.

At the same time, the merging of money and politics plays into the hands of candidates who have nothing apparent to gain from this system. This is the case with the two protest candidates, Trump and Sanders, in this year's presidential elections. Unlike their opponents, they do not

receive any support from super PACs. Donald Trump is largely using his own means to finance his primaries campaign, and Bernie Sanders had raised over 150 million U.S. dollars by late March, primarily from numerous small online donations (averaging 27 U.S. dollars each).[15] The two candidates have made their financial independence a key theme of their primary campaigns. Their central argument, which is the same in both cases and not without populist tones, is that only a financially independent candidate is capable once he is President of implementing reforms that benefit ordinary citizens and resisting pressure to serve the particular interests of the business and financial sectors.

Factor Four: Ideological Trench Warfare Instead of Bipartisanship

In many political institutions at national level and in the U.S. states alike, cross-party cooperation is essential if any decisions are to be made and any legislation adopted in the first place. This requires elected Republican and Democratic representatives to be willing to compromise and undertake joint initiatives. However, such bipartisanship has increasingly faded into the background in the United States in recent decades. As such, politics is also becoming increasingly polarised at this level. There are many reasons for this, but it is certainly related to the fact that a large proportion of voters has moved away from the political center ground.

Differences, whether of opinion or in the political agendas of the government and the opposition (parties) are part and parcel of life in a democracy, indeed they are the prerequisite for true political competition. What is unique about the U.S. situation, however, is that the ideological overlap between the Democrats and the Republicans is steadily decreasing. In some cases, the differences are so pronounced that there is no way of reaching agreement, something which leads to enormous obstructions in the system.

← "Berning Man": Financial independence of Bernie Sanders and Donald Trump plays a crucial role in the primary elections. Source: © Lucas Jackson, Reuters.

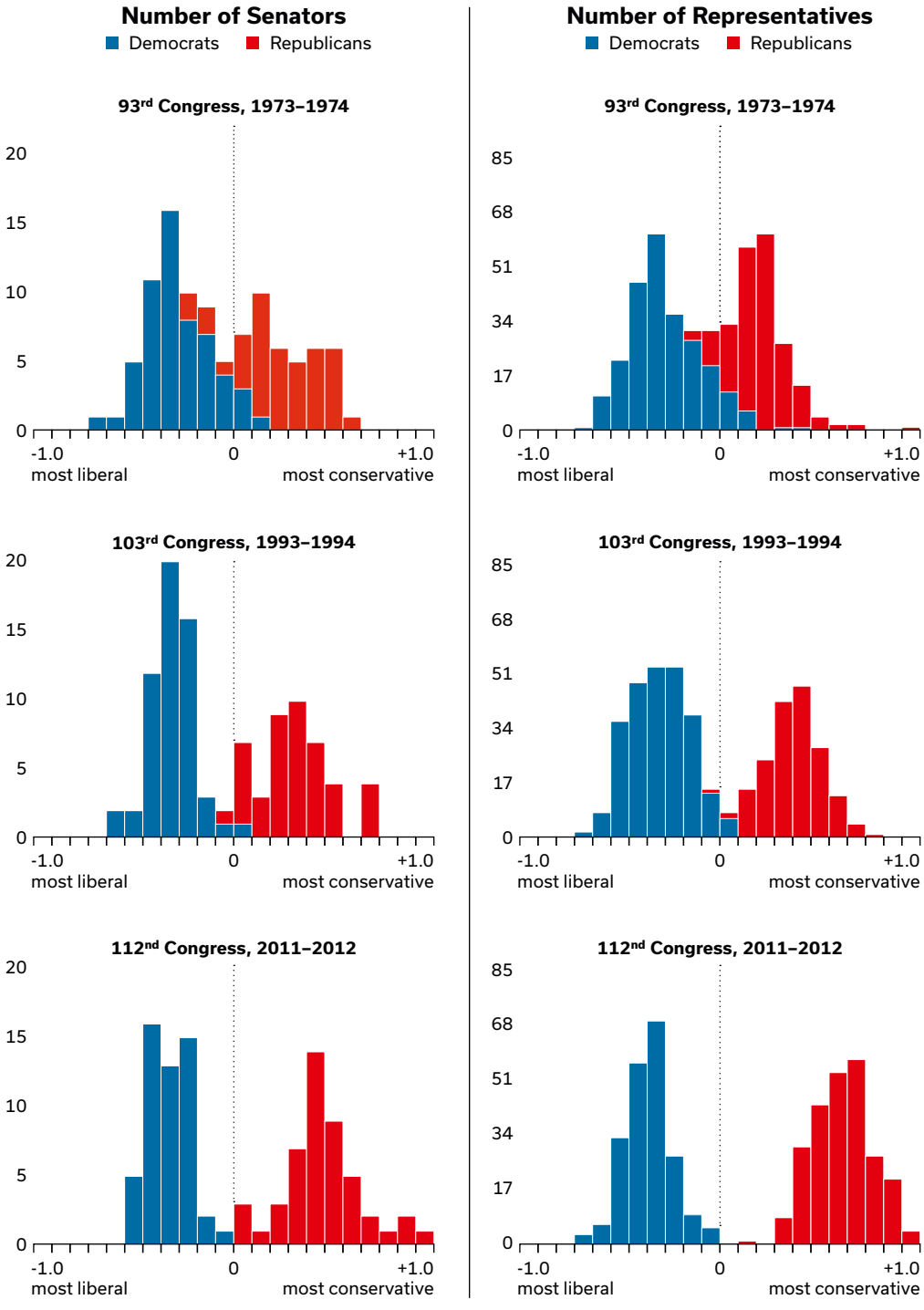
There has been a significant increase in the degree of polarisation within the U.S. Congress in recent decades.

This polarisation has been hindering the political decision-making process in both parties for several decades now. For example, researchers have calculated that the degree of polarisation in the U.S. Congress (House and Senate) has increased significantly on both sides since the 1970s and that it is now at its highest level since the 1870s (see fig. 2).[16] Its effect is most notable at national level when the House Majority and the President are from different political camps and the House of Representatives uses its budgetary powers to block the government's decisions. In one case, that of the bitter battle between Republicans and Democrats over the Affordable Care Act (Obamacare), this even led to a two-week government shutdown in October 2013. There could be another explosive case of partisan warfare following the unexpected death of conservative Supreme Court Justice Antonin Scalia in February 2016. These examples illustrate the difficulties at national level, but such challenges also arise in the U.S. states, within both the legislature and the judiciary, where they can trigger similar obstructions. The system can also be severely paralysed if the federal government and the executive of a given state are unable to agree on a uniform policy and choose to obstruct one another.

The trend of increasing polarisation within the political system is being exacerbated by a number of factors, several of which have been addressed already.[17] Another of these factors is the system of primaries which tend only to involve particularly dedicated party members. These members are often the ones with the most radical views. As such, it is candidates with extreme positions who fare better in primaries, even if their opinions are not representative of the party membership as a whole.[18]

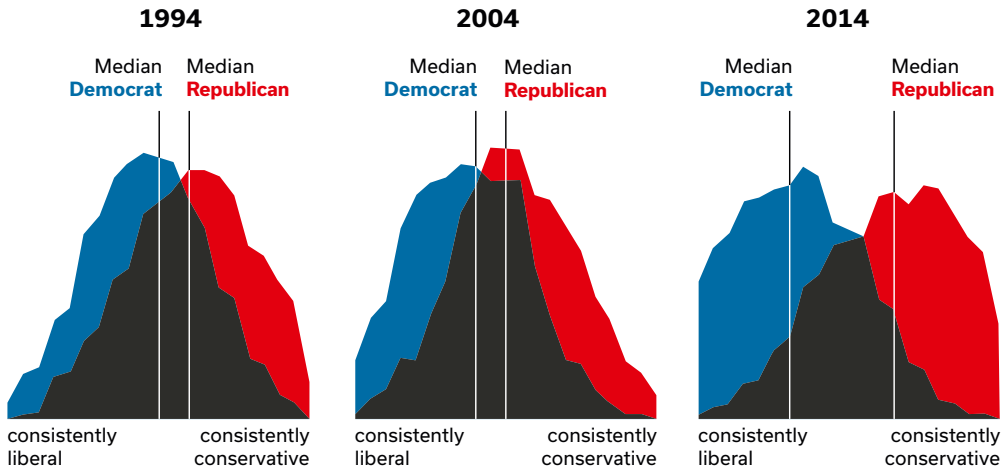
Moreover, when the political situation is already polarised, it often leads to even more polarisation

Fig. 2: Ideological Gap I



Ideological scores of senators and representatives based on roll-call votes. Negative numbers represent liberal views and positive numbers conservative views. Source: Own illustration based on DeSilver, n. 16.

Fig. 3: Ideological Gap II



Distribution of Democrats and Republicans on a 10-item scale of political values.
Source: Own illustration based on Pew Research Center, n. 18.

within society. The main reason for this is that such a situation is frequently accompanied by a policy of tactical obstruction designed to deny the opposition political victory and discredit it. This strategy of obstruction is accompanied by rhetoric which frequently awakens unrealistic expectations. Failure to deliver on the associated promises leads to disenchantment among some followers. In such an environment, it is easy for more radical politicians to criticise the incumbent as weak. During elections, this situation causes many candidates to step up their rhetoric even further in recognition of the frustration at grass roots level and as a way to counteract outside competition.

Current polls also show that citizens have had enough of the obstructions and dysfunction in the political system in general.[19] This has the counter-productive effect at election time of playing into the hands of the most extreme politicians who blame the political establishment in both camps for the situation and announce their intention to overhaul the political system which they consider to be ailing.

Related to this polarisation within the political system is the fact that the average U.S. voter has become more radical in his or her views in recent years.[20] Eric M. Uslaner, Professor of Government and Politics at the University of Maryland (College Park), makes the following observation with regard to the increasing polarisation within the U.S. Congress: "As Republicans in the electorate have become more conservative and Democrats more liberal, the electoral base for moderation has shrunk. The traditional strategy of seeking the middle, the centrist median voter, no longer is the path to success."[21]

Research studies confirm that the ideological identity of citizens on both sides of the political fence is now more pronounced than it used to be (see fig. 3), especially in the case of individuals who are politically active and who vote regularly. The concept of ideological silos is used to explain the increasing distaste that both camps have for each other's political convictions.[22] This encourages mutual intolerance and also promotes a trend of social retreat into one's own political "family", something which affects everyday life within society. One indicator of the increasing divide between Democrat and Republican supporters is the fact that, for a number of years now, there have been fewer voters changing sides from one party to the other.[23]

Factor Five: White, Middle Class Anger Against the Establishment

Long-term economic, social and cultural trends within U.S. society also help to explain the gradual polarisation of U.S. politics. They illustrate, in part at least, why a protest candidate with populist slogans can do so well in this year's presidential primaries on both the Democrat and the Republican side.

Donald Trump and Bernie Sanders' ideological differences are abundantly clear, yet several aspects of their discourse sound very similar and are considered by observers to be the reason for their popularity. The common denominator in these positions is that they address the everyday economic and social concerns of the (lower) middle classes and promise greater equity/less economic inequality. As such, long-term tensions within the U.S. population are a key reason for their success, something which their rivals in the primaries, from Clinton and Kasich to Cruz, have been far too slow to understand.

Both Trump and Sanders are addressing the concerns of the (lower) middle classes in this election campaign.

Trump and Sanders delight their followers by criticising the party establishment in both camps for, as they see it, ignoring the concerns of the middle classes. They decry the role of money in politics and claim that, if they were President, they would be able to limit the political influence of the economic elite and major corporations and push through key reforms for citizens. Under President Obama, the United States is showing more restraint in its actions on the international stage than in the past, yet both candidates are calling for even greater restraint in foreign policy and military matters to enable a larger proportion of the national budget to be invested domestically and support to be provided to citizens in need. When it comes to social matters, both candidates are in favour of strong social security systems, including in the health sector. Bernie Sanders also has the support of many millennials because of his promise to significantly reduce university tuition fees which are very high in the United States on average.

Additionally, both candidates claim to offer simple solutions that will quickly improve the situation of people at the bottom. For example, Trump intends to use drastic means to combat illegal migration and therefore relieve pressure on the American working classes, while Sanders plans to have his welfare state financed by the banks and Wall Street. Both candidates are also critical of the consequences of globalisation and free trade. While their respective parties are in broad agreement with regard to the benefits of liberal global trade, they stress that many jobs have been lost in the United States as a result and give the impression that they would turn back the clock if they could.

Under these circumstances, we may wonder why Trump is achieving far more success than Sanders in the current primaries, especially given Trump's nationalistic and xenophobic overtures, glaring knowledge gaps, almost non-existent political experience, derogatory comments, and more or less intentional breaking of taboos. One reason for this is that, while both candidates address the economic and social concerns of the lower middle classes, the billionaire's election campaign resonates far more strongly with the white working classes and mobilises them.

From an economic perspective, this group is still bearing the brunt of the consequences of the last economic crisis from which the nation as a whole has largely recovered since 2009. Several studies show that the income gap between the rich and poor in the United States has widened over the last five years and that distressed communities in particular are among the main losers of the current economic upturn.[24] Generally speaking, these individuals with no academic background are also the biggest losers of globali-

Far from being commonplace: Willingness to comprise on the part of the two camps in Congress (here: Nancy Pelosi from the Democrats and John Boehner from the Republicans) has dropped significantly over the past decades. Source: © Jonathan Ernst, Reuters.

sation, the increase in free trade and advances in the technology sector, with their employment and income prospects deteriorating considerably in recent years and a spending capacity that has declined in many cases since 2007. Despite this fact, both the Democrats and the Republicans have failed at the national and state levels to provide effective support to these lower classes over the last few years to enable them to adapt to the new economic environment.

Additionally, studies show[25] that these white, modest income voters currently backing Trump feel that they have been betrayed and left behind by modern society. They have had enough of the establishment and are eagerly awaiting the outsider who has never held any political responsibility before. They are concerned about their jobs and circumstances and so find anti-immigration speeches appealing. They harbour resentment against movements promoting minorities such as Black Lives Matter, as they feel they have no one to represent their own interests. Their criticism of political correctness should also be viewed in this context. There is more to it than simply "telling it like it is"; these individuals are expressing their indignation at the affirmative action being taken with regard to certain social groups, especially minorities. In a diverse, cosmopolitan society, these white lower classes feel increasingly culturally and demographically inferior. This creates social insecu-

What the Trump Voters Care About

78 %
of Mr Trump's backers agree (46% strongly) that "I'm falling further and further behind economically".

80 %
believe (55% strongly) that, "the government has gone too far in assisting minority groups".

85 %
agree (55% strongly) that "America has lost its identity".

91 %
report feeling (76% strongly) that "my beliefs and values are under attack in America these days".

95 %
of Mr Trump's backers agree (83% strongly) that "America needs a powerful political leader who will save us from the problems we face".

84 %
assert (54% strongly) that we need a leader who is "willing to say or do anything to solve America's problems".

74 %
believe (44% strongly) that real leaders "don't worry about what other people say, they follow their own path".

Source: Quinnipiac University Survey, 5 Apr 2016, in: Galston, n. 25.

rity and makes them feel threatened, triggering in them a hatred of strangers (Muslims, homosexuals, foreigners). Many of these individuals are also frustrated, fearing they have no prospect of social mobility, something which is closely associated in the United States with freedom and the American Dream.

Donald Trump openly addresses such concerns among the white lower middle classes. He speaks in dramatic fashion of the nation's demise and its impotence on the world stage (in the face of Iran, ISIS, China), to the delight of this sector of the population, which views these trends in exactly the same way and wants to stop and reverse them. The businessman's positive and simple message – "Make America Great Again" – restores these individuals' hopes of political self-determination, security, control and order.

Finally, there is an even more subtle element explaining why Trump is particularly good at mobilising the white middle classes, especially middle-aged men: his tone and style, despite how off-putting they may be to others. A number of sociological studies have found that authoritarian reflexes are activated in people when they feel threatened directly or indirectly, internally or externally, economically or culturally. In such moments, they look for the strong man who promises to do everything in his power to protect them from danger and change.[26] In this year's White House race, it is Donald Trump who no longer has any hesitation on the platform at campaign events in encouraging his followers to use violence against demonstrators – and he is reaping the rewards of these authoritarian aspirations. This dynamic is a sign of social unease among the white lower middle classes that is deeply rooted in American society and will continue long after the presidential elections are over.

Conclusion

Each of the five factors addressed in this article – gerrymandering, the role of the media, campaign finance regulations, the lack of bipartisanship and the protests of the white middle classes – plays a part in explaining the Trump and Sanders phenomenon. At the same time, these factors also illustrate long-term trends in the U.S. political system and within American society.

The voting patterns in the U.S. Congress, especially within the House, since the 1970s (see fig. 2) show that polarising trends are more pronounced in the Republican camp than among the Democrats. There are several reasons for this, a small number of which are briefly outlined below:

- More than seven years of opposition at national level have been particularly influential in leading the GOP to become less pragmatic and moderate in its positions.

Influx: Especially white lower-middle class voters are increasingly feeling threatened by immigration and a rapidly changing society. Source: © Carlos Barria, Reuters.

- Since the 2010 mid-term elections, it has been crucial for the Republicans to mobilise supporters of the Tea Party movement established in 2009, including conservative Christians, in order to consolidate the party's power in the U.S. Congress and improve its chances in the presidential elections. Consequently, ultra-conservative positions have been strengthened within the GOP.

- Following its defeat in the 2008 and 2012 presidential elections, the party has failed to increase its appeal among ethnic minorities (especially African Americans, Latinos and Asians). Efforts to address the party's own conservative clientele have been redoubled to make up for these losses.

- Experts are largely in agreement that the Republicans have made particularly heavy use of gerrymandering in recent years.[27] Due to controlling more states than the Democrats, they were more often in a position to employ this instrument. However, demographic trends also play a role in this context. The growth of ethnic minority groups, who are not traditionally Republican supporters, is tending to send the conservative camp into what Senator Lindsey Graham (Republican, South Carolina) once referred to as a "demographic death spiral".[28] On a tactical level, the GOP has certainly benefited from its own gerrymandering, as it has enabled many Republicans to achieve electoral wins at state and national level. However, from a strategic per-

Proximity to the people: For both in the U.S. and Europa, there is no other way to overcome the current crises than by listening to their citizens and taking their worries and fears seriously. Source: © Kevin Lamarque, Reuters.

spective, the practice also has negative effects because, as already mentioned, it gives rise to radicalisation within parties.

All these factors combine to produce a unique GOP dynamism which has gradually helped to shift the party ever further from the political center ground.

This radicalisation phenomenon, more pronounced in the GOP camp, will tend to make it more difficult for the party to win elections where the result is open and there is consequently a need for it to secure the support of moderate voters from its own ranks and from the political center ground. This is the case, for example, when gerrymandering plays no role at all, such as in presidential and U.S. Senate elections. This means, for instance, that an ultra-conservative candidate such as Ted Cruz would most likely have lost against a moderate Democrat such as Clinton.

The ease with which Donald Trump triumphed over Ted Cruz in the Republican primaries shows in another respect just how dangerous political radicalisation can be for a party. It can be observed with regard to the Republican primaries that the at times very hard-line positions of some candidates concerning the GOP's program priorities, namely low taxes, less regulations, a small government and welfare state, law and order and traditional values, fail to appeal to millions of Republican supporters. The argument pro-

One thing is certain – the polarisation of the lower middle classes on the left and the right of the political spectrum will still be one of the greatest challenges facing the political system in the U.S. after the elections. And not only in the U.S.: we are also seeing in Europe how important it is for established parties to take seriously the fears and concerns of all citizens in order to avoid strengthening populist and anti-establishment movements. The recent gains by the Alternative for Germany (AfD) party in Germany, the popularity of the Front National in France and the performance of the Freedom Party (FPÖ) candidate in the Austrian Presidential elections show that protest voters have long been an influential force in the EU as well. Consequently, it is high time that moderate powers find convincing answers to the political challenges that people face, as this is ultimately the only way to ensure that the recent gains by the populists remain a side note in the history books.

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pounded by GOP politicians that Trump is not a true conservative did not stop many primary voters from voting for him anyway. This shows that, for many voters, ideological purity is not a decisive factor, especially when they have economic and social concerns.

One question from this year's presidential elections that remains to be answered concerns Sanders' supporters: will they remain loyal to the Democratic Party in November if Clinton is nominated instead of their favourite? Analyses show that U.S. voters are currently reluctant to switch political camps.[29] Will some of them do so, nonetheless, and vote for Trump, especially if he adopts a position to the left of Clinton on certain issues?

1 GOP stands for Grand Old Party and refers in the United States to the Republican Party.
2 The term "gerrymandering" is derived from the name of former Governor of Massachusetts (1744 to 1814) and Vice-President of the United States (1813 to 1814) Elbridge Gerry, who was the first to make very heavy use of this instrument in his state
3 The electoral constituencies for House of Representatives elections are determined by the states.
4 Cf. Ingraham, Christopher 2014: America's most gerrymandered congressional districts, The Washington Post, 15 May 2014, in: http://wpo.st/y-5d1 [26 May 2016].
5 Please refer to the case of *Vieth v. Jubelirer*, 2004.
6 Cf. The Cook Political Report 2016: 2016 House Race Ratings for April 22, 2016, in: http://cookpolitical.com/house/charts/race-ratings/9562 [26 May 2016].
7 President Reagan pushed through the abolition of the doctrine. The arguments for doing so were as follows: the doctrine violates the First Amendment to the United States Constitution (freedom of speech and freedom of the press) and property rights; radio and television stations should have the same rights as print media (no licensing obligation); abolishing the doctrine would help to reduce state interference in society; and, finally, this rule is no longer necessary, as technological advances enable broadcasts by a wide variety of television and radio channels, ensuring a broad range of ideas and opinions within society. Cf. Pagano, Penny 1987: Reagan's Veto Kills Fairness Doctrine Bill, Los Angeles Times, 21 Jun 1987, in: http://articles.latimes.com/1987-06-21/news/mn-8908_1_fairness-doctrine [26 May 2016].
8 Cf. Ingram, Mathew 2016: Yes, the Media Is Partly to Blame for the Rise of Donald Trump, Fortune, 17 Mar 2016, in: http://for.tn/1S6LIbj [26 May 2016].
9 Super PACs are referred to in a similar way to the PACs that already exist. PACs stand for political action committees. These bodies collect donations for election campaigns, subject to specific legal requirements.
10 Cf. Confessore, Nicholas / Cohen, Sarah / Yourish, Karen 2015: The Families Funding the 2016 Presidential Election, The New York Times, 10 Oct 2015, in: http://nyti.ms/1LcuEva [26 May 2016].
11 Cf. Gold, Matea / Narayanswamy, Anu 2016: How 'ghost corporations' are funding the 2016 election, The Washington Post, 18 Mar 2016, in: http://wpo.st/335d1 [26 May 2016].
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13 Such as Farris and Jo Ann Wilks, the founders of fracking firm Frac Tech, who are top donors to Cruz's super PACs, having provided them with over ten million U.S. dollars.
14 Cf. Pew Research Center 2015: Perceptions of elected officials and the role of money in politics, 23 Nov 2015, in: http://pewrsr.ch/1LuVmhz [26 May 2016].
15 The official contributions made to each candidate's campaign fund are shown on the Federal Election Commission's homepage: http://www.fec.gov/disclosurep/pnational.do [26 May 2016].
16 Cf. DeSilver, Drew 2014: The polarized Congress of today has its roots in the 1970s, Pew Research Center, 12 Jun 2014, in: http://pewrsr.ch/SCAUr3 [26 May 2016].
17 See factors one to three.
18 Cf. Pew Research Center 2014: Political Polarization in the American Public, 12 Jun 2014, in: http://pewrsr.ch/1mHUL02 [26 May 2016].
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24 See in particular the „Distressed Communities Index" (February 2016) by the Economic Innovation Group, in: http://eig.org/news/over-50-million-americans-live-in-economically-distressed-communities [26 May 2016].
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Where Putin's Russia Ends

"Novorossija" and the Development of National Consciousness in Ukraine

André Härtel

In early 2014 the existence of an independent Ukraine hung by a thread. Russia had annexed the Crimean Peninsula, and with the "Russian Spring" a "hybrid" war in eastern Ukraine was initiated. At this moment the watchwords of "Novorossija" and Moscow's "reconquering" of South-Eastern Ukraine gained popularity. Ultimately, the failure of the idea of a "Novorossija" is attributable mainly to developments within Ukraine that involved a renegotiation not only of ethno-national allegiances, but also of national and political loyalities since 1991.

Introduction

The Minsk Agreement of February 2015 ("Minsk 2") marked the advent of a since then barely functioning ceasefire in the territorial conflict over part of the Donbass region. Nonetheless, until today, fundamental questions relating to the status of the territory remain unclear. In this respect, the prevailing public and academic debate concerning the background of the conflict (civil war, "imported separatism", an interstate dispute)[1] conceals another central question: why did the "Russian Spring" (*russkaja vesna*), in other words the "reconquering" of entire South-Eastern Ukraine, which had been the declared objective of pro-Russian separatists along with cohorts of Russian volunteers and also some of the leaders within the Russian Federation, end precisely on today's front line? Why were the targeted campaigns of terror and destabilisation carried out by pro-Russian forces unsuccessful in Odessa and Kharkiv and also in Dnipropetrovsk, Mariupol, Zaporizhia, Kherson and Mykolaiv as well as in large parts of the Donbass?

The endeavour to find answers to these still relevant questions inevitably leads us to the far more significant issue of how, just under 25 years after independence, things now look with regard to the Ukrainian nation and national consciousness in Ukraine. Outside of Ukraine, there has long been a rather uncritical agreement on this question. While an alleged ethno-cultural "divide" in Ukraine along the Dnieper has to date enjoyed paradigmatic importance in Western and especially German discourses,[2] partly guiding actions and policies, the matter is much clearer for the Russian elite. As early as 2008, Vladimir Putin claimed during a meeting with former American president George W. Bush that "Ukraine is not even a state".[3] After the conflict with Ukraine began in early 2014, Putin became even more unequivocal. Approximately "one third" of the population of Ukraine are deemed to be ethnic Russians by the Russian President, which is why Russia's strong interest in their fate should be, according to him, only natural. Furthermore, especially the South-Eastern regions (Vladimir Putin expressly uses the term *Novorossija*, meaning "New Russia") around the centers of Kharkiv, Luhansk, Donetsk, Kherson und Mykolaiv had only been handed over to the former Ukrainian Soviet Republic in the twentieth century, and this was by chance more than anything else ("why, God only knows").[4] This is also the reason why, said the Russian President in January 2016, the present-day border between Ukraine and Russia has an "artificial and gratuitous character".[5]

If one accepts this argument, it would only have been logical to divide Ukraine back in early 2014 and throughout that summer, when a power vacuum had virtually been created due to Kiev's "Revolution of Dignity" and the subsequent disintegration of the Donetsk elite clan in the country's South-East. In reality, this did not come about. Moreover, the supporters of "Novorossija" had to be content with a much smaller territory that was also not uniformly governed and revolved around the self-proclaimed Donetsk

Border Issues: Vladimir Putin in front of a map of Russia and Commonwealth of Independent States. The annexation of Crimea has been a geopolitical break in the post-Soviet region and in Europe.
Source: © Itar Tass, Reuters.

and Luhansk "People's Republics" ("DNR" and "LNR"). This situation points either to a serious mistake in Vladmir Putin's perception of national allegiances in the Post-Soviet region, or to a significant development in the identity of the inhabitants of Ukraine's South-Eastern regions.[6] How strong is the loyalty to the Ukranian state there 25 years after independence? Is there any significant relationship at all between the ethno-national types of self-identification and the commitment to Ukraine? And finally, what influence did the turning points of the "Revolution of Dignity", the annexation of Crimea and the war in Donbass have on the political attitudes of the people living there?

The "Unexpected Nation"

Ukraine's emergence as an independent state in 1991 was mainly a consequence of the dissolution of the Soviet Union (USSR) driven by republican elites who succeeded in the assertion of their individual republic's borders. In the "Ukrainian Soviet Socialist Republic" (UkSSR), similar to the situation in other emergent republics, the republican communist elite was also the main force behind independence. As for truly nationally conscious actors, the Ukrainian "Rukh" movement also established a political power base, yet it only had significant numbers of supporters in Western and in parts of central Ukraine. The Communist Party of Ukraine, whose members had transformed themselves into "national communists" led by Leonid Kravchuk, later the first President of independent Ukraine, pulled the strings in the state's foundation, which for them was rather an instrument to remain in power and gain control over economic assets.[7]

However, for elite circles of its eastern neighbour, and equally for many western observers, founding an independent Ukrainian state within the borders of the former Soviet Republic took some getting used to. Because there were allegedly

significant ethnic, linguistic and religious differences in Ukraine, some observers liked to call the new state "artificial" and later described the Ukrainian nation as "unexpected".[8] Doubts were raised with regard to Ukraine's ability to survive and, mainly among politically motivated critics, about the legitimacy of the new project. This was due to the large proportion of inhabitants identifying themselves as ethnic Russians (1989 Census, 22.1 per cent, see below), but also the widespread uncertainty at this time concerning constitutive elements, community spirit and the borders of the "Ukrainian nation".

However, here one must take into account that, after seven decades of Soviet communism, ethnic or national criteria could only have a limited identity-defining effect not only in Ukraine. While the question of nationalities indeed served as a welcome political instrument (cf. the "korenisacija" policy[9]) especially during the founding period of the USSR, the work on the new "Soviet Man" and the internationalism propagated from above had been internalised in many cases. This meant that for the majority of the population ethnic and national affiliations receded into the background. The year 1991 was thus partly a "zero hour" in terms of how most people living on the territory of Ukraine identified themselves. From this point on – as Fredrik Barth[10] once wrote – ethnic and also national allegiance were once again to be renegotiated between external attribution and self-identification.

Ukrainians, Russians and People with Hybrid Identities – On the Complexity of the Nationality Question

The fact that as a fledgling independent state Ukraine was suspected of being a divided nation is due in particular to the rigid criteria that foreign countries – for different reasons – on the one hand applied to the question of nationalities in Ukraine, and yet on the other hand also because of the nature of questions posed inside Ukraine concerning ethnic or national affiliations in the

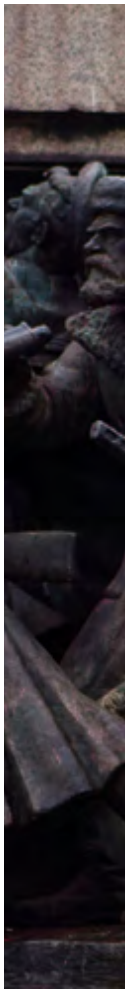


Table 1: National Affiliation in Ukraine According to the Official Census as a Percentage of the Overall Population

National affiliation	1989	2001
Ukrainian	72.7	77.8
Russian	22.1	17.3
Belarusian	0.9	0.6
Moldavian	0.6	0.5
Crimean Tatar	0.0	0.5

Source: State Statistics Committee of Ukraine, in: http://2001.ukrcensus.gov.ua/eng/results/general/nationality [30 Jan 2016].

Table 2: A Historical and Comparative Perspective of Language Use in Ukraine

Language groups	1991–1994	1995–1999	2000–2003
Ukrainian-speaking Ukrainians	41.2	46.3	45.4
Russian-speaking Ukrainians	32.6	28.2	30.9
Russian-speaking Russians	19.7	17	16.5
Other	6.5	8.5	7.2

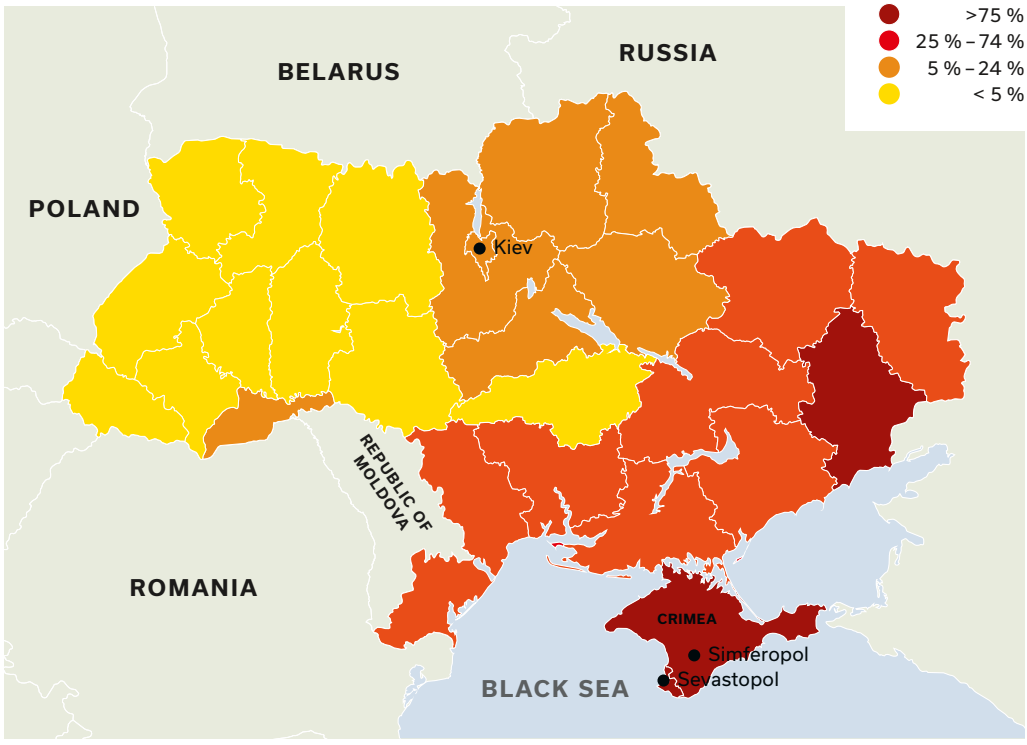
Source: Khmelko, n. 13.

last official 2001 census (see table 1). Because a large majority of those who described themselves as "Russian" in the extremely simplified official census were also concentrated in Crimea and in the country's South-Eastern region, the alleged "divide" also acquired a sensitive geopolitical significance.

However, critics[11] stressed early on that the simplistic way of comparing ethnic Ukrainians and Russians was hardly useful. Firstly, in the absence of other criteria a distinction was predominantly made between them purely on grounds of language as an "identity marker". In this respect, it is often overlooked that a sizeable majority of Ukrainians are basically bilingual or speak mixed forms such as "Surzhyk", and that the boundaries between languages are therefore not clear-cut. Hence, if on the one hand language is seen as a key distinguishing criterion for "national communities" living in Ukraine and then weighed against the obvious existence of a large group of multi-lingual people on the other, the "ethnic divide" argument already loses impact (see figures 1 and 2 as well as table 2). Furthermore, it needs to be borne in mind that precisely in regions such as the Donbass (the oblasts of Donetsk and Luhansk), which are characterised by a particularly high concentration of native Russian speakers and ethnic Russians

Showing one's colors: Parts of this soviet monument in the Bulgarian capital Sofia have been painted in the national colors of the Ukraine to show solidarity. Source: © Pierre Marsaut, Reuters.

Fig. 1: Percentage of Native Russian Speakers in the Overall Population



Source: Own illustration based on CNN 2014: A Divided Ukraine, 3 Mar 2014, in: http://edition.cnn.com/interactive/2014/02/world/ukraine-divided [17 Feb 2016]; Natural Earth ©, http://naturalearthdata.com [10 Mar 2016].

(according to the 2001 Census, 38.2 or 39 per cent), there is a clear urban–rural split. In other words, the "Russian"-dominated towns and cities are often surrounded by majority "Ukrainian" rural areas.[12] This circumstance also contradicts the generally accepted "divide" paradigm.

The territorial division of "Ukrainians" and "Russians" therefore assumes more highly complex dimensions if, as a supplement to such categories, another criterion is included, as has been the custom since the early 2000s in Ukraine: namely, a further category of ethnic self-identification or so-called "bi-ethnors",[13] or to adopt a relevant term in this context "people with hybrid identities". The appropriate introduction of this so-called type of hybrid identity, that is, the possiblity of describing oneself both as "Ukrainian" and "Russian", can be traced back to the observation that a large group of people with such a "hybrid identity" live in the towns and cities of South-Eastern Ukraine in particular. As a result, opinion polls (see table 3) reveal a highly differentiated picture with regard to Ukrainians' self-identification and it is notable that the group of "pure" ethnic Russians is subsequently almost cut in half.

The ethno-national structure of Ukraine is therefore shown to be much more complex than is suggested by the official census with its simplified Ukrainian-Russian dichotomy. But what conclusions can actually be drawn from this, especially if we recall what was referred to above as the evidently limited meanings of ethnic and national references in around 1991? Were there significant debates on the national question and such related aspects as the orientation of cultural and foreign policies in the first two decades of independent Ukraine? Were the results of the opinion polls on self-assigned group identities therefore actually reflected in the political reality of Ukraine as well as in the political actions of elites?

Table 3: A Historical and Comparative Perspective of the Ethnic Structure of Ukraine

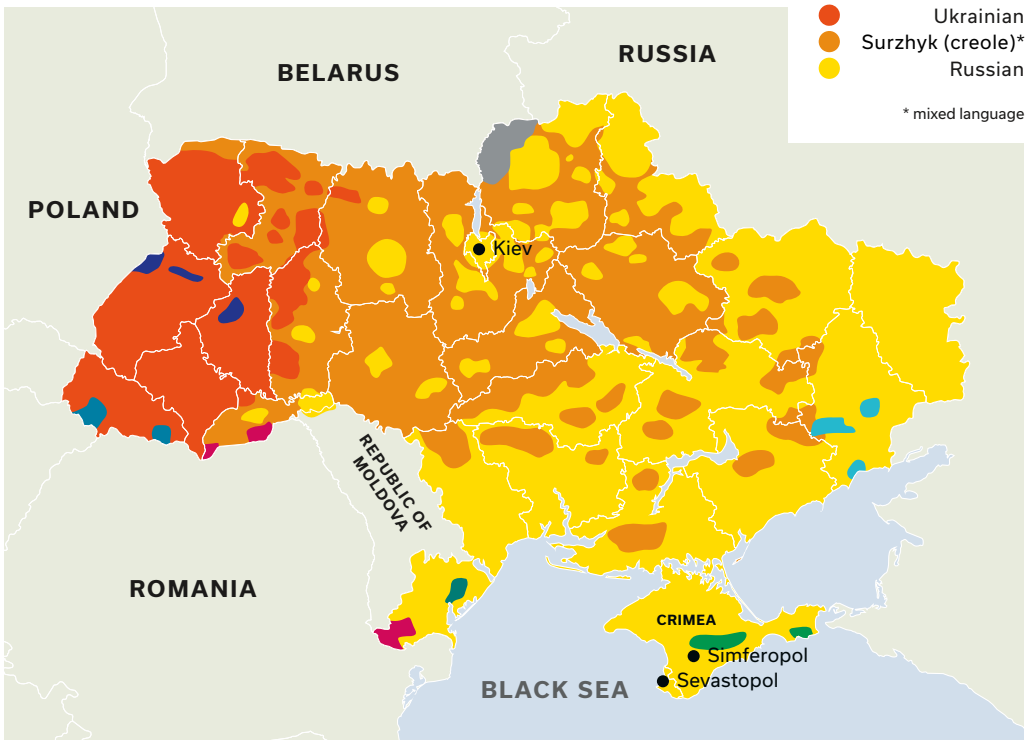
Identity	1994–1999	2001–2003
Only Ukrainian	59.8	62.9
Russian and Ukrainian	24.4	22.5
Only Russian	11.3	10.0
Other	4.5	4.6

Source: Khmelko, n. 13.

The "Amorphous" Ukraine: On the Importance of Ethnicity and the Nation Before the "Maidan"

The Ukrainian analyst Oleksandr Sushko recently described this reality in the most telling manner when he spoke of the "amorphous identity" of Ukraine before the "Euromaidan" and the "Revolution of Dignity" in 2013 and 2014.[14] He suggests that there could only be limited political effectiveness of ethnic and national self-identification in a post-1991 society that was mostly preoccupied with adapting to new and, for most social groups, difficult economic conditions. Moreover, society was still caught up in the Soviet tradition and therefore to a large extent subjected to the political elite. Alongside those with hybrid identities, also the groups describing themselves

Fig. 2: Languages Spoken at Home in Ukraine



Source: Own illustration based on National Linguistic University Kiev 2009; Natural Earth ⓒ, http://naturalearthdata.com [10 Mar 2016].

Epicenter: The Place of Independence in Kiev, the so-called Maidan, was the hub of protests associated with the Orange Revolution in 2004 and the Euromaidan-movement. Source: © Petro Zadorozhny, Reuters.

simply as "Ukrainian" or "Russian" were, with the exception of marginalised nationalistic fringe groups, hardly "nationally aware" and distinct, let alone having any incentive to be mobilised on grounds of ethnic dividing lines.

Most Ukrainian presidents consciously decided against the role of "ethnic" or national "entrepreneurs" and conformed to the "amorphous" national identity of Ukraine.

The political-societal dynamic together with policy makers' actions become the primary sources for "renegotiating" identities precisely if one leaves behind the classic primordial perspective of basically predetermined and rigid ethnical group allegiances and accepts a constructivist view of the concepts of "ethnicity" and "nation" instead. Against this background all Ukrainian presidents, with one notable exception, deliberately decided against the role of "ethnic" or national "entrepreneurs" and conformed to the "amorphous" national identity of Ukraine with regard both to their domestic and foreign policies. The major issues here were the, to a certain degree unavoidable, Ukrainisation policy as well as the general foreign policy in regard to the West and its institutions on the one hand and Russia on the other. Although the Ukrainian language became the national language in the new Constitution of 1996 and specific legislation from 1998, the elites only implemented this central part of the Ukrainisation policy in a "lax" manner.[15] This was a consequence of the delicate politicisation

of the issue: Under Viktor Yanukovych, a law on regional languages was even introduced, albeit controversially, in the form of the "Kivalov-Kolesnichenko Law" (2012). In the area of the "politics of memory", too, President Leonid Kuchma, who was in office from 1994 to 2004, was happy simply to refer to the fact that "Ukraine is not Russia".[16] Yet, like Viktor Janukovych later (2010 to 2013), Kuchma otherwise refrained from constructing a dedicated national Ukrainian view of history. Only Viktor Yushchenko (2005 to 2010) very consciously deviated from this policy and attempted a more progressive form of nation-building with numerous initiatives related to the "politics of memory". Furthermore, with his foreign policy geared towards joining the European Union (EU) and the North Atlantic Treaty Organisation (NATO), Yushchenko discontinued the "multi-vector" or "block-free" policy that Kuchma and, until 2013, Yanukovych had been operating. This foreign policy, in both their views, was in accordance with Ukrainian interests as well as with the people's allegedly "hybrid" attitudes concerning this question.[17]

In Ukrainian politics a narrative with an unwillingness to make clear commitments at its core became firmly established.

Hence, a type of "amorphous" political narrative became firmly established in Ukrainian politics – with a notable unwillingness to make clear commitments at its core. One should neither work too progressively towards a Ukrainisation of the state, nor should one focus on deciding on a clear foreign policy direction. Ukraine was therefore always implicitly "caught in the middle": between Ukrainian and Russian identity-wise, and between the West and Russia geopolitically (see the frequently used "bridge metaphor"[18]). This self-attribution was convenient especially for the majority of the Ukrainian elite. Although the spectre of separatism was present during the early phase of the new state and thus needed to be acted upon, once it had been overcome the fact that the majority of elites refrained from creating progressive policies on nationality and deciding on a foreign policy orientation can be largely explained by their interest in retaining power. In particular, none of the directly elected presidents could (normally) have an interest in mobilising society along ethno-national lines and thereby risking the carefully constructed balance between regional power structures ultimately characterising Ukrainian politics.

Revolution, Annexation, War: A Change of Narrative and Mobilisation along Ethno-National Lines

The restraint shown by the political actors therefore partially explains the relative stability of ethno-national attitudes in the first two decades after independence. The less effort the political actors had invested in the construction and consolidation of a national identity or identities, the less was their potential for change, mobilisation and therefore also for "danger". However, the pivotal question now was what would happen if the existing balance made up of "amorphous" identity and "narrative" was to be challenged or completely upset by specific internal and external developments.

The loyalty issue had already briefly emerged in the wake of the "Orange Revolution" in late autumn 2004 (cf. the Separatist Congress in Severodonetsk). Yet this issue had largely been removed from the agenda by an elite consensus that was basically putting an end to the "revolution".[19] The situation arising in late autum 2013 and winter 2014 was however a novelty. Viktor Yanukovych had only realised too late that the Association Agreement negotiated over a long period of time with the EU was, certainly from the point of view of his own people, yet also in the Kremlin's eyes, basically forcing him as the first leader of independent Ukraine to clearly decide on a foreign policy direction. This made a retreat to the "amorphous narrative", which had actually prevailed until then, impossible. In retrospect, however, the "Revolution of Dignity"

With eagle-eyes: Ukrainian President Petro Poroshenko followed by the presidents of Russia, Vladimir Putin, and Belarus, Alexander Lukashenko. A solution to the state of emergency at the Eastern EU border is still not within sight. Source: © Grigory Dukor, Reuters.

resulting from the "Euromaidan" triggered by the Vilnius summit can be assessed as far more crucial in terms of policies relating to nationality. This was because the revolution brought about the implosion of the elite network of the "Party of Regions", which almost wholly monopolised power in South-Eastern Ukraine since the early 2000s, thus creating a power vacuum that the Russian government used to intervene both in Crimea and later also in the Donbass.

In relation to the question of nationalities and a so far unknown mobilisation of people along ethno-national "dividing lines" in Ukraine, an entirely unprecedented situation had emerged: Firstly, the "Euromaidan" had been transformed into an ultimately victorious revolutionary movement. The latter, also due to Russia's role before and after the summit, bore strong characteristics of a national Ukrainian liberation movement. As a result, along with radicals, large sections were mobilised of what until then had been moderate national "camps". During this process, and in particular from April 2014 on, a clearly reciprocal effect was recognisable – a type of mutual mobilisation and growing national awareness. Secondly, the new rulers in Kiev – partly due to pressure from protesters on the street – quickly abolished the "amorphous narrative" and now openly committed themselves to a foreign policy course aimed at full integration into the West and to a national Ukrainian narrative that had been badly prepared and was not well thought through.[20] Thirdly, the "Russian Spring", in other words Russia's policy of intervention and annexation in Crimea and later in the Donbass based on a hybrid type of warfare, had created an option that up to that point had almost been unthinkable: a "reconquering" of South-Eastern Ukraine by the Russian Federation, or at least a secession of those territories supported by the Russian government – the so-called "Novorossija Scenario".

Why "Novorossija" Failed: The Emergence of a Civil Nation in Ukraine

In early 2014, an event occurred that even people in Russia had not seriously expected: after an illegal "referendum", which took place during a de facto occupation, the Crimean Peninsula was officially annexed or, in the language of the Russian President, "incorporated" into the Federation.[21] Vladimir Putin's decision wholly to integrate a part of the former empire into the Russian Federation for the first time since the break-up of the Soviet Union must, even in the light of Moscow's long-standing support of pro-Russian de facto states, be considered a geo-political earthquake of the first order. This earthquake set important revisionist forces in motion in Russia and also had a profound impact on the neighbouring states.

Although we still do not know today if Vladimir Putin's personal strategy was actually geared towards the reconquering of what he and a majority of Russian nationalists described as "Novorossija"[22] (see Figure 3), there is good reason to believe that, had it developed successfully, he would not have interfered with this scenario. Putin's remarks, mentioned at the beginning, make it clear that he openly questions the existence of Ukrainian statehood where, in his opinion, a majority of "Russian citizens" is living. Furthermore, the official Kremlin narrative, which contests any direct or official participation by the Russian military as well as any support for the "DNR"/"LNR" separatists, is to be understood merely as a tactic. This is how it was and is possible for pro-Russian forces and forces "imported" from Russia to use hybrid warfare methods, such as targeted experimental moves and month-long massive destabilisation campaigns, in the centers of the South-East, for example particularly in Kharkiv and Odessa, but also in Zaporizhia or Mariupol,[23] without losing face should there be a negative outcome.[24] There are also numerous indications that these "experimental moves" were centrally controlled and financed by Moscow.[25] However, one thing was certain – only a corresponding reaction or support from the people living in those regions would have facilitated the referendum- and the subsequent secession policy later successfully implemented in Donetsk and Luhansk. Why did this not happen here, and why did the projects planned for the "Kharkiv", "Odessa" and "Zaporizhian People's Republics" fail?

In this situation the people in the towns and cities of South-Eastern Ukraine were assigned a key role, all the more so because large sections of the existing elite had, as mentioned above, discredited themselves and a power vacuum emerged in many places. Although the situation

Table 4: Do You Agree that Russia is Justifiably Protecting the Interests of Russian-speaking Citizens in South-Eastern Ukraine? (April 2014)

Region or oblast	South-east as a whole	Dnipro-petrovsk	Donetsk	Zapo-rizhia	Luhansk	Mykolaiv	Odessa	Kharkiv	Kherson
Yes	32.6	21.0	47.0	19.5	44.2	14.6	30.6	36.6	23.5
No	49.9	65.6	33.4	53.3	31.8	71.5	52.3	53.0	61.1
Difficult to say	16.1	12.1	19.6	23	19.6	13.4	15.8	10.1	14.9
I would prefer not to answer	1.4	1.2	0.0	4.2	4.5	0.5	1.2	0.2	0.5

Source: Kiev International Institute of Sociology (KIIS) 2014: The Views and Opinions of Southeastern Regions Residents of Ukraine: April 2014, in: http://kiis.com.ua/?lang=eng&cat=news&id=258 [2 Feb 2016].

Fig. 3: The Claimed Territory of "Novorossija"

Source: Own illustration based on edmaps.com, Historical Maps of Novorossiya, Federal Republic of Novorossiya (source list), http://edmaps.com/html/novorossiya.html [16 Jun 2016]; Natural Earth ©, http://naturalearthdata.com [10 Mar 2016].

varied from one town and city to the next, there was one similarity. Pro-Russian activists failed in their attempts at destabilisation wherever it was possible to mobilise broad groups of pro-Ukrainians and wherever they were supported by the remaining local political elites and businessmen. In particular, the pro-Russian side underestimated the potential of mobilising the pro-Ukrainian people in the South-Eastern Ukrainian towns and cities, and even pro-Ukrainian observers and analysts were surprised by the magnitude of the phenomenon.[26] Although opinion polls carried out in these regions with a majority of Russian-speaking inhabitants and a high percentage of ethnic Russians had always revealed little sympathy for separatist projects or for annexation by Russia, for the first time these options now basically appeared within the realm of possibility. A particularly revealing picture for an investigation into the underlying causes for the ultimate failure of the "Novorossija Project" is therefore given by opinion polls (see tables 4, 5, and 6) from April 2014, when the window of opportunity for this was wide open. The following conclusions can be drawn from these opinion polls:

1. First of all, it is interesting that a majority of the inhabitants of the regions in question expressly denied the Russian state the right postulated by Vladimir Putin (see above) to represent their interests (see table 4). Here, we refer to absolute majorities of over 70 per cent, in particular outside the Donbass (Mykolaiv). If we start by assuming that Vladimir Putin aimed his statement about rights both at the groups of ethnic Russians clearly over-represented in these regions and at those with hybrid identities, even the relatively high "positive" values in Kharkiv and Odessa are shown in their true light. However,

Table 5: Which of the Following Variations on the Status of Your Region Would You Choose if Such an Opportunity Were to Arise? (According to Region, April 2014)

	Donbass	East (others)	South	Center
Retention of the present status in a united Ukraine with the current jurisdictions	9.3	17.8	23.4	30.5
Retention of the present status in a united Ukraine with expanded jurisdictions	25.7	55.2	58.9	53.8
Autonomy in a federal Ukraine	23.5	9.5	7.0	2.3
Separation from Ukraine and creation of an autonomous statehood	8.4	2.1	0.5	0.4
Separation from Ukraine and unification with another state	22.5	3.2	2.3	1.0
Difficult to answer / I don't know / still haven't made a decision	10.6	12.2	7.9	11.9

Source: KIIS 2014: Attitude to the Unitary State and Separatism in Ukraine, in: http://kiis.com.ua/?lang=eng&cat=reports&id=319 [2 Feb 2016].

in Donetsk und Luhansk the trend is reversed although – even here – there are no absolute majorities supporting an intervention to protect "Russian citizens". This statistic is not only the first indication that, excluding the present occupied areas, the people living in the South-East did not question the territiorial status quo despite an often ambivalent attitude to the revolution in Kiev and the general uncertainty. Furthermore, it virtually makes it impossible to suggest a connection between their ethno-national identification and their attitude to Ukrainian statehood. Both aspects become clearer in light of the next two sets of statistics.

2. Even in this situation of "multiple possibilities" the inhabitants of the South-Eastern oblasts – in particular Kharkiv, Odessa, Kherson, Mykolaiv, Dnipropetrovsk and Zaporizhia – were unable to get used to the idea of any type of "separation" of their territories from Ukraine nor to "autonomy" (see table 5). The very low values (all three "negative" options together <15 per cent of those questioned) correspond more to those for Central Ukraine, but diverge significantly from those for the partial region of Donbass (here all three "negative" options together = 54.4 per cent, whereby only about one third of those questioned are in favour of both separation options). More than the statistics mentioned above it is clear here that even during the tense situation in April and May 2014, when a change to Ukraine's territoral status quo had already occurred (in Crimea), no significant support for further processes of this type is discernible outside the Donbass. On the contrary, these high values in favour of maintaining the status quo point to the significant potential of a possible mobilisation of parts of the pro-Ukrainian population, which was then also possible to observe in many of the affected towns and cities.

3. The values shown in table 6 ultimately make it clear that there is, in contrast to the alleged direct connection postulated by the apologists for "Novorossija", only a relatively weak connection between ethno-national self-identification and people's attitude toward Ukrainian statehood. Among the ethnic Russians in Ukraine in particular only a fifth of those questioned appeared to be able to warm to the idea of a change to the territorial status quo; however, up to a third of

those with a hybrid identity were able to do so. If these values are compared with data from similar surveys taken during the time before the "Maidan", no direct effect appears to have been produced by the revolution and war. For example, in 2007 only 25.5 per cent of the ethnic Russians in Ukraine answered "No" to the question as to whether they would consider Ukraine their homeland.[27]

What can now be concluded from the mainly negative reactions of the inhabitants of South-Eastern Ukraine to the "Russian Spring" with regard to national self-identification and the general understanding of the concept of "nation" in the region? First of all, it can be assumed that the types of ethno-national self-attribution, which formed the basis of survey questions since the beginning of the 2000s (in other words, including people with hybrid identities), have remained relatively consistent. However, as of 2014, the number of ethnic Russians has fallen to 6.4 per cent (2013: 8.3 per cent) and the number of people with hybrid identities to 17 per cent (2013: 21.8 per cent),[28] though this can be explained above all by the loss of Crimea (no longer included in opinion polls from 2014). The movement of refugees from the Donbass into the Russian Federation might be the reason for smaller numbers of ethnic Russians since 2015. At the same time it has to be stated that, next to the above mentioned negative attitutude towards "Russian support" and a change of the territorial status quo, a significant increase in many indicators of patriotism is observable after the events of 2014 among all parts of the South-East's population. This trend is particularly striking among younger cohorts; in this respect, 81 per cent of all 14- to 35-year-olds are proud to be Ukrainian; among teenagers and young adults in the South-Eastern oblast of Odessa the figure is an astonishing 62 per cent.[29] In contrast to the overriding identification with one's own region, commune, etc., identification as "inhabitants of Ukraine" increased by ten per cent in the country as a whole.[30] Furthermore, in the South-East a long-term trend appears to be continued. After 2005, when only 32 per cent of the inhabitants of the Eastern regions and 35.8 per cent[31] of those in the Southern regions indicated that they considered themselves first and foremost to be "inhabitants of Ukraine", this number rose in 2015 from 53.8 per cent and to 45.1 per cent[32] respectively.

It is possible to propose a thesis based on the situation in early 2016. This proposal is not to

Table 6: Which of the Following Variations on the Status of Your Region Would You Choose if Such an Opportunity Were to Arise? (According to Nationality, May 2014)

	Ukrainians	Russians	Ukrainians and Russians	Others
Retention of the present status in a united Ukraine with the current jurisdictions	25.2	7.9	8.8	22.9
Retention of the present status in a united Ukraine with expanded jurisdictions	57.2	34.5	22.8	28.6
Autonomy in a federal Ukraine	4.7	19.7	17.5	14.3
Separation from Ukraine and creation of an autonomous statehood	1.1	6.1	8.8	2.9
Separation from Ukraine and unification with another state	2.3	16.2	24.6	14.3
Difficult to answer / I don't know / still haven't made a decision	9.5	15.7	17.5	17.1

Source: KIIS 2014: Attitude to the Unitary State and Separatism in Ukraine, in: http://kiis.com.ua/?lang=eng&cat=reports&id=319 [2 Feb 2016].

overstate numbers and trends; moreover, considerable caution in view of the continuing unstable and dynamic situation in the affected regions is recommended: external observers, in particular, have underestimated how tenuous the link was and is of ethno-national self-identification aspects on the one hand and attitudes to Ukrainian statehood and "nation" in South-Eastern Ukraine on the other. Rather, both elements seem to have become even more decoupled from each other in the long term and in an accelerated fashion due to the shock effects of 2014. Therefore, it can be stated that there is a definite trend towards a "Ukrainian civil nation"[33] in South-Eastern Ukraine that involves the dissociation of the national consciousness from of ethnic and linguistic patterns. However, this "civil nation" should not be confused with a "Ukrainian political nation" – although the vast majority of inhabitants in the South-Eastern regions identify with Ukrainian statehood, state symbols and the Constitution, they would have a negative view of an aggressive policy of Ukrainisation in terms of language and how the country's history is viewed.

The Russian policy of annexation in Crimea and the later intervention in the Donbass led to a "rally around the flag" effect among many Ukrainians in the South-East of the country.

One can only speculate about the reasons for this development towards a "Ukrainian civil nation". On the one hand, it is not possible to deny that the Russian policy of annexation in Crimea and the later intervention in the Donbass triggered a "rally around the flag" effect, which was clearly embraced by many inhabitants of Ukraine, whose loyalty to the Ukrainian state had previously been much less than equivocal. This factor is still gaining strength in many ways today, above all in the unoccupied parts of Donbass[34] after it became clear that the Russian government is primarily pursuing geo-political and few, if any, humanitarian goals there. On the other hand, attention can certainly be drawn to a long-term "habituation effect" which, after 25 years of their own statehood, has also had an effect on people living in the South East. Younger cohorts in particular no longer have experience of the Soviet Union; despite what in many cases are a complex ethnic patterns of identification, Ukraine is the only reality and experience of their homeland. Lastly, one can point out the role of the Ukrainian elites who, despite the "amorphous narrative" described above, also never questioned independence based on their own interests. This also applies to the "Party of Regions", which monopolised the South-East for a long time, but whose leaders were less inclined to pro-Russian policies than often assumed and on the contrary proved more sympathetic towards an implicitly defined "pragmatic nationalism".[35]

Conclusion and Outlook

The 2014 "Revolution of Dignity", the annexation of Crimea in March and the war in Donbass were turning points for the history of independent Ukraine, the Post-Soviet region as such, but also for European politics. Revolution and war are profound shocks to domestic and international order, which give rise to basic questions such as personal survival, but also cast doubt over self-identification and allegiance to a community. What was obviously taken for granted for many years, and therefore went unquestioned suddenly becomes an existential matter. In Ukraine, in the wake of the "Revolution of Dignity" a hitherto prevailing "amorphous identity" could not survive. That identity was propped up by a corresponding elite-narrative and allowed a large number of Ukrainians' during the first two decades after independence to avoid a definitive committment to Ukrainian statehood and nation. However, the revolution not only rescinded the "power pact" between competing regional elite clans that had always been in force up until then, thus creating a power vacuum in the South-East of the country. The subsequent annexation of

Crimea and Moscow's intervention had also resulted in an alternative option for societal and political allegiance that became known as the "Novorossija Scenario".

Despite the thesis of an ethno-cultural division in Ukraine, which was mainly popular outside the country, this scenario ultimately enjoyed only extremely limited success in the form of the self-proclaimed "DNR" and "LNR" in Donbass. This fact can largely be explained by a gradual development, which was reinforced by the events of 2014, towards a Ukrainian "civil nation" in the South-East of the country. In this region, where ethnic Russians and people with what may be called hybrid identities are over-represented, ethnic and linguistic identification patterns were decoupled from questions of national allegiance and loyalty to the state. After a quarter century of Ukrainian statehood a majority of people identify themselves in particular as "citizens of Ukraine" and reject a change to the territorial status quo. In Vladimir Putin's view, the revolution and intervention therefore had an unexpected and conflicting effect. Instead of the Ukrainian South-Eastern citizens rising up

Politics and education: The principal of this Ukrainian language school in Simferopol was dismissed shortly after the annexation of Crimea. This happened on the grounds that a school sending its students to Ukrainian universities has no longer a place on the Crimean peninsula. Source: © Maxim Shemetov, Reuters.

against what Russian propaganda portrayed as a "fascist putsch" in Kiev and taking sides with the pro-Russian activists, a majority committed themselves to Ukrainian unity, thereby discouraging the apologists for "Novorossija".

Despite these undoubtedly positive news for Ukraine, which had been severely affected by the crises of recent years, caution should be urged in several respects. Firstly, the situation in South-Eastern Ukraine is anything but consolidated. This is mainly related to the deep economic and political crisis in the country alongside continued attempts at destabilisation from inside the occupied territories and beyond. If Kiev proves unsuccessful in providing sustained security and economic prospects in these regions, this could have an effect on identification with and support for Ukrainian statehood in the medium term. Furthermore, the nature of the relationship between the "Ukrainian political nation", which is strengthened by the "Maidan" and the new elite, and the above mentioned trend towards a civil conception of nationhood in the South-East is still unclear. One must for example agree with Nikolai Mitrokhyn[36] when he states that a large majority of the citizens in the South-East do not share the "official narrative", which is shown in the policies relating to Ukrainisation and the country's history. After signs as early as the "Maidan" essentially pointed to the potential of an all-Ukrainian "civil nation", in particular, above and beyond the boundaries of language,[37] Kiev's current policy is more oriented toward a dangerous form of alienation. Finally, it should be reiterated that, despite the perspective chosen here with regard to the effectiveness of ethno-national types of self-identification, there are important objective consequences arising from the dynamic of the last two years. In this respect, the group of ethnic Russians in particular has been decimated by annexation, secession and exodus to such an extent that it represents now effectively a national minority due to its small numbers. Protection of this group should not just be of humitarian interest to Kiev, but also especially because of Vladimir Putin's "nationalist" logic, which was described here in detail.

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1 In this respect, see e.g. Wilson, Andrew 2014: Ukraine Crisis. What it Means for the West, New Haven and London, pp. 99–143; Mitrokhyn, Nikolaj 2015: Infiltration, Instruction, Invasion: Russia's War in the Donbass, in: Journal of Soviet and Post-Soviet Politics and Society, Vol. 1, No. 1, pp. 219–250. The "civil war" view is respresented, amongst others, in Buzgalin, Alexander 2015: Ukraine: Anatomy of a Civil War, in: International Critical Thought, Vol. 5, No. 3, pp. 327–347.

2 Cf. e.g. Schneider, Eberhard 2007: Ukraine – Gespalten zwischen Ost und West, bpb Informationen zur Politischen Bildung, 20 Feb 2007, in: http://bpb.de/25087 [24 Feb 2016] oder zuletzt auch Hildebrandt, Reinhard 2015: Die Ukraine – Grenzland oder Brücke? Reflexionen zum aktuellen Konflikt, Frankfurt a.M.

3 The Moscow Times 2008: Putin Hints at Splitting Up Ukraine, 8 Apr 2008, in: http://themoscowtimes.com/news/article/361701.html [17 Jan 2016].

4 Cf. Putin's utterances known as "Novorossija Comments" from 17 April 2014, Kremlin, in: http://kremlin.ru/events/president/news/20796 [13 Feb 2016].

5 This is what Putin said during his appearance at the meeting of the "All-Russian People's Front" on 25 Jan 2016, Kremlin, in: http://kremlin.ru/events/president/news/51206 [14 Feb 2016].

6 Other factors in the utlimate failure of the idea of "Novorossija" such as military resistance or strong local identities are covered, e.g. Portnov, Andrij 2015: Das neue Herz der Ukraine? Dnipropetrovs'k nach dem Euromaijdan, in: Osteuropa, No. 4, pp. 173–185.

7 On the phase directly before and after independence, cf. in particular Wittkowksy, Andreas 1998: Fünf Jahre ohne Plan: Die Ukraine 1991–1996, Münster.

8 Cf. Putin's comments above again and Wilson, Andrew 2002: The Ukrainians: Unexpected Nation, 2nd edition, New Haven / London.

9 Cf. amongst others Simon, Gerhard 1986: Nationalismus und Nationalitätenpolitik in der Sowjetunion: Von der Diktatur zur nachstalinistischen Gesellschaft, Baden-Baden.

10 Cf. Barth, Fredrik 1998: Ethnic Groups and Boundaries: The Social Organization of Cultural Difference, Long Grove.

11 Cf. e.g. Pogrebinskij, Mikhail 2015: Russians in Ukraine: Before and After Euromaidan, E-International Relations, 26 Mar 2015, in: http://e-ir.info/2015/03/26/russians-in-ukraine-before-and-after-euromaidan [15 Jan 2016].

12 In this respect, cf. e.g. the Ukrainian Debates, reproduced in Wilson, n. 8, pp. 279 ff.

13 Cf. Khmelko, V. 2004: Linguistic and Ethnic Structure of Ukraine: Regional Differences and Trends of Change Since Independence, in: Scientific Notes of Kyiv-Mohyla Academy, Social Science, No. 32.

14 Oleksandr Suhsko used the formulation in the author's presence at a conference of the Konrad-Adenauer-Stiftung entitled „Die Beziehungen EU–Ukraine–Russland vor dem Hintergrund eines andauernden Konflikts" in August 2015 in Cadenabbia, Italy, http://kas.de/ukraine/de/publications/42474 [16 Jun 2016].

15 Cf. e.g. Guttke, Matthias / Rank, Hartmut 2012: Mit der Sprachenfrage auf Stimmenfang: Zur aktuellen Sprachengesetzgebung in der Ukraine, in: Ukraine Analyses, No. 106, 11 Sep 2012, pp. 11–15.

16 Kutschma, Leonid 2004: Ukraina – ne Rossija, Moskau.

17 In this respect, cf. Härtel, André 2012: Westintegration oder Grauzonen-Szenario? Die EU- und WTO-Politik der Ukraine vor dem Hintergrund der inneren Transformation, 1998–2009, Münster.

18 Cf. ibid., p. 304.

19 In this respect, cf. above all Wilson, Andrew 2006: Ukraine's Orange Revolution, New Haven / London.

20 Amongst others, see the attempted rescinding of the "Kivalov-Kolesnichenko Language Law" in 2014 or the new laws on the "de-communisation" of Ukraine (Apr 2015), which were criticised, e.g. by the Council of Europe, due to possible restrictions on freedom of speech.

21 Cf. Kremlin 2014: Address by President of the Russian Federation, speech by Vladimir Putin, 18 Mar 2014, in: http://en.kremlin.ru/events/president/news/20603 [15 Feb 2016].

22 On the different meanings of the term "Novorossija" in Russian discourses cf. Gazeta.ru 2014: Četyre Novorossij i odin Krym, 10 Dec 2014.

23 A good overview of the campaign run by pro-Russian forces is provided in the recently published article: Korrespondent 2016: Koroli v Isgnanii, 4 Mar 2016.

24 In this respect Makarkin, mentioned in n. 22, states that, "[...] the more unclear the term 'Novorossija' is, the less likely would it be for contradictions to occur in a case where something other than originally planned would develop from it."

25 On the debates about the Kremlin's financial and logistical support for the new "republics", cf. amongst others Gazeta.ru 2014: Ne raskačali lodku, 4 Dec 2014.

26 This is according to e.g. the respected Ukrainian professor at the National University "Kyiv-Mohyla Academy", Mykhailo Wynnickij, in the "Facebook Diary" he kept during the "Revolution of Dignity".

27 Cf. the opinion poll conducted by the Kiev-based Razumkov Centre from 31 May to 18 Jun 2007, in: http://razumkov.org.ua/ukr/poll.php?poll_id=775 [13 Jan 2016].

28 2014 data obtained from a survey conducted by Kiev International Institute of Sociology from 29 Apr 2014 to 11 May 2014, Attitude to the Unitary State and Separatism in Ukraine, 22 May 2014, in: http://kiis.com.ua/?lang=eng&cat=reports&id=319 [22 Jan 2016]. Comparables for 2013 obtained from Progrebinskij, n. 11.

29 Cf. GfK Ukraine 2015: Study entitled „Youth of Ukraine 2015", 15 Dec 2015, in: http://www.gfk.com/uk-ua/insights/news/doslidzhennja-molod-ukrajini-2015 [15 Feb 2016].

30 Cf. the statistics in Kulyk, Volodymyr 2015: One Nation, Two Languages? National Identity and Language Policy in Post-Maidan Ukraine, PONARS Policy Memo No. 389.

31 Cf. the opinion poll carried out by the Kiev-based Razumkov-Instituts from December 2015, in: http://razumkov.org.ua/ukr/poll.php?poll_id=762 [2 Feb 2016].

32 Cf. an opinion poll not available to the author in published form, carried out by the Institute for Sociology at the Ukrainian National Academy of Sciences from 26 Jun 2015 to 18 Jul 2015.

33 Mikhail Pogrebinskij and other authors have already used the term (cf. n. 11). However, I use it here only in a limited sense for the South-Eastern regions because these regions are to the forefront here and the question of a pan-Ukrainian type of national understanding has to be explained elsewhere (see also Conclusion).

34 According to an opinion poll carried out by the Kiev-based Democratic Initiatives Institute, in these areas an increase from 21 per cent to 63 per cent in the number of people identifying as "citizens of Ukraine" was recorded between 2013 and 2015. Cf. Ilko Kucheriv Democratic Initiatives Foundation 2015: Ukraine: Two Years After Maidan, in: http://dif.org.ua/modules/pages/files/1457009023_4029.pdf [13 Mar 2016].

35 Cf. Härtel, n. 17, pp. 297 ff.

36 Cf. Mitrokhyn, Nikolaj 2015: Zwischen Stabilität und Labilität: Die gesellschaftspolitische Situation im Süden und Osten der Ukraine, Studie, Friedrich-Ebert-Stiftung, Sep 2015, in: http://library.fes.de/pdf-files/id-moe/11625.pdf [23 Feb 2016].

37 Cf. Kulyk, n. 30.

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