KONRAD-ADENAUER-STIFTUNG 3|2017

INTERNATIONAL REPORTS

Water. Power. Conflict.

INTERNATIONAL REPORTS

3 | 2017

Dear Readers,

Some 30 years ago, Boutros Boutros-Ghali – who went on to become UN Secretary General – predicted that the wars of the future would be fought over water. His prediction has not yet come true, but when we look at the various regions of the world, it is clear water is becoming an increasingly scarce resource that is indeed at the centre of many conflicts – or is at least exacerbating them significantly.

This is particularly true of the Middle East, one of the world's most arid and unstable regions. The situation in the Gaza Strip is certainly dramatic, but unresolved water issues are also causing conflicts between Israelis and Palestinians in the West Bank, as Marc Frings and Johannes Lutz discuss in their contribution to this issue. The recent resurgence of the Israeli-Palestinian Joint Water Committee is a sign that both parties are prepared to take pragmatic action. Nevertheless, there is a risk of further destabilisation of the region if no mutually acceptable solution can be found to the water issue.

In Africa, conflicts could also intensify if the continent's extremely scarce water supplies continue to be used so unsustainably. In his article, Daniel El-Noshokaty highlights the potential supra-regional disaster that could threaten Africa's largest freshwater lake. The livelihoods of more than 30 million people depend on Lake Victoria, but water pollution, resource exploitation, and the region's dramatic population growth are all putting massive pressure on the lake's ecosystem. The countries concerned will have to significantly increase their national efforts and work together more closely if the risk of an acute water shortage is to be countered effectively.

In contrast to Africa, Latin America is one of the world's water-richest regions. However, the distribution of water is extremely uneven, meaning the problem of water supply is largely a problem of distribution. Gunter Rieck Moncayo and Maximilian Wichert discuss how the struggle to find solutions revolves around the regulatory question of whether a publicly or privately owned body

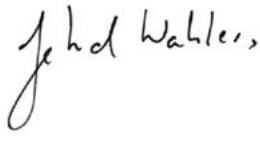
is the best way to guarantee a safe and equitable supply of drinking water. The authors conclude that an appropriate institutional framework and proportionate regulations are more important for a functioning water policy than whether a supplier is a private company or state-run.

The challenges in Southeast Asia are of a completely different nature. Here, water has become a major security issue. Rabea Brauer and Frederick Kliem use the example of the Mekong to illustrate how Chinese power plays lie at the heart of numerous conflicts. China has built many dams in the upper reaches of the river, and as a result can "turn off the tap" for countries that lie downstream. With this in mind, the authors stress how important it is for all countries bordering the Mekong, including China, to be involved in a regulated system for working together on water-related issues.

Overall, the articles on this issue's key topic highlight the enormous potential for conflict inherent in the scarce yet vital resource that is water. At the same time, cross-border water resources open up numerous opportunities for countries to work together. These opportunities must be systematically expanded if we are to prevent future wars being waged over water.

I wish you a stimulating read.

Yours,



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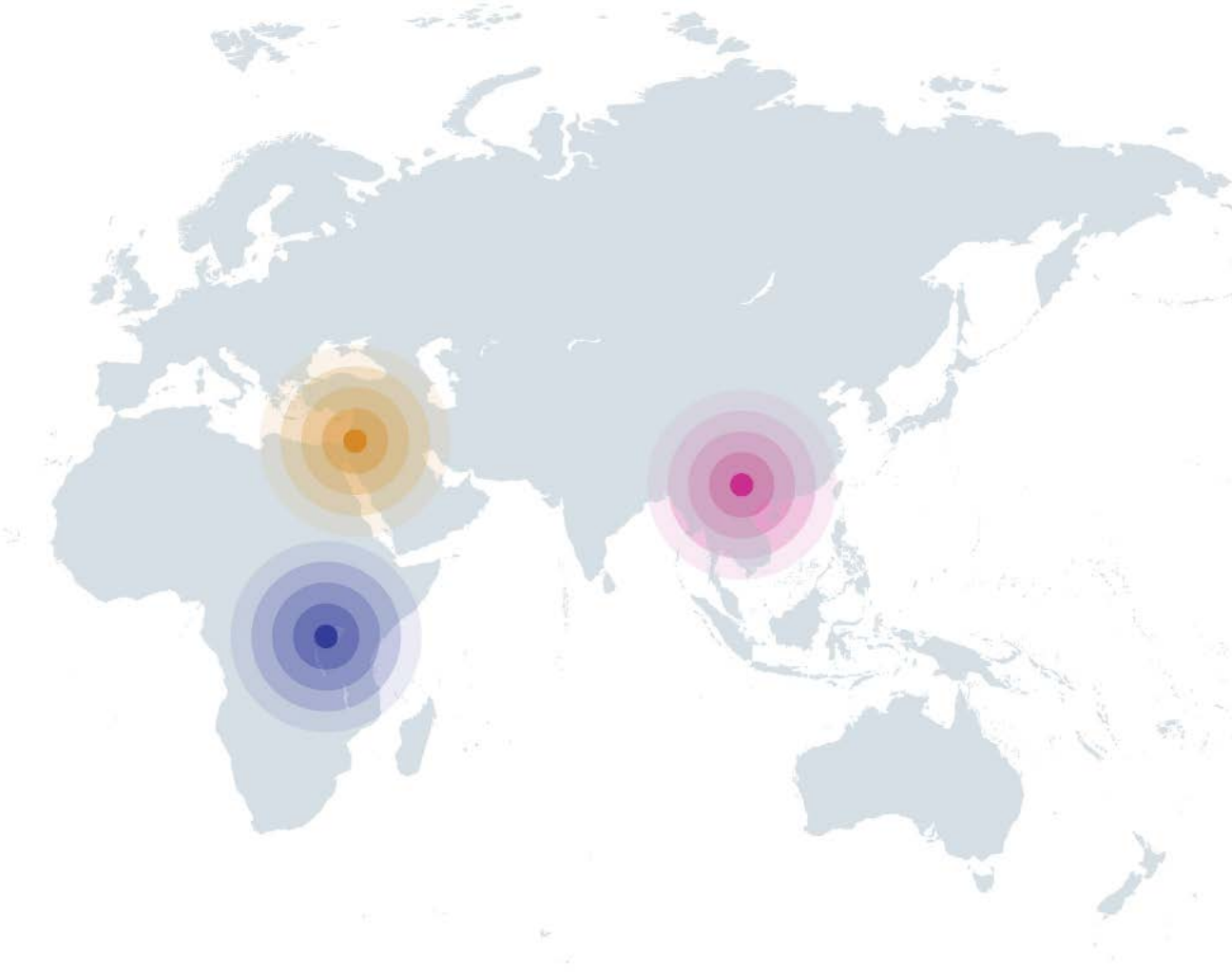
Water. Power. Conflict.



OTHER TOPICS

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Water. Power. Conflict.

A Breakthrough at Long Last?

On the Revival of the Israeli–Palestinian Joint Water Committee

Marc Frings / Johannes Lutz

The crisis-ridden Middle East is among the world's water scarcest regions. The issue of the equitable distribution of the cross-border resource water regularly fuels conflicts. Unresolved water issues are proving to be an obstacle to peace between Israelis and Palestinians. The decision to revive the Israeli–Palestinian Joint Water Committee has led to a rapprochement in the water sector after years of inactivity. Will the breakthrough now succeed?

Introduction

This summer, unrest around the Temple Mount/al-Haram ash-Sharif in Jerusalem has hit the headlines. Despite the religious overtones of these events, the Israeli-Palestinian conflict is fundamentally about territorial issues. The agenda of future peace talks will include geostrategic questions such as the Jewish settlements, Palestinian refugees, the status of Jerusalem, borders and security, as well as resource issues. Water plays a key role in this context. Equitable access to natural resources is linked closely to questions concerning economic development, population growth as well as health and sewerage. The scarcity of the occurrence of natural water resources in the Middle East and the conflict potential this is frequently attributed to give greater significance to these questions.[1]

One look at the geological map shows that water does not recognise borders. The key water sources – the Jordan River and the Mountain Aquifer – extend across parts of both Israel and the Palestinian West Bank. If no mutually acceptable way to divide the water can be found, this could destabilise the region even further. However, the cross-boundary aspect could also be used constructively to noticeably improve the living conditions of the people between the Mediterranean and the Jordan today whatever the final status negotiations will bring. As there are currently no indications of serious regional and international efforts being made to reactivate the peace process, the resource issue should be given particular attention.

The developments over the last few months indicate that some work has been done in this area behind closed doors. After a six-year hiatus, the Israeli–Palestinian Joint Water Committee was reconvened this January. Since the signing of the 1995 Interim Agreement (Oslo II) between the Palestine Liberation Organisation (PLO) and Israel, the committee has been responsible for approving infrastructure projects relating to water and waste water in the West Bank.[2] In 2010, the Palestinians withdrew their cooperation in the Joint Water Committee, as Israel was making the approval of Palestinian applications dependant on the approval of infrastructure projects for the Israeli settlements, which are illegal according to international law. This dependence mechanism put the Palestinian side under increasing pressure, as every approval of an Israeli project could have been construed as retrospective recognition of the settlers' activities. The newly signed agreement has overcome this point of contention by determining new sets of rules for the Joint Water Committee. One of these states that only Palestinian applications are to be dealt with in the future; and certain projects will be exempted from the obligation of obtaining a permission altogether. In parallel, Jason Greenblatt, who is in charge of international negotiations in U.S. President Donald Trump's government, has taken action in support of this new rapprochement in the water sector. While visiting Jerusalem in July, he announced a new deal under which Israel will supply an additional 32 million cubic meters of water to the Palestinians in the West Bank and the Gaza Strip.[3]

The article takes this latest Israeli-Palestinian rapprochement as a launching point to investigate whether it was an intervention on the management level or a real break-through in the water sector, and will examine more closely the Israeli-Palestinian Joint Water Committee. To this end, the authors first examine the Interim Agreement of 1995, as well as the regulatory framework of the Joint Water Committee and its implementation up to 2010. Subsequently, the content of the new agreement and the reasons for the revival of the Joint Water Committee are discussed. The article concludes with a discussion about the possible consequences, opportunities, and risks the new agreement entails.

Water – a Contested Resource

The Six-Day War of 1967 ended with Israel's victory over its neighbouring Arab states. Its end signified the beginning of the occupation of the West Bank (including East Jerusalem), the Gaza Strip, the Golan Heights and the Sinai Peninsula.[4] With the conquest of these areas, Israel gained control not only over the land and its inhabitants but also the resources present there. This includes the natural water reserves in the West Bank, which represent an important strategic resource in view of the low amounts of rainfall in the region.[5] To this day, Israel utilises water resources for its own needs that are located entirely or partly outside the 1967 borders and therefore on territory claimed by Palestinians as their own.[6] The Palestinians, on the other hand, still do not have adequate access to the groundwater under the West Bank.

The Palestinians still do not have adequate access to the groundwater under the West Bank.

One could argue that this is in part due to the 1995 Interim Agreement, the most comprehensive set of contractual arrangements between the PLO and Israel to date. The agreement initiated a five-year transitional period, during which competences and territories were to be gradually transferred to the Palestinian Authority (PA), which had been set up a year previously, in preparation for Palestinian statehood. Soon, however, events such as the assassination of Israeli Prime Minister Yitzhak Rabin in 1995, the election of the conservative politician and Oslo critic Benjamin Netanyahu as his successor the following year, the ongoing expansion of Israeli settlements in the occupied territories and a wave of terror by radical Palestinian organisations resulted in planned measures being delayed and ultimately the envisaged timeframe being abandoned.

Even after the interim period had officially elapsed in 1999, Oslo II continued to be used for reference. The supposedly temporary political system of the PA and the transition rules for bilateral relations between Ramallah and Jerusalem have remained in place ever since. Over time, the Oslo II agreement came to be viewed more critically, particularly by the Palestinians. The first PA president Yasser Arafat was thus said to have a tendency to make ad-hoc changes to his negotiating teams and to not rely sufficiently on specialist expertise.[7] By contrast, Israel went into the negotiations with clear objectives and was intent, for instance, on avoiding any agreements in the interim period that could be considered precedents during the subsequent final status negotiations.[8] The outcome was a reality, created with the approval of the PLO, that in many respects reflected the preceding occupation regime.

This process can be illustrated through the example of the sets of rules for the water sector, which are stated in Article 40 of Annex III of the Interim Agreement. During the negotiations, water issues threatened to undermine the entire set of agreements, placing the Palestinian delegation under considerable pressure. At the same time, Palestinian representatives were largely excluded from the concluding rounds of negotiations and were only represented by one delegate who did not have relevant expertise.[9] While Israel recognised the Palestinians' water

rights in the West Bank, these rights were to be specified only during final status negotiations. It was further stated in the agreement that the existing volumes of water used by Israelis in the West Bank should be maintained throughout the duration of the interim period.[10] As the final status negotiations never took place, the application of these transitional rules continues.

The Oslo II Agreement assigns Israel water use rights in the West Bank.

The Interim Agreement also determined fixed extraction volumes for the PA. The volume of water entering the groundwater through West Bank territory each year is put at 679 million cubic meters (679 cubic hectometers) in the Interim Agreement. The PA is permitted to extract 118 cubic hectometer per year, which corresponds to the volume the Palestinians extracted during the period before the agreement. It was further stated in the agreement that the PA would require an additional 80 cubic hectometers per year to cover future demand. Most of this water was to be extracted via new wells in the West Bank. The Interim Agreement therefore considered neither climatic nor demographic changes, nor the fact that the contractual status quo would determine reality if the peace process were to fail.

The two sides quote different figures in the analysis of current extraction volumes: Israel argues that the volume extracted by the Palestinians has increased considerably since the Interim Agreement was signed, stating that the digging of dozens of wells has been approved and existing systems have been handed over to the PA. In addition, the PA is said to have drilled numerous unapproved wells in the West Bank, from which some ten cubic hectometer of water were supposedly extracted in 2009.[11] Palestinian authorities, on the other hand, maintain that the actual extraction volume dropped to an all-time low of 87 cubic hectometers in 2011 because of technical and bureaucratic obstacles. According to these figures, the volume of 106,9 cubic hectometers extracted in 2013 still fell considerably short of the allocated share.[12] Even over twenty years after the signing of the Interim Agreement, the issue of Palestinian water rights has therefore lost hardly any of its explosive force.[13] On the contrary: the analysis of the conflict has become even more complex because of the discrepancies in the reported key figures.

A Joint Water Committee – but only for the West Bank

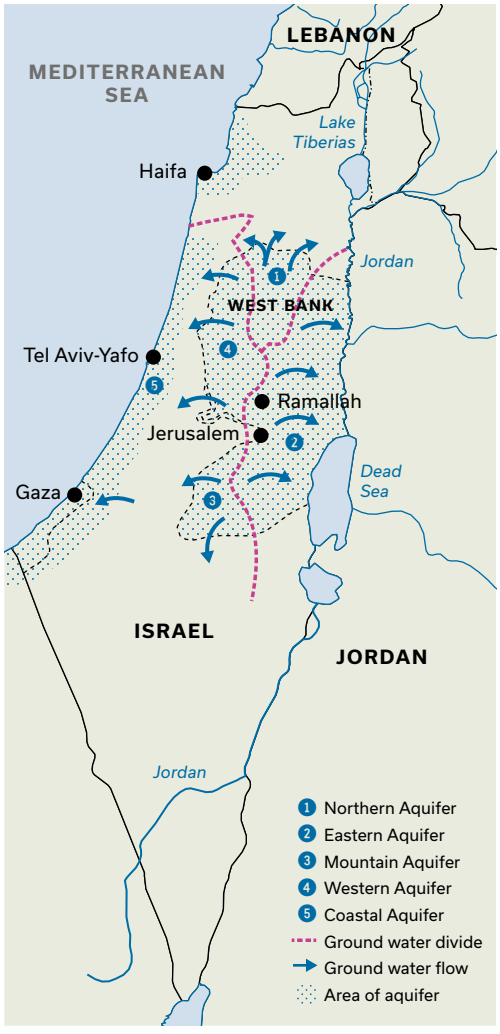
The right to equitable and reasonable utilisation of shared water resources is a generally recognised principle of international law. However, the Palestinian territories do not constitute an independent state under international law. The PA can therefore not fall back on the legal remedies that would be required to enforce its claims. That said, international law does provide guidelines for standards and principles that can also be applied to the relations between Israel and the PA.[14]

The region has three shared main water resources, for which both the PA and Israel have a right to equitable and reasonable utilisation and for which cooperation seems a sensible course of action. In the case of the Coastal Aquifer along the Mediterranean coast, the PA and Israel have control of their respective section; there is no formal cooperation. Such cooperation would, however, be essential for controlling excessive utilisation of the aquifer. The Gaza Strip has been governed by Hamas since 2007 and is therefore beyond the PA's control. Because of limited supplies of water from Israel, the population depends on water abstracted from the aquifer, and because of overuse, the groundwater level is dropping continuously. Because of increasing infiltration of seawater, there is a risk of the water from the aquifer becoming totally unsuitable for human consumption within the next few years. Where the Jordan is concerned, the PA is not included in any of the regional regulation

mechanisms. By the time the river reaches the West Bank, Israel and the neighbouring Arab countries have already diverted up to 95 per cent of the original flow, leaving only a contaminated trickle.[15]

The third shared water resource is the Mountain Aquifer between the West Bank and Israel. Oslo II established the Israeli–Palestinian Joint Water Committee as the coordination mechanism for this resource. Its task is to implement the provisions of Article 40 in the West Bank.

Fig. 1: Water Resource Jordan and Aquifers



Source: Own Illustration based on ArcWorld, UN Geospatial Information Section, DCW, Palestinian Environmental Quality Authority 2002.

In the first instance, this means approving planned infrastructure measures in the water sector. Although the committee has an equal number of Palestinian and Israeli representatives, a look at the geographic situation reveals an imbalance in favour of Israel.

The key characteristic of shared water resources is that they are not limited to one administrative area, but extend over the territories of several parties. But in the case of the Mountain Aquifer, the area covered by the Joint Water Committee is only limited to the section beneath the West Bank. Most Israeli pumping stations above the Mountain Aquifer are located outside the West Bank and are therefore not subject to decisions by the Joint Water Committee.[16] Although the Mountain Aquifer is fed predominantly by rainfall across the West Bank, only 14 per cent of the abstracted volume was utilised by the Palestinians in 2015 while Israel used the rest.[17] Even though the Joint Water Committee has often been described as a coordinating body, this must be judged with caution due to its limited geographic coverage. While Israel has a right to have a say in decisions about projects in the West Bank, the PA has no legal remedy to control the utilisation of the shared aquifer on Israeli state territory.

The political topography of the West Bank creates another geographic peculiarity. The Interim Agreement divided the West Bank into Areas A, B, and C. Areas A and B are subject to full PA control for civil matters; in Area A, the PA also has responsibility for security. The majority of the Palestinian population lives in these (semi-)urban centers, which occupy some 40 per cent of the West Bank. Area C comprises the remaining 60 per cent of the West Bank, which are under complete Israeli control. Here, 300,000 Palestinians live side by side with close to 600,000 Jewish settlers, who are spread across some 250 settlements and outposts.[18] Due to environmental and expediency factors, important components of a Palestinian water infrastructure need to be located within the thinly populated Area C, as there is insufficient space for

them in the PA-controlled Areas A and B.[19] In practice, this means that the PA has had to go to the Joint Water Committee for approval of any new projects or maintenance measures in Areas A, B and C. If it wishes to operate in Area C, it also needs to obtain permits from the building and planning committee of the Israeli Civil Administration, the Israeli Army body that administers the occupied territories.

Implementation of the Joint Water Committee until 2010

The geography-related imbalance in favour of Israel was strengthened further in the period up to 2010 through the establishment of Israeli interpretations of vague guidelines. The dimensions determining whether infrastructure projects required approval were, in fact, not clearly specified to start with. It was not until the Joint Water Committee had begun operating, for instance, that a rule became established according to which pipelines exceeding five centimeters (two inches) in diameter or 200 m in length would require approval. This interpretation corresponds to the modus operandi applied before the Interim Agreement was signed; at that time, projects exceeding these dimensions needed to be approved by the Israeli Civil Authority.[20]

Israel made the approval of Palestinian water projects dependent on the approval of applications to supply Jewish settlements.

It was also initially assumed that Article 40 only covered the Palestinian water sector in the West Bank. However, Israel soon began submitting applications of its own, which related to connecting up settlements to the Israeli water network. It became established practice to make the approval of Palestinian projects dependent on the approval of Israeli applications. By 2010, over 100 infrastructure projects had been approved that predominantly served to supply Israeli settlements. In practice, Israel frequently ignored the approval process and unilaterally realised projects in Area C, which it controlled, without waiting for a decision by the Joint Water Committee.[21] The PA does not have a similar option as Israel consistently prevents unauthorised Palestinian construction activities.

In the everyday work of the Joint Water Committee, it soon became clear that Israeli projects were treated more favourably. Of the 135 Israeli applications submitted up to 2008 just one was rejected. Israeli applications took around 70 days on average to be processed. There are no comprehensive statistics available for the 602 Palestinian applications submitted in the same period, but the available figures indicate a substantially lower approval rate. Only 33 to 66 per cent of 188 applications for renovating or extending existing wells and drilling new ones were approved. There were also delays, sometimes lasting years, particularly with the approvals for the 32 applications for new wells. Eight wells applied for in 1996 were not approved by the Joint Water Committee until 25 months later. A further eight wells approved in 2001 did not receive planning consent from the Israeli Civil Authority until 2009, and only partial consent at that.[22]

Under the mantle of cooperation and with the apparently willing consent of the PA, Israel obtained approval for developing the infrastructure of Jewish settlements. At the same time, the country blocked the development of the Palestinian water sector and cemented the inequitable access to water resources.[23] The PA condoned this practice for well over the official five-year interim period. This was most likely due to the pressure on the PA to make projects happen because of the poor state of the Palestinian water infrastructure. By 2015, seven per cent of Palestinian households still had no access to a water network. 80 out of 524 Palestinian communities also have no connection whatsoever to a proper sewage system.[24] The way the PA approached its involvement

in the Joint Water Committee did not change until Shaddad Attili was made Head of the Palestinian Water Authority in 2010. After the Palestinian side first refused to sign the committee's minutes, it finally withdrew its cooperation.

After a Six-Year Hiatus: New Rules for the Joint Water Committee

The approach pursued by the PA changed again in 2014, once Mazen Ghoneim had been nominated Head of the Palestinian Water Authority. During the four-year boycott, the Joint Water Committee and its sub-committees had met sporadically, above all in cases of emergency, to discuss important matters relating to water projects that had already been approved. Under the new head, negotiations about a formal revival of the Joint Water Committee were initiated.

These negotiations extended over several years and took place away from the public eye and without the presence of international representatives.[25] At a press conference held on 15 January 2017, the Palestinian Minister of Civil Affairs and the Israeli Head of the Coordination of Government Activities in the Territories announced the signing of a new agreement as well as the resulting reactivation of the Joint Water Committee. Reporters were tentative in commenting on the agreement and its content, mainly because the text was initially not made public. However, it has since been made available to relevant international representatives and organisations.

The new Israeli-Palestinian water agreement offers wide scope for interpretation.

The agreement comprises just one page of text and redefines succinctly the types of projects that will require approval by the Joint Water Committee in the future. Three key messages seem to be of particular relevance.

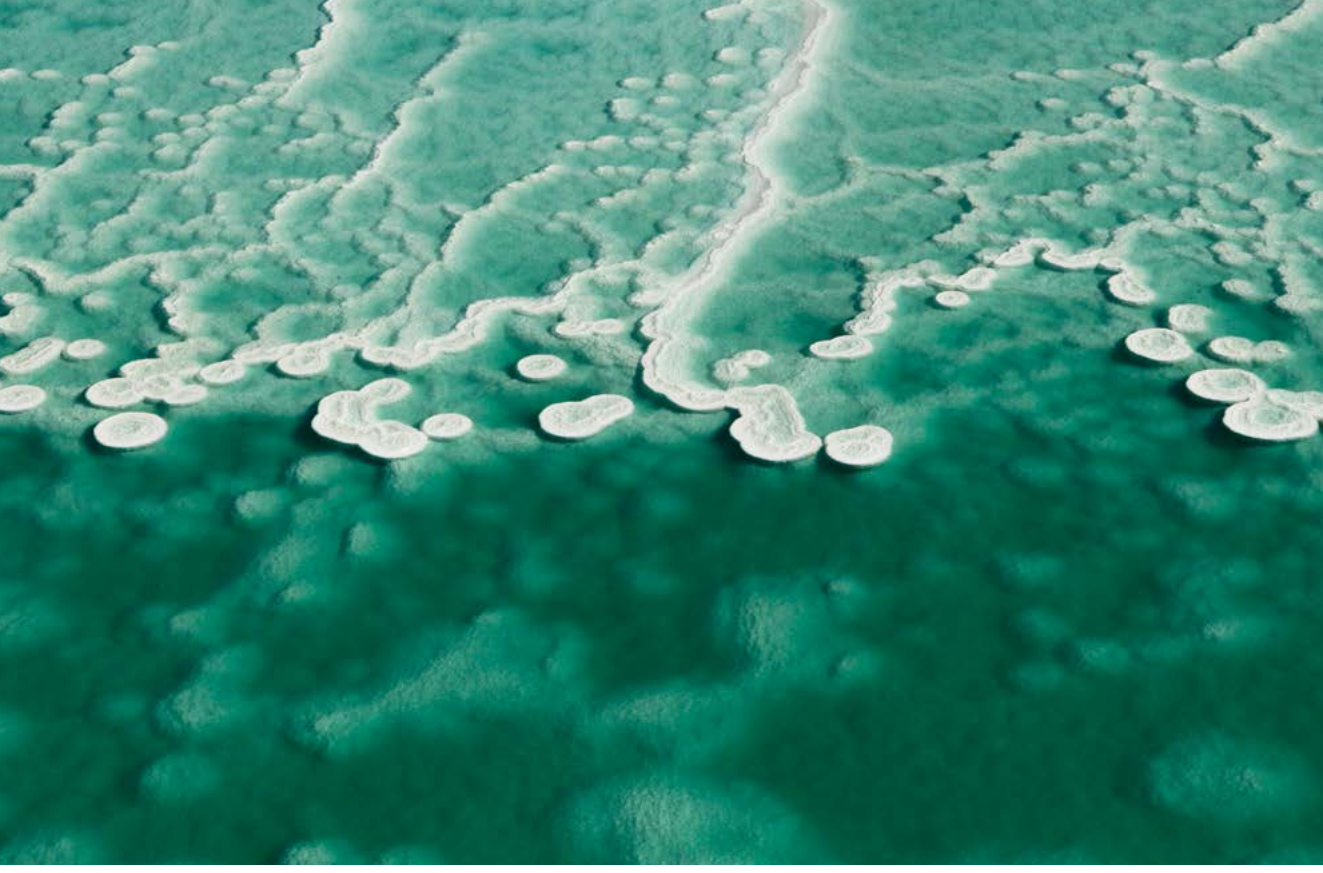
1. In contrast to the original wording of Article 40, the new agreement explicitly refers to the Palestinian Water Authority as the only body that can submit applications. Everything points to the idea that the Joint Water Committee will no longer deal with Israeli projects.

2. All projects that will affect the groundwater level will continue to require approval from the Joint Water Committee. This includes all work relating to wells, as well as measures that will increase the abstraction of water beyond the volumes specified in the Interim Agreement. Israel therefore reserves the right to continue regulating Palestinian utilisation of natural water resources.

3. Apart from a few other restrictions, many projects appear to be exempted from the obligation to obtain approval from the Joint Water Committee before realisation. It appears that the expansion of the distribution network in particular will now be free from this political obstacle. However, the wording of the agreement is rather vague and offers wide scope for interpretation.

Factors Conducive to the New Water Agreement

At the same time as the new water agreement was signed on 15 January, representatives from 70 countries and international organisations met in Paris for discussions about a new attempt to restart the peace efforts, to which the Palestinians and Israelis were not invited.[26] Israel had already made its disapproval of the conference clear several weeks earlier. The fact that the two events coincided was therefore probably not just a matter of chance. Instead, the temporal correlation indicates that the Israeli side at least in part intended to contrast the conference with an example of successful regional cooperation. But this was definitely not the only factor contributing to the signing of the new agreement.



Salt formations: Further technological progress in desalinating sea water could transform Israel into a future water exporter. Source: © Baz Ratner, Reuters.

Where technology is concerned, seawater desalination has transformed Israel from a country with serious concerns about future water shortages to a potential water exporter. The country, 60 per cent of which is covered by desert, already exports water-related technologies and expertise worth 2.2 billion U.S. dollars.[27] Since Israel commissioned the first desalination plant in 2005, capacities have been expanded continuously. With the upcoming commissioning of the fifth plant, the country is set to desalinate 582 cubic hectometers of water a year, corresponding to some two thirds of domestic consumption.[28] Thanks to this development, the strategic significance of the water resources in the West Bank is diminishing for Israel, at least theoretically. On top of this, the desalination plants also enable the country to increase the amounts of water it shares with its neighbours.[29]

By contrast with these positive developments, the critical situation of inadequate sewage systems and poor general water supply in the West Bank and the Gaza Strip persists. According to figures from the Palestinian Central Bureau of Statistics, the number of households connected to a sewage system in the north of the West Bank was around 34 per cent, in the central region around 48 per cent and in the south around 36 per cent in 2015. During the same year, some 66 cubic hectometers of waste water was produced in the West Bank, only 15 cubic hectometers of which went into the existing sewage systems. Only around ten cubic hectometers was partially treated; the remainder seeped into the ground or ran off untreated.[30] Together with the partly untreated waste water from Israeli settlements, this scenario represents a clear challenge to the part of Israel located downstream. Interested parties regularly call attention to the potential consequences of environmental pollution. As recent as May 2017, State Comptroller

Joseph Shapira issued a dramatic statement warning that if the authorities continued to fail to take action against the pollution, this could lead to consequences for human health and the environment as well as the country's "political-security situation".[31]

As long as the Joint Water Committee takes no decisions, the danger is that this dire situation will deteriorate further. Thus, there is a risk of the number of projects in the Palestinian water sector funded by international organisations and foreign states decreasing as time goes on. While donor organisations have still conducted some projects in 2017, these had already been approved by the Joint Water Committee before 2010. Without new approvals, these organisations are likely to shift their attention to other regions or sectors in coming years. Unsurprisingly, international organisations have regularly called upon both sides to resume work in the Joint Water Committee.[32]

The water issue also has serious security implications that deserve consideration. For years, there have been growing concerns about the gloomy economic prospects for the West Bank – growth is expected to be around 3.5 per cent this year, unemployment stands at 27 per cent, the PA's budget deficit is set to grow to 1.35 billion U.S. dollars – and a deterioration of the security situation.[33] To counter these developments, the Israeli Coordination of Government Activities in the Territories is making efforts to raise the living standards of the Palestinian communities. Following the announcement of a 3G mobile radio network, plans for faster international mail deliveries and a deal to settle Palestinian debts to Israeli electricity companies, the water agreement is already the fourth agreement made within two years.[34] However, the implementation of the agreement – and therefore a noticeable improvement in the daily lives of the population – is slow to materialise.

In view of these factors, the new compromise appears to be attractive to Israel for a number of reasons. The revival of the Joint Water Committee will allow new infrastructure projects to be initiated in the Palestinian water sector. That has the potential to both reduce risks to human health and the environment for Israeli citizens and help to lower the conflict potential in the West Bank. Israel will incur little direct costs in this connection as the funding will come mainly from the PA. One important task will be to ensure that the international community of states will continue its development cooperation consistently at the same high level, as the Palestinian Authority will remain reliant on donor funding as long as the prospects for economic development and improvements in foreign trade remain poor. At the same time, Israel will retain legal control over the volumes abstracted from the aquifers by the PA under the new rules.

Possible Consequences of the New Agreement

After an interval of over six years, the Israeli-Palestinian Joint Water Committee convened once again for the first time on 16 May.[35] The meeting was chaired by the heads of the Palestinian and Israeli water authorities. Only very scarce information about the meeting itself made it into the public domain. It was merely reported that the committee had discussed several topics of mutual interest.[36] No decisions were taken about any water-related projects, nor did the committee agree on a fixed schedule of meetings.[37]

The critical water situation in the West Bank carries security risks for both Palestinians and Israelis.

On the side of the Palestinian Water Authority, the hope is that the new agreement will result in the go-ahead for the rapid realisation of numerous projects. It is said that a total of 97 projects are in the pipeline since 2010, waiting for approval by the Joint Water Committee. According to information from the Palestinian

Water Authority, potential international donors are ready to provide funding and implementation assistance for most of the projects.[38] That said, there must be some doubt purely from a technical perspective as to whether many of these projects can actually be realised without lengthy delays. Major projects generally require long planning phases; after years of delay, many projects will also very probably need new feasibility studies to be carried out due to changed economic and demographic circumstances.[39]

Despite the rapprochement between the two sides, the PA still has no control over its own water resources.

Besides technical requirements, the vague wording of the new agreement could also continue to hamper infrastructure projects. One outstanding question centers around which projects will in fact be exempt from the need to make an application. Amongst other things, the agreement points out that "cross-boundary" waste water projects will continue to require approval. This wording is so vague that the international organisations interviewed for this article did not feel able to make a prognosis about how to interpret that passage. There also remains the question as to the rules applying to Area C of the West Bank, which is under Israeli control. The new agreement also appears to exempt many projects planned in this area from the need for approval by the Joint Water Committee. There is hope on the Palestinian side that it will now be possible to realise projects within the Palestinian communities in Area C in particular.[40] However, one must assume that all infrastructure projects in this area too will continue to require permits from the Israeli Civil Authority and from its building and planning committees. Consequently, Israel will probably continue to be able to obstruct undesirable projects in Area C through bureaucratic measures.

To test the limits of the new agreement, Palestinian authorities may try to realise individual projects without prior approval by the Joint Water Committee over the coming months.[41] But in case of doubt, they will not have much chance of enforcing their interpretation of the agreement. Israeli authorities, on the other hand, have proved on various occasions in the past that they do not shrink back from preventing projects they deem illegal, if necessary by deploying Israeli security forces. This also poses potential political challenges to international donor organisations. Donors are generally only willing to help realise capital-intensive infrastructure projects if permits by the Israeli authorities are on hand.[42] Whether they will be prepared to realise projects even without explicit Israeli approval is questionable as long as there is the possibility of a retrospective Israeli veto. A recent decision by the European Union indicates that things are changing in the EU's approach to dealing with investments in Area C: in future, EU-funded measures will be implemented in Area C if they have not been vetoed by the Israeli Civil Authority within 18 months from submission of a master plan. So far, this approach has been pursued by the EU and a few of its member states. It remains unclear, however, whether this can also be an option for larger infrastructure projects.[43] The German government continues to implement projects in Area C only once Israeli approval has been obtained.

Aside from the discussion about the practical implementation of the new agreement, one should not forget that the power ratio within the Joint Water Committee has not changed fundamentally. The new agreement will probably enable the PA to avoid one bureaucratic hurdle during the realisation of certain projects. However, it will still not be possible to pump additional water through new pipes without Israeli approval.

Political Implications for Water Cooperation in the Region

Around the world, sought-after resources have the potential to trigger conflicts and to

Uncertain prospects: Whether the hopes held by the Palestinian Authority regarding the quick realization of numerous water projects will be fulfilled, remains to be seen. Source: © Loay Abu Haykel, Reuters.

cause existing tensions to escalate. They can, however, also do the opposite: The scarcity of natural resources and the fact that natural, climate-related and manmade environmental disasters do not stop at political borders can also promote integration and help to resolve conflicts.

It is therefore a welcome sensible development that some progress appears to have been made with respect to the Israeli-Palestinian water conflict. Assuming that the latest decisions will be implemented promptly, the inhabitants of the West Bank can hope for an improved water supply. In the Gaza Strip, the humanitarian situation has seriously deteriorated at the same time after three bouts of armed conflicts between Hamas and Israel over the last nine years. The UN warns that the coastal strip that is home to two million people will become unliveable by 2020 and that the environmental damage done by then will be irreversible.[44] The water situation is particularly worrying here, as 95 per cent of the only source of fresh water – the Coastal Aquifer – are contaminated and therefore no longer suitable for use as drinking water. This not only increases the risk of epidemics and diseases but also the strategic dependence on water imports.[45] Israel is also affected by 90 million liters of virtually untreated waste water from Gaza flowing into the Mediterranean because the sewage treatment plants, which are small in number as it is, can no longer operate due to acute and recurring power crises: Beaches regularly need to be closed and the operation of

the desalination plant in the city of Ashkelon north of Gaza had to be temporarily shut down on several occasions in the past.[46] Given this situation, courses of action involving cooperation between Israelis and Palestinians can be viewed as contributions to mitigate the potential humanitarian catastrophe in Gaza. An agreement brought about in July with the USA acting as mediator could provide a cautious message of hope for the inhabitants of the Gaza Strip: Israel declared itself prepared to sell ten of the additional 32 cubic hectometers of water promised to the Palestinians to the Gaza Strip for some 75 cents per cubic meter.[47]

The rapprochement in this specific sector illustrates that the Israelis and the Palestinians are prepared to take some pragmatic steps. However, the veneer is stripped off this decision by the fact that the most recent agreement merely increases allocation limits unilaterally instead of granting the PA the right to utilise its own water resources. There have been no fundamental changes to the rules in the water sector. On the contrary, the status quo of the Israeli-Palestinian conflict has been cemented: 'nothing is agreed until everything is agreed'. The most recent agreement was made at the management level, while confirming the imbalance of power unquestioningly. The outlook for a return to peace negotiations – or even just the willingness on both sides to resume them – remains as poor as ever.

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1 Cf. Pedraza, Lisdey Espinoza / Heinrich, Markus 2016: Water Scarcity: Cooperation or Conflict in the Middle East and North Africa, Foreign Policy Journal, 2 Sep 2016, in: http://bit.ly/2vHGQHV [9 Aug 2017].

2 The 1995 "Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip" (also "Oslo II") regulates the responsibilities and functioning of the Joint Water Committee in Annex III, Article 40 XI-XV.

3 Cf. Haaretz 2017: Trump's Middle East Envoy Announces Water Deal Between Israelis and Palestinians, 13 Jul 2017, in: http://bit.ly/2w28cni [9 Aug 2017].

4 Subsequent to the 1978 peace agreement with Egypt, Israel withdrew from the Sinai Peninsula. The withdrawal from the Gaza Strip in 2005 took place on the basis of a unilateral decision by the then Israeli government; today, the coastal strip is subject to a blockade maintained by Israel and Egypt. Israel annexed East Jerusalem in 1980 and the Golan Heights in 1981. From a perspective of international law, the West Bank, East Jerusalem and the Golan Heights still represent occupied territories to the present day.

5 Cf. Maddocks, Andrew 2015: Ranking the World's Most Water-Stressed Countries in 2040, World Resources Institute, in: https://shar.es/1SOk5U [9 Aug 2017].

6 Cf. Asseburg, Muriel / Busse, Jan 2016: Der Nahostkonflikt, Geschichte, Positionen, Perspektiven, Munich, p. 77 f.

7 Cf. Selby, Jan 2003: Water, Power and Politics in the Middle East: The Other Israeli-Palestinian Conflict, London, 144-45.

8 Cf. Arnon, Arie 2007: Israeli Policy Towards the Occupied Palestinian Territories: The Economic Dimension, 1967-2007, in: Middle East Journal 61:4.

9 Cf. Selby, n. 7.

10 Cf. Marina Stephan, Raya 2007: Legal Framework of Groundwater Management in the Middle East (Israel, Jordan, Lebanon, Syria and the Palestinian Territories), in: Shuval, Hillel / Hassan Dweik (eds.): Water Resources in the Middle East: Israel-Palestinian Water Issues, p. 298.

11 Cf. Israeli Water Authority 2009: The Issue of Water between Israel and the Palestinians, in: http://bit.ly/2wDJJ9T [9 Aug 2017].

12 Cf. Isaac, Jad / Rishmawi, Khaldoun 2015: Status of the Environment in the State of Palestine, in: http://bit.ly/2xM8Zv1 [9 Aug 2017].

13 The abstraction volume cannot be used to determine actual per capita consumption. According to Palestinian figures, the total amount of water available to the Palestinians in the West Bank in 2013 was 163.1 hm^3. 36 per cent of this was supplied by the Israeli water company Mekorot, the remainder came from local resources. On average, each West Bank inhabitant had some 110 l/c/d available, just over the 100 l/c/d that the WHO specifies as the minimum standard for personal

consumption. But this volume fluctuates in the different administrative districts (governorates). In the Jerusalem Governorate, for instance, only 69 l/c/d was available. The supplied volumes cannot be equated to actual personal consumption either. Because of the poor state of the infrastructure, some 29 per cent of the supplied water was lost in 2013. The figures also include water that is not used for home consumption but for business purposes and tourism, cf. Isaac, n. 12. Consequently, average personal consumption by West Bank inhabitants is only around 70 l/c/d; in villages that are not connected to the water network, the average figure drops as low as 20 l/c/d, cf. PWA 2012: Palestine – the Right to Water, in: http://bit.ly/2eZNJtT [9 Aug 2017].

14 Cf. Amnesty International 2009: Troubled Waters – Palestinians Denied Fair Access to Water, in: http://bit.ly/2x7nwnJ [09 Aug 2017].

15 Cf. Haraldsson, Hördur / Sverdrup, Harald / Svensson, Mats / Belyazid, Salim / Kalén, Christer / Koca, Deniz 2002: The coming water shortage in the Jordan River Basin – Finding objectivity in a subjective problem, Lund, in: http://bit.ly/2wDoW6z [9 Aug 2017].

16 Cf. Selby, Jan 2013: Cooperation, Domination and Colonisation: The Israeli-Palestinian Joint Water Committee, in: Water Alternatives 6:1, pp. 1-24.

17 Cf. Isaac / Rishmawi / Khaldoun, n. 12.

18 385,900 settlers live in the West Bank and 203,000 in East Jerusalem. Cf. PASSIA 2016: PASSIA DIARY 2017, p. 389. The statistics used here come from the Israeli CBS.

19 Cf. Selby, n. 16, p. 9.

20 Ibid., p. 7.

21 Cf. Hass, Amira 2016: No Shortage of Discrimination When It Comes to Water in the West Bank, Haaretz, 02 Jul 2016, in: http://bit.ly/2eYK5QX [9 Aug 2017].

22 Cf. Selby, n. 16, p. 14.

23 Cf. Hass, n. 21.

24 Cf. Isaac / Rishmawi / Khaldoun, n. 12.

25 Interview with a representative of the Office of the European Union Representative (West Bank and Gaza Strip, UNRWA) (East Jerusalem, Jun 2017, unpublished).

26 Cf. Economist 2017: An Israel-Palestine Peace Conference — without Israel or Palestine, Economist, 17 Jan 2017, in: http://econ.st/2x7o6C1 [9 Aug 2017].

27 Cf. Weinglas, Simona 2015: How Israel became a water superpower, The Times of Israel, 1 Dec 2015, in: http://bit.ly/2iYf6su [9 Aug 2017].

28 Cf. Rinat, Zafir 2017: Desalination Problems Begin to Rise to the Surface in Israel, Haaretz, 6 Feb 2017, in: http://bit.ly/2iZh63Z [9 Aug 2017].

29 Cf. Jacobsen, Rowan 2016: Israel Proves the Desalination Era Is Here, Scientific America, 29 Jul 2016, in: http://bit.ly/2wDB2MX [9 Aug 2017].

30 Cf. Isaac / Rishmawi / Khaldoun, n. 12.

31 Cf. Udasin, Sharon 2017: Cross-Border Water Pollution Threatens Israeli Security, Watchdog Says, The Jerusalem Post, 16 May 2017, in: http://bit.ly/2iZ87zz [9 Aug 2017].

32 Interview EU East Jerusalem, n. 25; interview with a representative of the German development bank KfW (Ramallah, Jun 2017, unpublished).

33 Cf. The World Bank 2014: Palestinian Economy in Decline and Unemployment Rising to Alarming Levels, 16 Sep 2014, in: https://goo.gl/9aEuan [9 Aug 2017].

34 Cf. COGAT 2017: Cogat Signs Agreement with the Palestinian Authority to Renew the Joint Water Committee, in: http://bit.ly/2gBVLJa [9 Aug 2017].

35 Cf. Goodridge, Hugo 2017: New Chapter Begins in Israel-Palestine Water Dispute, Al-Monitor, 9 Jun 2017, in: http://bit.ly/2gIW20B [9 Aug 2017].

36 Cf. Sternlicht, Hezi 2017: Israel-PA Joint Water Committee Meets after Years of Stagnation, Israel Hayom, 19 May 2017, in: http://bit.ly/2wC2Rqy [9 Aug 2017].

37 Interview with a representative of the Palestinian Water Authority (Ramallah, Jun 2017, unpublished).

38 Cf. Rasgon, Adam 2017: Israel Gives Pal. Authority Limited Water Autonomy in West Bank, The Jerusalem Post, 17 Jan 2017, in: http://bit.ly/2iZPITo [9 Aug 2017].

39 Interview EU East Jerusalem, n. 25.

40 Cf. Rasgon, n. 38.

41 At the time of the article's submission, the authors do not know whether the PA has already conducted or begun a pilot project.

42 Interview EU East Jerusalem, n. 25; interview KfW Ramallah, n. 32.

43 Cf. Interview EU East Jerusalem, n. 25.

44 United Nations Conference on Trade and Development 2015: Report on UNCTAD assistance to the Palestinian people: Development in the economy of the Occupied Palestinian Territory, 6 Jul 2015, in: http://bit.ly/2wEgtQe [9 Aug 2017].

45 Ibid., p. 12.

46 Cf. Udasin, Sharon / Lazaroff, Tovah 2017: Gaza Sewage Forces Shutdown of Israeli Beach, The Jerusalem Post, 6 Jul 2017, in: http://bit.ly/2wD2VV7 [9 Aug 2017].

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Water. Power. Conflict.

Big Lake, Big Problems

Is There Still Time to Secure the Water Resources Lake Victoria Provides?

Daniel El-Noshokaty

Lake Victoria is essential to the lives of over 30 million people. Water pollution, resource exploitation and a lack of regional cooperation are threatening its ecological balance. The situation is exacerbated by the high population growth rate. There are justifiable doubts as to whether the future of the essential water resource provided by Africa's largest lake is secure.

The sustainable utilisation of the transboundary water resources presents a particular challenge to developing countries. This is illustrated very strikingly by the example of Lake Victoria. Any changes affecting the lake – and therefore water resources – directly impacts the three countries bordering its shores, namely Kenya, Tanzania and Uganda. Indirectly, Burundi and Rwanda also play a role, as important tributaries to the lake originate from these countries. Developments relating to the lake also indirectly affect the three countries of South Sudan, Sudan and Egypt, as they are located on the only river emerging from the lake, the White Nile. The water of Lake Victoria is consequently not only of local and regional but also transregional significance. If the sustainable management of water resources in this region fails, this will have serious repercussions for all the people, animals and plants depending on the Lake Victoria ecosystem.

Significance for the Environment, People and the Economy

Lake Victoria is Africa's largest lake and the second-largest freshwater lake in the world. It lies within the borders of Kenya, Tanzania and Uganda and covers an area of 68,800 square kilometers. Its total catchment area extends over some 500,000 square kilometers. Lake Victoria is of outstanding significance, both from an ecological and a socioeconomic perspective. It is the defining element of the region's ecosystem and essential to the lives of the people living in the lake's vicinity. It is estimated that the lake supplies some ten million people in towns and villages on its shores with drinking water. In addition, the water is needed for livestock and to irrigate farmland.

Purely on account of its size, it comes as no surprise that Lake Victoria is of significant importance for the climate system of eastern Africa. It has a direct impact on the amounts of rainfall in the region. Simulations indicate a direct correlation between the lake surface temperature and the amount of rainfall in the surrounding area.[1] A permanent change in lake temperature would lead to unpredictable changes in the amounts and locations of precipitation. Even very small climatic changes can have huge repercussions for the region's agricultural production and therefore people's livelihoods. A shift in the precipitation pattern would also have a significant impact on the amount of water present in the lake, as over 80 per cent of its water comes directly from rainfall.

While the average water temperatures of Lake Victoria fluctuate little throughout the year, they have been increasing steadily over the last few decades. The average surface temperature on the Ugandan side of the lake increased by an average of 0.5 degrees Celsius during the period from the 1960s to the late 1990s. This may not appear dramatic at first sight, but it puts a highly complex regional climate system under pressure to change. Models show that a 1.5 degree rise in temperature can result in some areas in the lake's surroundings receiving up to 100 per cent more average annual rainfall, others therefore correspondingly less.[2]

Lake Victoria also represents one of the essential economic factors of the riparian countries. According to estimates by the East African Community (EAC), over three million people in the

lake's surrounding areas depend directly or indirectly on fishing and the fish-processing industry for work. As a large proportion of the Lake Victoria perch caught in the lake is destined for export, the fishing industry represents a means of generating foreign currency revenues. Particularly for Tanzania, it is a significant economic factor and source of employment. But decades of overfishing and worsening environmental pollution are leading to steadily declining catches and consequently impacting negatively on people's economic situation.

Lake Victoria is essential to the livelihood of millions of people.

The lake is also used for electricity generation, particularly in Uganda. The hydroelectric power stations at the dams on the White Nile in Nalubaale, Bujagali and Kiira generate up to 630 megawatts of electricity a year. A further two power stations are under construction at Isimba and Karuma, with a joint planned capacity of 780 megawatts of hydroelectric power per year.[3] Consequently, the Ugandan energy generation from renewable sources depends to a considerable extent on water from Lake Victoria. Uganda generates by far the greatest amount of electricity from hydropower out of the three riparian countries. While Kenya also uses hydropower commercially to some extent, it increasingly uses water from the tributaries and from the lake for its expanding agricultural production.

Lake Victoria is not least an important transport route, as the road infrastructure does not provide an adequate and reliable means of linking the most heavily populated towns situated on the lake and the industrial centers. Most of the transportation of goods as well as passenger traffic in the region take place across the water.

The Numerous Problems Affecting Lake Victoria

There are a number of different reasons why the lake's ecosystem and therefore the livelihood of the people living around it have come under pressure. The water quality has deteriorated steadily over the last few years, partly because the urban infrastructures have not been able to keep pace with the rapid population growth. Establishing adequate wastewater disposal systems in particular represents a huge challenge, which is why large amounts of wastewater are still being fed into the lake untreated.

One of the consequences of the untreated wastewater is the spread of water hyacinth. While it is still unclear how it got into the lake in the first place, it has developed into a massive problem over the last 30 years. The plant was discovered for the first time in the Ugandan part of the lake in 1988 and then spread massively in several waves. Its growth is greatly promoted by the fertilisers and manure in the wastewater from agriculture. The water hyacinth covers the lake surface and prevents light and oxygen from penetrating. Besides fishing, its spread also hinders shipping and hydroelectric power generation. In 2000, the World Bank put the economic losses caused by the first cross-border spread of the weed in 1997 at up to ten million US dollars. The plant spread so rapidly that the trade conducted at the port of Kisumu in Kenya, which ships had problems reaching, shrunk by 70 per cent.[4]

Direct as well as indirect pollution represent the greatest problem for Lake Victoria. Wastewater from industrial plants, which is generally treated inadequately, is discharged into the lake.[5] Particularly in the larger urban centers of Tanzania, this is still the case to date. Besides wastewater from industry, wastewater from private households and livestock farming exacerbates the situation further. Up to 80 per cent of the phosphorus ending up in the lake originate from untreated or insufficiently treated wastewater. Although there have been some efforts made over recent years to reduce the volume of untreated wastewater, the existing pollution

abatement facilities are not even remotely sufficient to stop the increasing pollution of the lake's water. There is also a lack of reliable data quantifying the problem in such a way that the number of additional pollution abatement facilities required could be determined. The water pollution also carries serious health risks for the people living around the lake. Up to 70 per cent of the local population use water from the lake unfiltered either directly as drinking water or in farming, for irrigation or for watering the livestock.[6]

At around 75 per cent, wastewater from agriculture is the main source of the lake's increasing nutrient pollution load. Wastewater from the region's agriculture is subject to virtually no treatment. Although fertiliser use is still relatively modest, the United Nations already found over ten years ago that the increasing professionalisation of the cultivation of coffee, cotton, rice, sugarcane and tobacco was resulting in an increase in fertilisers and other chemicals in the water.[7] The soil erosion resulting from improper soil utilisation, deforestation and drainage of wetlands has further increased the nutrient load through sediments carried into the lake. As a consequence of this overloading with nutrients, the amount of algae in the water is now five times of what it was in the 1960s. The most telling proof of this becomes apparent by the fact that visibility in the water is now one metre at the most compared to around five meters in the 1930s.[8]

Furthermore, waters in tropical climate zones generally exhibit a lower oxygen content than those in moderate latitudes and are therefore more vulnerable to pollution by an excessive nutrient content. Areas of wetland, of which there were a great many around Lake Victoria, were able to counteract this by binding nutrients and sediment and thus acting as important filters. With the expansion of agriculture, the growth of settlements, falling water levels and the transformation of wetlands into land suitable for cultivation, this filter system is steadily losing the ability to perform its job. And so, the nutrient load continues to increase.[9] If this development cannot be reversed, the problem of nutrient overload in the lake will continue to deteriorate.

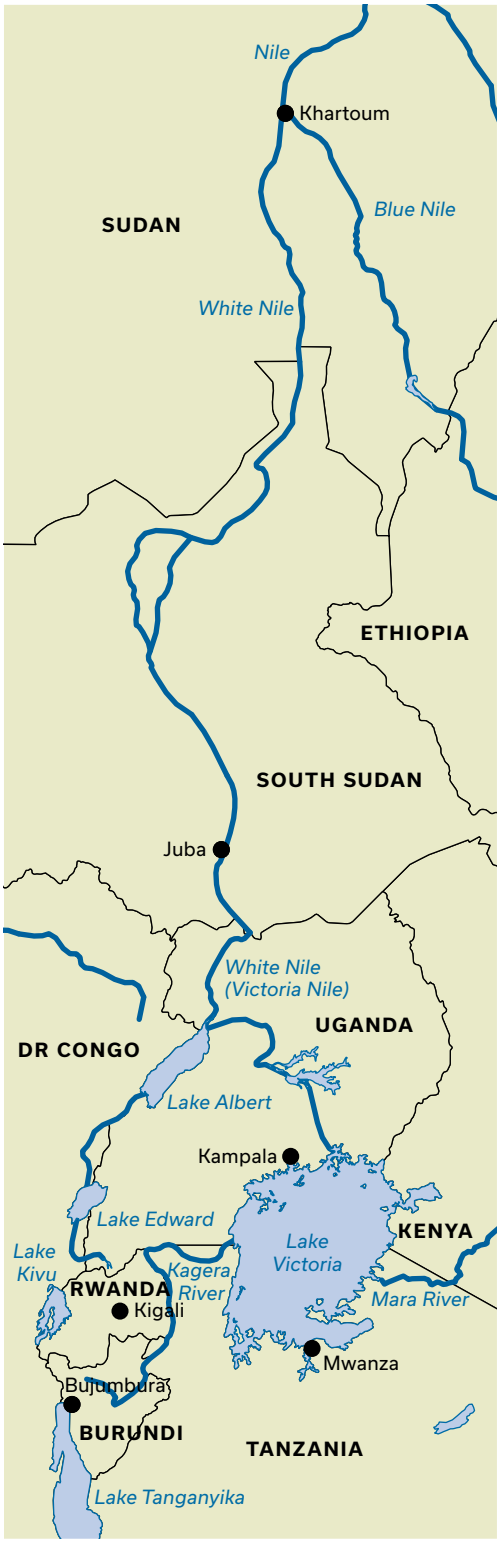
The increasing nutrient overload from fertilisers also represents a risk to food security as it affects fish stocks. For people living around Lake Victoria, the local fish is an essential source of protein. Changes in catch sizes and the quality of the fish therefore have a direct impact on the food security of the local population and consequently also on their health.

Increasing soil erosion is another of the many problems to be mentioned. Estimates vary greatly in part, once again due to the lack of reliable empirical data. However, even the most conservative estimate puts the amount of fertile soil lost to erosion each year at some 20 million tonnes. And the situation does not appear to be getting any better. To be able to satisfy the needs of the ever-growing population, new land is being developed continuously in all three riparian countries, putting further pressure on the lake's ecosystem.

Where the threats to the region's environment are concerned, one must also mention that there are substantial reserves of mineral resources in the region, particularly on the Tanzanian side of Lake Victoria. Tanzania is one of Africa's major exporters of gold, the extraction of which has steadily increased over recent years.[10] Besides the mines operated by international mining companies, there are many small-scale operations mining for gold in the direct vicinity of Lake Victoria. Many mines do not apply the environmental standards that would prevent the gradual pollution of the groundwater. While the extent of water pollution through mining is relatively limited for now, there are some signs of negative impact on the ecosystem.

Another serious problem is Lake Victoria's falling water levels, having reduced by an average of more than two meters since 2002, a development that has very serious repercussions for water quality and for the lake's fauna. Falling water levels intensify the concentration of the

Fig. 1: Lake Victoria and Surrounding Area



Source: Own illustration based on Natural Earth ©.

nutrient load and pollution. Many fish species need the protective wetlands on the lake shores to spawn. The lake water's decrease has also meant that fish can no longer reach the previously accessible breeding grounds of mosquito larvae and thus control their population. This has led to an increase in the numbers of these insects and a rise in cases of malaria.[11] In addition, the problem of falling water levels has negative consequences for the daily lives of the people living near the lake shores and for their economic activities. The water supply for Mwanza, the largest city on the Tanzanian lake shore, thus had to be temporarily restricted because one of the three waterworks could no longer pump sufficient water from the lake. Trade routes are also affected as ships can no longer enter all the harbours or only do so with a reduced load on board.

To explain the falling water levels of Lake Victoria, most studies point to the correlation between lower rainfall, higher temperatures and increased evaporation as well as changes affecting the rivers feeding the lake. The water levels of most inland bodies of water are to a large extent dependent on the quantities of water that flow into and out of them. This is not the case for Lake Victoria. Inflowing water only contributes some 15 per cent of the lake's water, while over 80 per cent comes from rainfall. That makes the water levels highly vulnerable to changes in precipitation or lack of rainfall. However, the studies don't agree on how much rainfall has reduced over the last few decades and on the extent to which the lack of rainfall has affected the water levels in concrete terms.[12] The experts similarly disagree about whether and, if so, to what extent temperatures have risen in the region. While the EAC has concluded that the average temperature at the lake rose by up to one degree Celsius in the period from 1960 to 1990, later studies could detect no further increase. Once again, there is a glaring lack of reliable data and studies for the region, which makes it difficult to come to any generally accepted conclusions on the basis of empirical and scientifically analysed data.

But meteorological factors alone cannot be solely responsible for the falling water levels. In 2008, the Global Environment Facility (GEF) found that the falling water level was at least partly due to the high volume of water being extracted.[13] Since the first hydroelectric power station in Uganda was completed in the mid-1950s, the water flowing out of Lake Victoria has been fully controlled. As Egypt's water supply relies exclusively on the constant water level of the Nile, the North African country and Uganda concluded an agreement in 1954 after the construction of the first hydroelectric power station, that has become known as the Agreed Curve. This states that the natural conditions of Lake Victoria should have priority over energy generation. The agreement therefore allows Uganda to generate electricity from hydropower provided that the lake's water level maintains its natural balance. In practice, this agreement did work until the beginning of the 2000s, but there has been increasing doubt of late whether Uganda is still adhering to it. There is sufficient data available for the period between 2000 and 2006 indicating that the water level should have remained constant in view of the amounts of rainfall in this period.

Uganda's failure to adhere to the Agreed Curve could be an explanation for the drop in the lake's water level. Although the Ugandan side refuses this, the country's continuously rising demand for electricity and the steady expansion of the hydroelectric power stations suggest that the need to generate power in Uganda exceeds the scope determined by the Agreed Curve. The few data and studies that do exist also indicate that there is a correlation between the extraction of water exceeding the volume limits under the agreement and the falling water levels in Lake Victoria.[14]

High Population Growth All Around the Lake

While the above-mentioned problems are serious enough for themselves in driving the negative developments, the continuing high rate of population growth in the region is exacerbating the situation further. With a constant growth rate of three to four per cent in rural areas and five to ten per cent in urban areas, the population around the lake in 2020 is likely to be twice as high as in 2006.[15] This applies equally to Kenya, Tanzania and Uganda, because while their growth rates differ slightly, growth in the vicinity of Lake Victoria is twice as high as the national average in all three countries.[16]

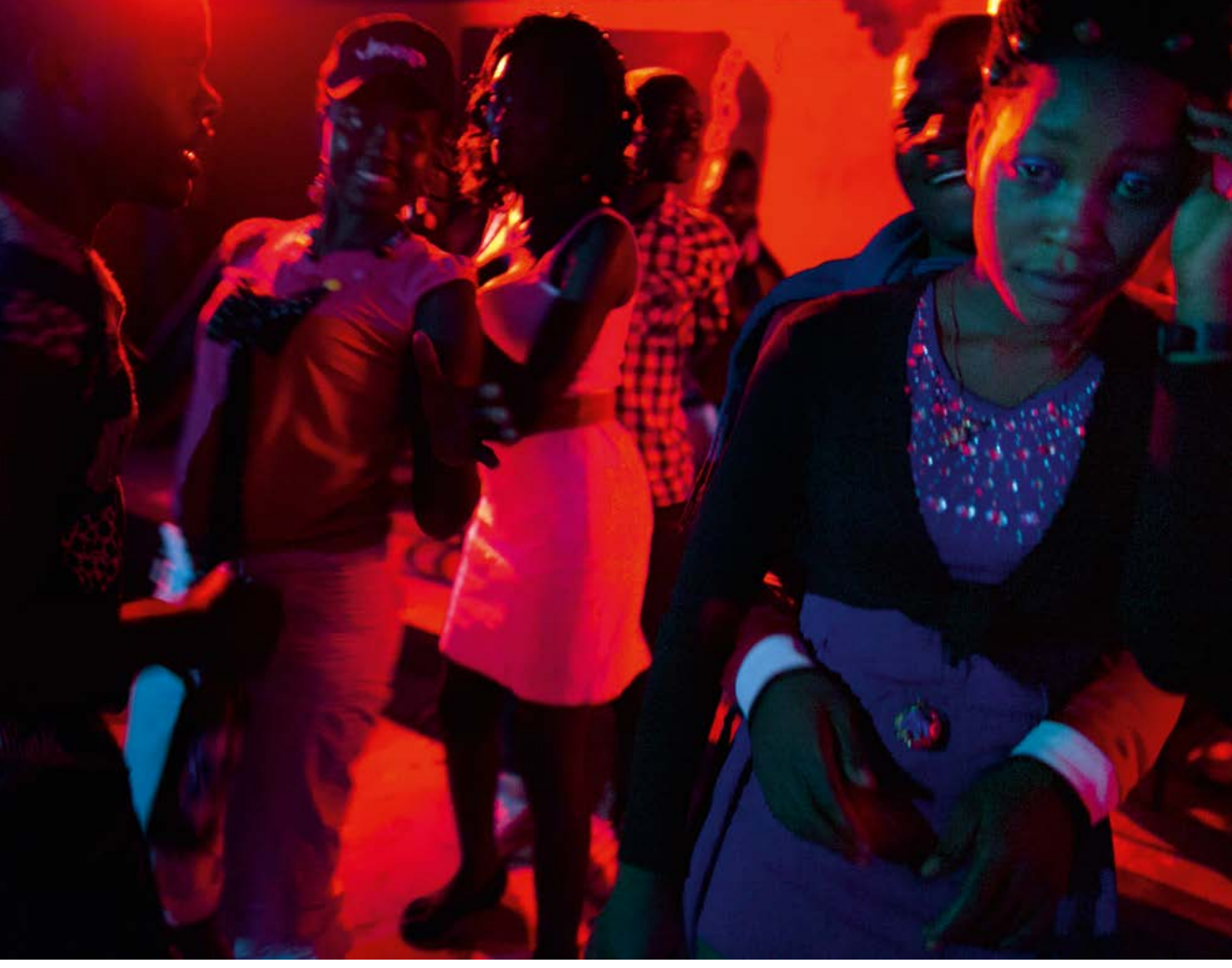
The high rate of population growth in the region is considerably exacerbating the problems affecting Lake Victoria.

Despite the high growth rates in the urban centers, the majority of the population continues to make their living from agriculture and the fishing industry. The relative poverty of the people living off agriculture makes them dependent on water from the lake while simultaneously acting as something of a catalyst for the above-mentioned environmental problems.

The massive growth of the urban and rural population places considerable pressure on the three riparian states.[17] Providing basic services alone takes them to the limits of their capabilities. And the situation forces them often enough to choose short-term economic gain over long-term solutions for sustainable resource use. Due to the prioritisation of energy generation from hydropower and the exploitation of the natural resources, the natural balance at Lake Victoria, which was already under great pressure, has become even more precarious over recent years. If this development is not stopped in the near future, it will lead to a scarcity of usable water in the long term.

Multilateral Approaches

As a transregional organisation, the EAC has a particular interest in developing multilateral approaches that include all member states and



Source: © Alec Jacobson.

can contribute to solving the described problems. One of the key elements of the EAC's strategy is the so-called Lake Victoria Environmental Management Project (LVEMP). This is the first project to involve the government departments of all three countries dealing with the relevant topics and to get personnel from Kenya, Tanzania and Uganda to collaborate. The aim of the project established in 1992 was to cast a vision for the sustainable management of the lake basin as well as finding compatible and individual solutions to the existing problems.[18]

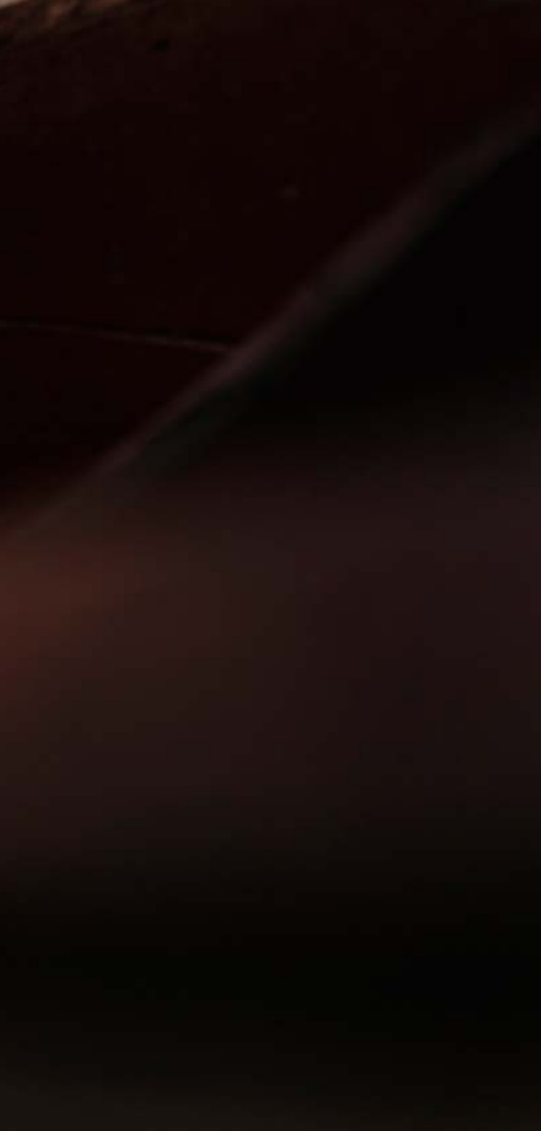
The most important projects of the LVEMP include the development of a database for the fishing industry by the member states, the setting up of three laboratories for performing quality inspections on the fish catches, taking measures to curb the spread of the water hyacinth by 85 per cent, monitoring water quality, reforestation measures as well as maintaining the wetlands. In addition, the project has established the first reliable database to monitor and track the lake's water quality and initiated the enhancement of wastewater treatment plants.

The first nine-year phase of the LVEMP was concluded in December 2005. The EAC and its member states, which now numbered five,[19] had recognised the need for further harmonisation of national and regional environment policies and improved cooperation and so a second project phase was started in August 2009 – with support from international donors. This phase, scheduled to run until the end of 2017, focuses on three key areas. Firstly, a multilateral agreement

Source: © Alec Jacobson.

on the sustainable use of water resources and of fishing in Lake Victoria was to be prepared. Secondly, the pollution of the lake through wastewater from industry and agriculture was to be reduced while simultaneously establishing an effective network of wastewater treatment plants in the urban centers. Thirdly, the local population as well as local administration staff were to be sensitised and informed about the approaches to solve the existing problems.

The first phase of the LVEMP can be considered a success insofar as the national efforts made in the riparian countries of Kenya, Tanzania and Uganda were bundled under one umbrella for the first time to devise joint solutions for problems that the countries cannot overcome by themselves. Thanks to the project, it has been possible to take cross-border measures for battling the water hyacinth and to conduct the first studies on fishing in the lake, making a direct positive impact on the lives of large numbers of people living in the lake's vicinity. Achievements of the second phase of the LVEMP to be mentioned include a reduction in soil erosion and in the influx of nutrients from the most important tributary, the protection of some wetlands and the sensitisation of parts of the local population.



Nevertheless, the two most significant deficiencies of the LVEMP have also become very noticeable over the course of the two project phases. First of all, the involved countries cannot seem to make common cause in matters where they are in competition with each other or maintain that only their own interests are affected. This can be seen particularly clearly in connection with the two described problems of falling water levels and overfishing, which were not included in the agenda of either the first or the second project phases. Then there is the issue of the efforts made by the LVEMP being inadequate in view of the size of the problems. The failure to address these two deficiencies has direct repercussions for the region's future development. If this cannot be remedied, there is a risk that people living around Lake Victoria will no longer be able to use its water. While the affected countries have held various discussions about these two points, bilaterally and within the EAC, they were not able to come to an agreement, let alone any implementation, and to effect a noticeable improvement of the situation.

National Approaches

Besides transregional efforts, each of the three riparian countries is pursuing its own national approach involving various activities to try and address the problems. In Kenya, the National Environment Management Authority (NEMA) plays a crucial role in matters relating to environmental protection in and around the lake. In addition to the national implementation efforts relating to the LVEMP, NEMA conducts a programme for the rehabilitation of the rivers flowing into the lake, which contribute just over 38 per cent of the entire inflow. To this end, protection zones are being established at the rivers' shores and measures are being taken to encourage the renaturing of wetlands. The enhancement of local solutions for wastewater purification is given particular priority. NEMA also works in the area of waste prevention and proper waste disposal. It further makes efforts to sensitise the local population to the problems and has established regional environment committees that have a say in environmental matters.

In Tanzania, there has been national legislation on environment management in force since 2004. But this is widely ignored – particularly where fishing, agriculture and mining are concerned. Environmental protection also does not receive much attention at a political level, as the relevant sets of rules are often regarded as obstacles to the country's development. Tanzania loses some 300,000 hectares of forest every year to the creation of new arable land as the demand for wood and charcoal for domestic cooking purposes is constantly rising. This also affects the region around Lake Victoria. The few environmental measures are conducted almost exclusively as

part of the LVEMP. They focus on the rehabilitation of the country's most important tributary, the Mara River. A 60 metre protective corridor was set up along its banks where agriculture is now forbidden. But there is still no comprehensive environmental policy or national initiative for sustainable fishing in place in Tanzania.

The majority of the Ugandan environmental protection measures in the Lake Victoria region are connected with or complement projects conducted as part of the LVEMP. Besides the efforts aimed at harmonising local standards and regulations, one key area being addressed is proper waste disposal in the urban settlements bordering the lake. At the same time, work is being done on improving wastewater treatment and making the population aware of sustainable and ecologically compatible possibilities of generating an income. This involves awareness campaigns conducted in rural areas and in schools. Finally, there are also some reforestation projects to counter the continuing soil erosion.

All in all, there is little appreciation of the magnitude and urgency of the existing problems evident at the political level in all three riparian countries. Environmental policy does not receive priority, and funding is consequently low. Nor does the topic feature to any large extent in the political discourse between government and opposition. It is therefore mainly international donors, but increasingly national NGOs as well, that address the issue and demand, and achieve, changes at the local level.

Conclusion

The described challenges relating to Lake Victoria are diverse, complex and interlinked. Deteriorating water quality and levels, increasing nutrient loads and pollution, shrinking wetlands, decreasing biodiversity and the spread of water hyacinth pose a number of risks to the lake's ecosystem and the health of currently 30 million people who depend on its water and resources. The rapid population growth adds to the difficulty in producing an accurate forecast of the region's future.

To put in place long-lasting and sustainable measures to resolve the problems, Kenya, Tanzania and Uganda must in the first instance considerably increase their national environmental policy efforts – also in terms of funding – as well as collaborating more closely to develop effective solutions. While the LVEMP programs of the EAC have made some headway in the fight against the water hyacinth and the compilation of baseline data, progress has only been made in the areas where the three countries have overlapping interests. Politically sensitive issues have not been addressed. Particularly where the rapidly falling water level and the problems from overfishing are concerned, effective multilateral cooperation to protect the resource of water has proved impossible. National efforts have also been inadequate.

Overcoming the problems in the long term will require closer cooperation between Kenya, Tanzania and Uganda.

In the worst-case scenario, failure to meet the above-described challenges may lead to a situation where the falling water levels exacerbate the environmental pollution in the region, the supply insecurity where clean water is concerned deteriorates and, as a result, the economy suffers. In the long term, a lack of the resource of water may lead to mass migration and to conflicts among the region's population, estimated to rise to around 60 million people. In the best-case scenario, the successful LVEMP projects will encourage better cooperation between the three riparian states, which may then put the crucial points on the agenda of a third phase of the programme to be set up in 2018 or of the EAC's programme and which could implement sustainable proposals to solving the problems. This would illustrate the capability of these countries to prioritise securing the livelihoods of their populations and protection of the environment in the entire region for the long term over short-term commercial interest.

The way things are currently, however, suggests that not enough efforts are being made to protect the water resources Lake Victoria offers.

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The images in this article are part of the photo project "End of Frenzy" by photographer Alec Jacobson. They depict the difficult everyday life of fishermen at Lake Victoria. The entire photo series is online at: http://alecjacobsonphoto.com and http://instagr.am/alec_jacobson.

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Water. Power. Conflict.

Private vs. Public

Thoughts on Regulatory Matters Relating to Water Supply in Latin America

Gunter Rieck Moncayo / Maximilian Wichert

While the wave of public service privatisation in Latin America is waning, the underlying issue of regulation remains unresolved. The failure of many projects in the water sector after some initial successes shows that huge challenges remain, whether the water supply is in public or private hands. This is in part due to a failure to engage in a debate about a stable governance model for the region.

Latin America is among the water-richest regions in the world. According to the World Bank, some 31 per cent of global freshwater reserves are located in this region.[1] But the distribution of the resource is enormously uneven. The amount of water available per inhabitant in southern Chile, for instance, is up to 1,000 times higher than in certain areas in the north.[2] Brazil's major cities regularly suffer from interruptions to the water supply while the country is home to the Amazon and therefore one of the world's most water-rich areas. And the region's most important industries – agriculture and mining – generate a high demand for water in many countries that has serious consequences.[3] At the macro level, water supply is essentially a distribution problem in Latin America. However, the distribution and transportation of the rich water resources generate a complex cascade of challenges. In terms of regulation, these regularly involve the contentious question of whether water supply management is by its very nature a task for the state or for private enterprise.

The publicly exchanged arguments follow a well-known pattern. Based on the conviction that access to drinking water has to be guaranteed as a human right, the proponents of state control call for the regulating force of the public sector to be able to guarantee that disadvantaged areas are also provided with a reliable water supply and to ensure a supply at low prices or even at no cost to the consumer. Those advocating a free market system, on the other hand, fear waste, a lack of investment, and costs rising unnecessarily in the public sector because of a lack of competition and the absence of the need for cost-effective resource utilisation. They maintain that only a free market can guarantee efficient supply, investments and the expansion of the networks with connections at the lowest price in the long term.

It is a beautiful, simple world, in which the solution to such a challenging problem will ultimately be decided on the basis of a closed either-or question. However, in the end the well-worn debate between liberalism and paternalism may ultimately ignore the actual problems. This can be seen from the failed consolidation attempts in the water sector by both public and private operators. Time and again, both sides fail to meet their investment targets.

Latin America plays a special role in the privatisation debate in the water sector. In some countries, privatisation was pushed particularly hard, with greatly differing results. The authoritarian regimes that had characterised many of the continent's countries in the past tended to veer to political extremes, both on the left and the right side of the spectrum. Their interventions were either collectivist in nature or pursued an ultraliberal policy, such as in Chile. The climate of world politics after the collapse of the Soviet Union also encouraged the willingness to open up the market in sectors that had been under state control for a long time. While the water supply sector in Chile is virtually fully privatised and provides a high-quality service to this day, there were four privatisation projects in other Latin American countries that ended in the premature termination of the concessions. These affected Buenos Aires and Tucumán in Argentina as well

as Cochabamba and La Paz in Bolivia. After the premature withdrawal of the concessions, responsibility for water supply and sewerage was transferred back to the public sector. Particularly in Bolivia, this caused considerable disruption, revealing the sensitive nature of the water supply management.[4]

A Regulatory Bone of Contention

The water supply issue no doubt represents one of the most emotive political debates. Drinking water is essential for sustaining human life – hardly less so than the air we breathe. But while the latter is generally freely available, a functioning drinking water supply requires a complex infrastructure. Due to the increasing urbanisation of the world's population, the supply of water has turned into a huge logistical challenge.

The amount of emotion the debate about clean water evokes was last revealed in Germany during the TTIP protests. A few years earlier, statements made in December 2011 by the EU Internal Market Commissioner Michel Barnier when presenting new concession guidelines, were immediately equated by the German public to an EU diktat for the water supply to be privatised. But forced privatisation was, in fact, never mentioned. The commission directive merely envisaged giving public authorities the right to decide whether to transfer public services into private hands or to take them back under state control. But immediately, opposing voices made themselves heard and a popular petition was set up, forcing the withdrawal of the draft paper relating to the water sector. Contrary to the facts, some commentators were convinced that representatives from the multinationals had taken up the fight against the right to water.[5] During the negotiations on a Transatlantic Trade and Investment Partnership, the supposed enforcement of privatisation once again appeared as a post-factual poltergeist in the publicly conducted debate and helped denigrating the TTIP among wide swathes of the population.

The unspoken conviction is that only public utilities can offer an equitable supply of clean drinking water for all and that every private enterprise is enriching itself while exploiting people's vulnerable position in their urge to satisfy as fundamental a need as that for drinking water. Only trade in the air we breathe could elicit greater outrage.

Where political debates on sensitive issues are concerned, Latin America tends far more towards extremes than Germany. Particularly in the Andes, where the cultural significance of water and water management is not to be underestimated, involving a bonding effect and an almost mystical character, is adding to the emotional content of the debate. There have been significant clashes in the past in Latin America in connection with privatisation projects in the water sector, tragically even resulting in some deaths. During protests against the Tía-María copper mine and its huge demand for water in 2015 in Peru, for instance, five people lost their lives. The following year, the human rights activist Berta Cáceres was shot and killed by an armed commando in Honduras after years of fighting against the construction of the Agua Zarca dam.

Several people lost their lives during protests against privatisation projects in the water sector in Peru and Honduras.

The topic of water polarises societies throughout Latin America. However, in this region in particular it becomes clear that the decision between public and private supply management by itself cannot solve the problems. Whether water is traded freely or not – the supply of water causes costs and requires a functioning infrastructure. There is a demand for water. And water is scarce. These facts immediately make it a commodity. In economic terms, however, water plays a special role. And this is not due entirely to its enormous importance for human health.

A question of distribution: Although Latin America is one of the world's water-richest regions, there are areas that regularly suffer from dry periods and drought. Source: © Ueslei Marcelino, Reuters.

The example of water can be used to illustrate practically every type of market failure in textbook fashion. Particularly natural monopolies, external effects and the properties of public goods, but also asymmetries of information affect the water sector directly or indirectly. These special properties legitimise state intervention in the water market; this also applies against the backdrop of a social market economy where the purpose of the state is first and foremost to ensure rule-governed competition and therefore to install a clear regulatory framework. The unanswered question is how far this state intervention should go. Is a state utility required as a last resort or is state regulation of private competitors sufficient?

The Case of Buenos Aires

In Latin America, the debate over water supply management resulted in a number of seemingly attractive privatisation projects. These can be viewed above all as a response to the inadequate outcome of the states' water policies. Even before it made the headlines as a country in crisis from the beginning of the recession in 1998, Argentina had considerable problems with water supply management, for instance in Buenos Aires. Almost half the city's inhabitants had no consistent access to drinking water. And the sewerage situation was even worse. Delays in replacement investments caused the water network become increasingly dilapidated and supply security was greatly reduced.[6] This brought about a typical privatisation scenario.

A private investor takes on the ailing sector under a long-term concession and consolidates the infrastructure under market economy pressures without which the public predecessor was not able to deliver the required services. But as the investor can only generate revenues from a comprehensive network that reaches every paying consumer, everybody's situation is improved – if only because, for many inhabitants of the supplied city, a reliable paid-for connection is more useful than no connection.

The privatisation projects in Latin America were initiated not least due to the state's inadequate water policies.

However, the privatisation of water supply management in Buenos Aires failed because of a deficient regulatory framework. In retrospect, the regulatory authority ETOSS, which was specifically set up for managing the award of the concession to the French-dominated consortium *Aguas Argentinas* (ASAA), made fatally flawed decisions in an attempt to steer a course through the country's economic crisis. It failed, for instance, to adjust the transfer prices to the depreciating national currency. And it continued the erratic and already failed system of price regulation unchanged.

Governance failures resulted in the premature withdrawal of the concession, scheduled to run for 30 years, after just 13 years.[7] What happened? When the concession was awarded, it went to the bidder who was prepared to offer the lowest water price. Consequently, the award entailed a 26.9 per cent average reduction in the price to the consumer. While using such tender criteria might be suitable to ensure social peace in the immediate aftermath of a concession being awarded, it sows the seeds of unavoidable subsequent problems. After all, high investment costs can only be paid for if the appropriate capital is available. Generating funds for replacement investments is anything but easy. Consequently, there were several renegotiations during the term of the concession. The situation escalated with the abolition of the dollar peg, which resulted in a drastic deterioration of the debt situation for ASAA due to its outside capital being set in dollars, and the consortium consequently became a loss-making enterprise for its international shareholders.[8]

Although the ASAA injected multiple times the amounts invested by its public predecessor, the increase was not sufficient to fulfil the contractually agreed targets. The unfavourable design of the tender process and the implausible conditions elicited bids for the contract that were far too aggressive. The low starting tariff was contractually frozen and the consortium would only be allowed to adjust it to the consumer price index every five years. In the absence of water meters, customers were charged a flat rate that differed substantially by district and eliminated the incentive to supply precarious locations. The lack of data about individual consumption made efficient monitoring virtually impossible. The contractually regulated transfer of all information risks to the operator, who would not have been allowed to make any claims against the state based on defects of information provided, was implausible in view of the great negotiating power of a water supplier. This alone illustrates that the institutional framework prevented a successful privatisation in Buenos Aires.[9]

Disparities in Bolivia

While Buenos Aires had problems with institutional obstacles, private projects in Bolivia failed due to an inept approach to dealing with the prevailing social conditions. After having suffered from military dictatorships for years, the country asked the World Bank for loans in the 1980s. The conditions imposed in connection with the loans included the privatisation of the water supply management to relieve the government budgets. Consequently, the Bolivian government put concession rights out to tender.

Scarce reserves: Bolivia, plagued with aridity, → is especially dependent on an efficient water supply.
Source: © Monica Machicao, Reuters.

In Cochabamba, the *Aguas del Tunari* consortium, whose majority shareholder was the US construction company Bechtel, was the only bidder. It was ultimately awarded the 40-year contract, which for the most part corresponded to the terms offered by the consortium. Where prices were concerned, *Aguas del Tunari* was granted the right to apply increases upon taking over as well as an option of a further 20 per cent increase in 2002. The tariffs were determined under a price discrimination model depending on the household income of the respective city district and the amount of water consumed.[10]

Once the contract had been awarded to *Aguas del Tunari*, a successive escalation of events took place. While there had already been some indications of opposition before the privatisation, this threatened to get out of control with the price increase in January 2000. The price for water connections in Cochabamba was raised by an average 35 per cent. This meant a painful attack on the budgets of many households that had previously only just been able to pay their bills. *Aguas del Tunari* responded to the failure of households to pay the company by cutting their supply, which triggered vehement protests. It started off with farmers affected by the water price increases protesting, soon followed by mass protests by people assembling in the city centre to demonstrate against *Aguas del Tunari*'s pricing policy, the World Bank and allegedly neoliberal politics in general. There followed a general strike with police intervention, resulting in over 100 wounded. After renewed riots in April, the government declared a state of emergency. The subsequent clashes, which involved the military and left one person dead, made a settlement involving *Aguas del Tunari* impossible. The government ended up cancelling the concession contract unilaterally.

The criticism of the way the privatisation of water supply management in Cochabamba was conducted focused mainly on the price increases that triggered the protests. But assigning the blame for the loss of control in Cochabamba solely to the private consortium ignores the bigger picture. While the Bolivian government's negotiating position may have been weak, the consortium did take on substantial obligations when signing the contract. This included the drilling of four new wells and a substantial expansion of the network. *Aguas del Tunari* could not take over funds from the highly indebted previous municipal operator SEMAPA. The required investments had to be funded from current revenues, as would be the delayed renovation work. To the management of the international consortium, the abrupt price increases were unavoidable, but they hit many households and businesses hard, particularly given the prevailing conditions. From a commercial perspective, the decision to increase the prices was overdue. But this was only the case if you viewed the situation in isolation from the socioeconomic conditions in Cochabamba. Because of the lack in local purchasing power, the price increases were simply not enforceable. To the local population, simplistic reactions such as that of the then manager Geoffrey Thorpe, who called for the non-paying customers simply to be cut off, was confirmation of the suspected colonial ruler mentality.[11]

In Bolivia, private projects failed because the prevailing social conditions were not adequately taken into account.

The case of Bolivia remains overshadowed by the disaster in Cochabamba. The World Bank recorded it as a clear failure in its statements. That said, Cochabamba was not the only water supply project in which the World Bank invested in Bolivia at the turn of the millennium; La Paz/El Alto and Santa Cruz de la Sierra also needed their water supply networks renovated at the time. In the region of La Paz and El Alto, the water network was also transferred into private hands. But here, protests such as those in Cochabamba were avoided by pursuing a different implementation strategy. The bidder that guaranteed the largest scope of network expansion was awarded the contract, and the necessary price increases were implemented by the state-controlled company

before the private bidder took over as operator. Contrary to the measures taken in Cochabamba, some areas were also treated more leniently in terms of prices, producing an average price increase of 35 per cent as well.[12] In Santa Cruz de la Sierra, by contrast, there was already a water supply operation run by a cooperative in place at the time of the state intervention. In this case, a General Delegate Assembly appointed senior management, and the cooperative's by-laws gave the Supervisory Board veto rights over the Management Board. Because of the cooperative's good record on fighting corruption and creating transparency with respect to the use of funds, the World Bank did not insist on a change in legal form as a loan condition. The cooperative of Santa Cruz achieved the targets set by the World Bank in full within the specified deadlines using its loans. It is also the only operator out of the three communities that has continued its operation to the present day.[13]

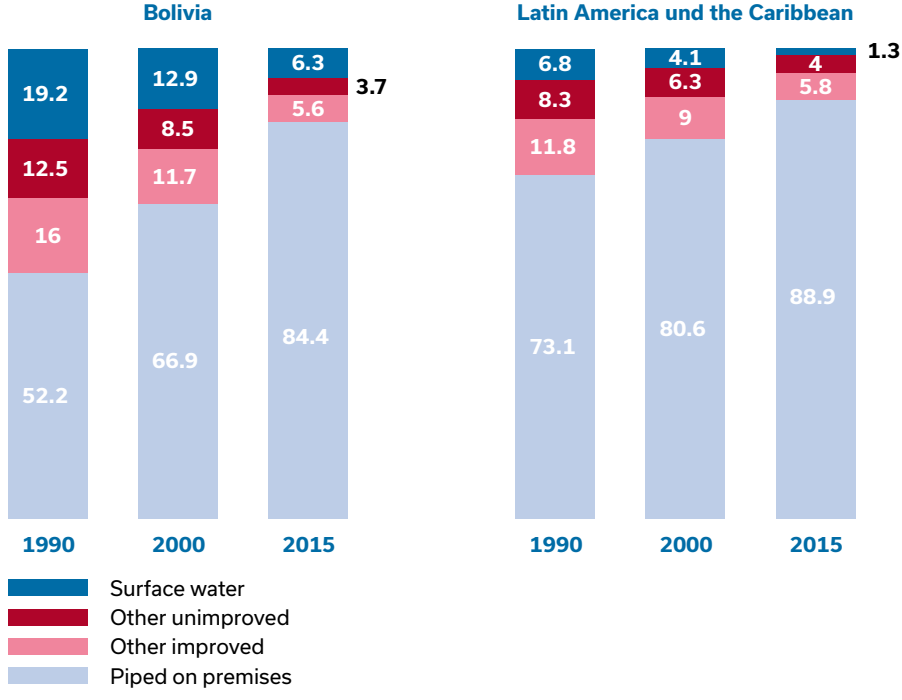
Lessons from Bolivia

Overall, Bolivia still lags behind the average service level in the region where the water supply is concerned (cf. fig. 1).

While the achievements of the cooperative in Santa Cruz provide some hope for possible solutions, one would be naïve to believe that the entire water supply in Latin America can be set to rights by the panacea of small, cooperative municipal operations.

The system in Santa Cruz works mainly because it incorporates effective control mechanisms. The success of the World Bank investments in the 2000s has been ascribed above all to the fact that the cooperative managed to rid itself permanently of virtually any type of corruption. This eliminated one of the greatest obstacles to investment. Whether a private or a public company is responsible for a network infrastructure,

Fig. 1: Development of the Water Supply 1990 to 2015 (in per cent)



Source: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (WHO/UNICEF JMP), in: https://washdata.org [6 Sep 2017].

corruption facilitated by opaque structures hinders both types of organisation equally. Funds are extracted from the water supply and drain away into the coffers of corrupt officials.

Successful Privatisation in Chile

Chile provides an example of successful privatisation under the right framework conditions. The Andean state excels through good supply security and quality. With a water sector that is almost totally in private hands, Chile is in a special position worldwide. The country demonstrates that under the right conditions private water supply management is not only possible but can be successful, and that occasional failures of privatisation projects do not necessarily have to result in state intervention.

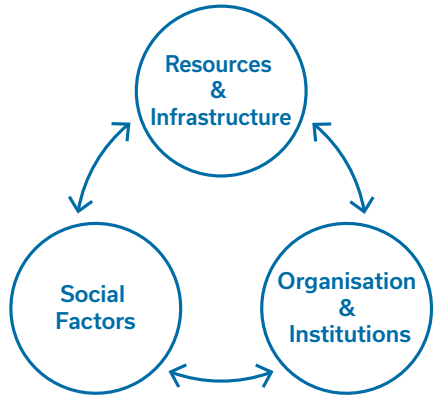
Until the end of the 1970s, the Chilean water supply system was a fragmented system in the hands of local authority operators. The supply rate in urban areas was around 80 per cent, but the proportion of households connected to a sewerage system only around 50 per cent. The country was able to increase the connection rates to 98 and 82 per cent respectively by 1988. While the legal framework concerning the water supply in Chile continues to be the subject of partly heated discussions, the country has an excellent record by regional comparison. It would be too easy to simply explain this success with the efficiency of private organisation, which the above-mentioned examples have shown. The question is, in fact, why the private organisation of the water supply works so much better in Chile than it does elsewhere.[14] It is useful in this context to examine the Worldwide Governance Indicators of the World Bank. Chile regularly ranks far above its regional neighbours among the OECD countries and is usually placed in the upper fifth percentile. Its regulatory quality for the reporting year 2015 was even ranked above that of Belgium and the United States of America.[15] These figures indicate that in Chile private operators work under far better conditions and their supply remit is hindered far less by institutional and regulatory deficiencies.

Factors Determining Efficient Water Policy

The functioning of a water policy therefore depends not so much on the question of whether you are dealing with a private or public operator but more on the institutional framework for the private or public water supply. Improving the supply situation in disadvantaged areas therefore requires reliable criteria for a sustainable supply and effective governance.

However, every political framework must contend with existing conditions. A water supply system is therefore not designed on the drawing board of economic policy, but has grown historically and is consequently the result of various factors. These include local circumstances such as the available volume of natural fresh water per inhabitant and its future development as well as the level of purity of the resource. They also include the state of the created infrastructure, such as the age and condition of the water networks, the depth and number of existing wells as well as possible sources of contamination. Social factors are comprised of particulars such as the specific water consumption per inhabitant and the current level of satisfaction with the supply as well as the size of the workforce in the water sector. And finally, organisational factors include the financial strength of potential supply operators, the efficiency of the

Fig. 2: Factors Determining Efficient Water Policy



Source: Own Illustration.

flow of information, and the rules regulating ownership rights as well as the quality of the institutions involved and the level of corruption.[16] The listing of relevant factors could be continued at length, but they will all come under the already mentioned categories of natural resources, existing infrastructure and social as well as organisational and institutional factors.

Social opposition above all makes the regulatory task in the water sector extremely complex.

In the case of the cancelled concessions in Bolivia, the actors had to contend with numerous obstacles in the above-mentioned areas. Social opposition above all made the regulatory task extremely complex. Freedom from social and political pressures is crucial for the regulator if they wish to promote technical optimisation – an approach that is, however, frequently not realistic. Because of the great dependence of those affected, dealing with the water supply is a highly precarious field of activity for regulators. Added to this is the fact that poorly developed regions frequently suffer from a very unevenly distributed flow of information. Measures can therefore be perceived totally differently in varying social milieus. A poorly communicated price adjustment can undermine the process of supply stabilisation for a long time. Suppliers and regulators must be particularly cautious in deciding who to talk to in order to ensure that all affected groups are properly informed. When setting prices for services, the time component plays a key role in addition to the amounts themselves; while the operator in Cochabamba was under time pressure to adjust the pricing structure, it underestimated the impact of a large price hike directly after taking over. It thereby gave credence to people's belief that it would exploit the commercialisation rights it obtained from the government through the concession contract.[17]

Conclusions

How can the problems relating to water policy be addressed? In Latin America, different countries, regions and communities have developed a wide range of measures. Which of them will be suitable in any one case of course depends on the individual circumstances. But it is possible to define a number of governance standards without which stable water supply management is not conceivable.[18]

Against the background of the examples described above, it is possible to derive several recommendations for sustainable water governance. Where resource availability and infrastructure are concerned, there should be regulations in place to determine who will be allocated rights of use for water reserves in what way, how far private autonomy should extend and which areas should be subject to regulation. The regulator itself should be independent and separate from the other actors. It should be equipped with the necessary competences to be able to make decisions. The assignment of responsibilities to the administrative entities should ideally be made on the subsidiarity principle so as to be able to take the social situation into account most effectively.

There must also be clarity for the actors as to who is responsible to pay for investments, for what period of time the supply agreements apply and how the pricing will be regulated. Crucially, there must be clearly regulated ownership rights in place, which would have to be transferred to the state in conflict situations if necessary. It is important that the scenarios are described in as much detail as possible ahead of any investment projects.

As regards the design and quality of institutions, measures should be put in place to achieve maximum transparency and prevent corruption. For any potential conflict, a catalogue of clearly defined processes to resolve conflicts of interest is very useful. A successful resolution would depend crucially on the neutrality of the arbitration bodies.

The guidelines for a stable water supply must be devised in collaboration with the involved partners. Poor coordination – between national, regional and local levels – is often due to a lack of clarity regarding the distribution of the competences between the actors. This can be counteracted by various means, including, for instance, multi-sector conferences involving people from the national and subnational levels or from the private and the public sector, interdepartmental coordination groups, or the amalgamation of administrative units. The instrument of multi-sector conferences is particularly popular. Over half of the surveyed OECD countries in Latin America use this instrument to determine the necessary starting conditions and to coordinate their measures. It is therefore the most frequently used measure.[19] On the basis of the above-mentioned determining factors, objectives can then be identified on which the actors involved in the water supply sector have to agree in order to be able to guarantee a stable water supply, whoever will manage it. Only once a consensus has been found will it make sense to renegotiate and come to a regulatory decision on placing the management of the water supply into private or public hands. This decision will depend on economic policy premises and regional idiosyncrasies, which may call for private engagement as well as commercial activity by the state. But the development of reliable governance guidelines must be given priority.

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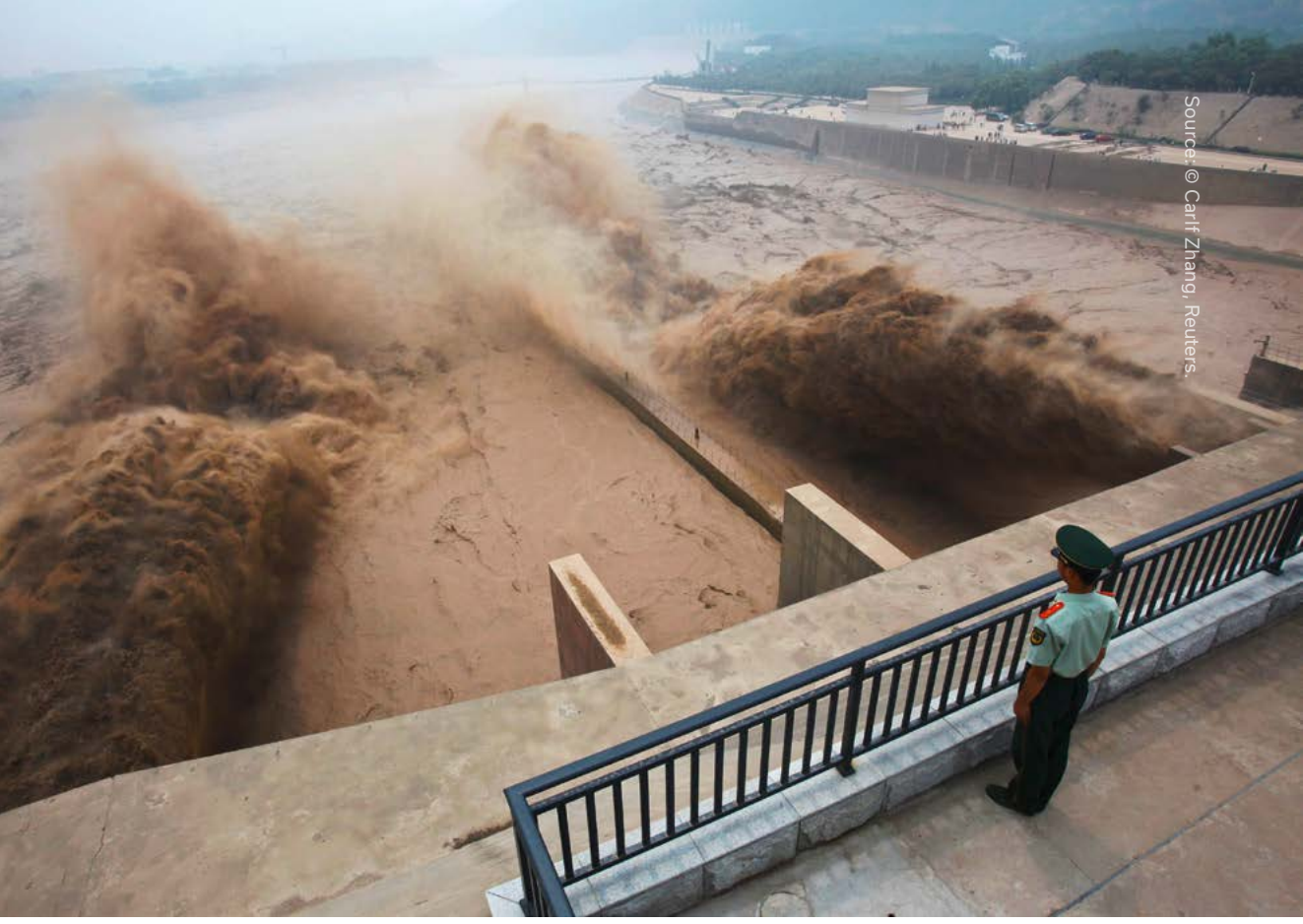
Source: © Carlf Zhang, Reuters.

Water. Power. Conflict.

Coercive Water-Diplomacy

Playing Politics with the Mekong

Rabea Brauer/Frederick Kliem

In Asia, water has become a critical non-traditional security issue. Reduced water flow, resulting from Chinese hydropower dam construction, threatens food and socio-economic security. Simultaneously, China gains a potent political instrument with the ability to "turn off the tap". The Mekong demonstrates the region's need for rules-based institutionalised water cooperation.

Thus far, fresh river water is an infinite resource as the natural hydrological cycle runs its course on earth. Rivers are integral to ecological and socio-economic activities in the regions they supply. And often, they are the most important constituent of food, energy, and economic security. However, this article intends to demonstrate by specifically highlighting the case of the Southeast Asian Mekong River that reality often differs. Occasionally, trans-boundary waterways are under de facto control of a single state that happens to occupy the geographically most advantageous position of being a stream's upmost country. The intention of this article is to give specific insight into Chinese hydropower-infrastructure development along the Mekong and the ecological, socio-economic, but most importantly, geopolitical ramifications. By doing so, the article illuminates two interrelated conundrums: questions of non-traditional security in Asia and Chinese assertiveness across all political and economic arenas in the Asia-Pacific.

"Whiskey Is for Drinking. Water Is for Fighting Over."[1] – Asia's Troubled Waters

Chinese conduct as the rising great power in the Asia-Pacific region has become one of the most critical issues in regional, perhaps global politics. The way China designs its ascendance, revisionist or accommodative of the present post-Cold War regional order, will be the decisive factor as to whether or not the region is heading for instability and conflict. In Asia, Chinese attempts at rearranging this essentially stable order so as to enhance its own control capabilities, materialise with and within water. Thus, water has become highly politicised and the one dominating security arena in East Asia.

When one thinks of water and China, one first thinks of the South China Sea (SCS). But there is more to Asia's troubled waters. At first blush, there seem to be very few concrete parallels between the Mekong River and the SCS. And yet, both are part of the same geopolitical strategy, as both reflect China's growing ambition to assert itself in the region and to restrain its neighbourhood; not exclusively, but most obviously, Southeast Asia. Questionable Chinese conduct in the SCS has received broad attention in recent years and it is here where Beijing's revisionist tendencies are most palpable. Individual claimants quarrel over territory, military bases and fortifications, and access to resources. Despite U.S. military backing and international diplomatic and juridical support, smaller Southeast Asian countries have not been able to balance increasing Chinese assertiveness, relative power gains, and strategies of dividing its neighbourhood within international institutions.[2] Reminiscent of the SCS, nations affected by China's "coercive water-diplomacy" along the Mekong streams have very little capacity, yet, to answer the 'Middle Kingdom'.

The "Mother of Water" – A Unique Ecosystem and Lifeline to Millions

Southeast Asia's longest river, the Mekong, is a trans-boundary waterway, crossing six countries, and consists of an upper (China and Myanmar) and a lower basin (Laos, Thailand, Cambodia, Vietnam). Originating in the Tibetan Highlands, it cascades over some 4,500 kilometres through southern China, before reaching its delta in Vietnam, where it issues into the South China Sea (SCS). Along the way, the Mekong crosses five Southeast Asian countries and is fed by numerous tributaries in both basins.

The stream's Thai name, *Mae Nam Kong*, translates into "Mother of Water", symbolising the Mekong's importance. Its ecosystem corresponds with and depends on seasonal tides. The flood season is critical to the sustainability of the environment and agricultural activity in the lower basin. During dry-season, snow-melt from China contributes to over 24 per cent of the total flow. In particular during monsoon, it floods the Indochinese wetlands and supports a biodiversity second only to the Amazon. Despite significant seasonal variations, the Mekong is a major trade route and vital to all riparian countries' economies. Wetland habitats rely on monsoon floods as the aquatic life migrates between lakes, such as the Tonle Sap in Cambodia, during the dry season, and the nutrient-rich grounds in the wetland plains during the wet season.[3] The Mekong and its unique ecosystem is therefore a lifeline not only for natural wildlife, but also for some 60 million river dwellers. In other words, all riparian countries have at least one thing in common: a significant stake in the river's functionality.

Fig. 1: Mekong and Surroundings

Source: Own illustration based on Natural Earth ⓒ.

In Cambodia for instance, freshwater fisheries are estimated to account for seven to twelve per cent of gross-domestic-product (GDP) and are the basis for food security and nutrition, accounting for two-thirds of Cambodia's protein consumption.[4] Southeast Asia's largest lake, the Tonle Sap, is fed by the Mekong and has been the main source for fish supply in Cambodia since the times of the Angkor Kingdom. During the dry season for instance, the lake quadruples in size, swallowing ice-melts from the Tibetan Highlands to keep the lake waterlogged via the Tonle Sap River. The Mekong is responsible for a unique ecological phenomenon, where this tributary changes direction six-monthly. Man-made modifications in the upper Mekong basin threaten this highly unique ecological process and have already irreversibly impacted this complex, but vital ecosystem.

Similarly, Vietnam has a rice-based agricultural sector, occupying over 80 per cent of the arable land. The Mekong Delta is Vietnam's "rice-bowl" and accounts for over half of all Vietnamese production. Rice provides over 50 per cent of total domestic calorie consumption. In terms of trade, the delta supports the country's status as the fifth-largest rice producer in the world and a top-five rice exporter.[5]

Taming the "Mother of Water" – Damming the Mekong

Approximately half of the Mekong lies on sovereign Chinese territory, where the river is called *Lancang*. Here, it drops over 4,000 metres in height from the Tibetan Plateau to Yunnan Province, making the downstream a perfect

source for hydro-electricity. Flowing water creates energy that can be harnessed and turned into electricity via electricity-generating turbines in hydropower plants, propelled by controllably releasing water from reservoirs through river dams.

Over the past two decades, the Chinese government has either directly constructed or financed numerous large-scale hydropower dams along the Mekong mainstream and tributaries on both Chinese and foreign territory (mostly in Laos, Cambodia, and Thailand). At the time of writing, eight mega dams had already been completed on the Chinese mainstream alone, and more than 20 are under construction or in the planning stages. Laos, and soon Cambodia, too, will be highly congested in terms of hydropower infrastructure.

Hydropowering Towards Sustainable Development?

Dam construction is a double-edged sword. Developing hydro-electricity offers significant development potential for poorer countries in Indochina, and governments understandably intend to capitalise on their geographic position along the river-system. Increasingly, they satisfy their own energy needs with comparatively cheap hydro-electricity, and even go beyond that in order to export overproduction. In particular Laos, one of the least developed countries in Asia, regards thus generated earnings as a means to leapfrog development and reduce poverty. Through its favourable geographic position and large, mostly Chinese financed hydropower dams, Laos intends to become the "battery of Southeast Asia".[6] Energy generation projects accounted for almost half of the country's total incoming foreign-direct investment (FDI) in 2015, with China being the main contributor.[7]

In Cambodia, Chinese state-owned enterprises (CSOE), backed by Chinese-spawned financing institutions, invest heavily, capitalising on their reputation for delivering infrastructure projects without tiresome delays over human-rights or environmental concerns. Hydropower is one of the main targets, as the humongous *Lower Sesan 2* dam exemplifies. The CSOE *HydroLancang* plans to complete the dam by 2019, despite serious environmental concerns as well as some 5,000 displaced villagers. So far, the country's long-term leader Hun Sen has been utterly complacent and continuously sells large stakes in Cambodian infrastructure development and Cambodian soil to a number of CSOE.[8]

Moreover, energy demands across Asia are ever growing, and so is the need for renewable energy sources in lieu of fossils. China is the world's leading country in renewable electricity production and is likely to even extend this lead in the medium-term future. Hydro-electric power already is the largest component of China's renewable energy portfolio, second only to coal in overall production. As the energy demand rises and the impact of climate change becomes ever more apparent, investing in hydro-energy and accelerating economic development are laudable causes – even if question marks over dubious financing remain.

Not All Is Well Along the River

Such positives are offset, however, by mounting evidence as to the significant negative ecological and socio-economic impact of the Mekong dams. Constructions raise questions pertaining to future food and environmental security. According to environmental NGOs, large damming projects already have an adverse domino effect, impacting wildlife, altering flow patterns and sediment delivery (e.g. Tonle Sap), leading to shoreline erosion and increasing salinization of agricultural land.[9] Surprisingly, Laos and Cambodia have put very little effort into determining whether their approaches are sustainable development strategies.

Ecological harm aside, the political component is as worrying. Unintended consequences include upsetting regional neighbours, most of all, downstream countries such as Vietnam, who directly suffer the consequences, but also the wider region within the framework of the Association

of Southeast Asian Nations (ASEAN). Cambodia and Laos already are at the executing end of China's "divide and rule" tactics in Southeast Asia, whereby Beijing relatively successfully manages to sow the seed of discord within ASEAN, in order to prevent collective regional action; mostly by virtue of being their main source of foreign direct investment (FDI).[10]

Expert Brahma Chellaney shows that China's hydro-engineering projects and Mekong-damming already have a direct bearing on both quality and quantity of river water flows to Southeast Asia.[11] Beijing now has the potential to use its position to pressure downstream riparians into compliance, even subjugate them. At the ASEAN Summits in 2012 and 2016, Cambodia and Laos respectively capitalised the regional grouping's consensus principle and held ASEAN decision-making processes hostage by de facto vetoing the resolution of other members (in particular Vietnam) to issue the usual Joint Communique, which was supposed to include references to Chinese aggression in the SCS. This exemplifies how Beijing fragments an increasingly incoherent ASEAN. Directly constructing or financing hydropower dams in Laos and Cambodia adds to China's "divide and rule" toolbox. There are several strategically placed dam projects in both Laos and Cambodia, such as the Lower Sesan 2, which effectively cut out Laos and Cambodia from potential water flow disruption and isolate Vietnam as the one country that can be targeted.

China is the one country that plays politics with its water-control capability.

Thus far, China successfully publicises hydropower construction as a means for economic development, renewable energy policy and carbon reduction, fitting well into its Belt and Road Initiative (BRI). Of course, China is not the only country to manipulate the river's natural flow. Laos has also been criticised for dam construction and Thailand unilaterally diverted the river in order to support Thai farmers. Nor is political leverage over other countries the main reason for damming projects. But China is the one country that does so with more than its own economic development in mind; to play politics with water-control capability. Beijing is able to literally "turn off the tap". As regional tensions in various political arenas grow, in the SCS for example, so does Laos' and Cambodia's value to Beijing's regional power-positioning. The "coin's flip side" may become ever more apparent as Chinese fresh-water water control capability further pressurises downstream countries and turns into a forceful political instrument.

Vietnam May Feel the Real Force of Coercive Water-Diplomacy

Certainly, all aspects affect much of the Indochinese Peninsula, but the brunt of it is most profoundly felt in Vietnam. Geographical fate determines that a vital mighty river that knows no human drawn boundaries flows downstream, from China all the way to Vietnam. Depending on how far up or down on the Mekong one country is located, such is its influence over the further flow. Geographical fate also determines that Vietnam sits lowest along the Mekong, where the river finds its delta – a jackpot once, ill fate now.

In southern Vietnam, the ecological and socio-economic consequences of waterway manipulation are most severe in terms of human and economic costs. It is also policy-makers and diplomats in Hanoi that fear and feel Beijing's coercive water-diplomacy most and where awareness as to the consequential political vulnerability and potential spill-over effects of disputes into other international arenas is highest. Sino-Vietnamese relations are riddled with entrenched, historical antagonisms and mutual distrust. There are deep anti-China resentments in the public domain, which are occasionally politically utilised and do have the potential to upset domestic stability. Such domestic populist opposition regularly forces Hanoi to react strongly on the international scene, thereby potentially furthering a complicated and already tense relationship.

Closed tap: By building dams, China factually controls the fresh water supply of the states that are located downstream. Source: © Pring Samrang, Reuters.

In 2016, millions of lower basin dwellers were affected by the worst drought Southeast Asia had seen in many years. Dramatically low Mekong levels caused fresh-water shortage. In particular in Vietnam, limited supply had devastating effects on rice-agriculture, as the depleted delta became salinized from the SCS. In Cambodia, too, the low water level of the Mekong was keenly felt, as the Tonle Sap water level fell to a 50-year low. Beijing was quick to blame the *El Niño* weather phenomenon, but in response to a desperate request from Hanoi, it agreed to help. In an apparently benevolent act of water-diplomacy, Beijing announced it would ease fresh-water shortages by discharging massive quantities downstream from its *Jinghong* hydropower station.

China's Foreign Ministry stated that "China and Mekong River countries on the Indochina Peninsula are friendly neighbours [...] nourished by the same river. It goes without saying that friends should help each other when help is needed."[12] An alternative reading however, could argue that Beijing did not act as selflessly as it claimed. Firstly, the discharging came at no cost to Beijing. Secondly, it only slightly relieved an ecological disaster that was at least partially caused by Chinese dam construction in the first place.[13] Most of all, the apparently benevolent discharge reminded Hanoi of just how much influence Beijing has over their economic, ecological, and socio-economic security.

While it would be unfair to allege exclusively ulterior motives, the *Jinghong* dam discharge underlined the power Beijing wields over a shared trans-boundary resource and was a stark reminder of the extent to which downstream riparians depend on Chinese goodwill for their economic and humanitarian wellbeing. Reminiscent of the aforementioned Beijing-influenced ASEAN disagreements, Vietnam got a direct taste of Chinese influence on their

Economic power China: The desired intensification of economic relations around the Mekong will not be possible without Beijing. Source: © Reuters.

political affairs via water-control capabilities. This leverage can be expected to add to Beijing's strategic leeway in all matters of regional concern. It is not implausible to reach the conclusion that Beijing could easily further their strategic ends via coercive water-diplomacy.

Managing the Mekong?

Beijing is generally reluctant to ratify international treaties. Correspondingly, it has refused all international water-management agreements, such as a 1997 United Nations treaty.[14] In 1992, the Asian Development Bank (ADB) created the Greater Mekong Sub-region (GMS) as the first locally designated project for wider Mekong governance. The GMS brought together all six riparian states into one management programme to enhance economic relations. Via ADB funding, the GMS intended to implement development projects across a wide range of industries for socio-economic development. Security and political questions were not on the agenda.

Another well-known management body is the Mekong River Commission (MRC). The MRC is the implementation body of an agreement between Vietnam, Thailand, Laos, and Cambodia. Despite recent structural reforms, including improved financing and operative effectiveness;[15] it remains bereft of any enforcement powers, is chronically underfunded, and excludes the most important country, China. The MRC is a body strong on ecological and socio-economic research, but in light of its structural limitations, unlikely to bear any influence to speak of in this case.[16]

The MRC has recently been pushed aside by a Chinese spawned alternative, the Lancang-Mekong Cooperation (LMC). The LMC was inaugurated in 2016 and unlike the MRC, includes all six riparian countries. With the LMC, China has convened an institutional alternative, furnished with some 11.5 billion U.S. dollars for development projects, marginalising the underfunded MRC.

From a Chinese perspective,[17] adding to existing multilateral frameworks fits into the wider BRI, complementing infrastructure FDI in Southeast Asia. But institutional rearrangements also cement China's ascent on the economic and political theatre in the Asia-Pacific. Just like the new Asian Infrastructure Investment Bank or the planned Chinese maritime tribunal, the Chinese initiated LMC implicitly intends to replace, not complement, existing mechanisms.

Such critical reading sees the LMC as yet another Chinese measure to revise, not join, the established rules-based superstructure by devising amply financed homemade institutions and regimes with the intention of creating their own version of order. It was hardly coincidental that the Jinghong water discharge came right before the inaugural LMC summit. This act of water-diplomacy supported Beijing's inaugural negotiation position over new LMC river-management rules. The Vietnamese CEO of the MRC, Dr Pham Tuan Phan, argued that the LMC was "yet another framework for the Mekong", bringing their number up to 15 overlapping mechanisms. Although it was not clear how the LMC would see its future role, it had communicated that it would "build on, not duplicate the MRC." But it is already evident that there will be no role for existing mechanisms within the LMC and the financing makes it de facto the strongest instrument.[18]

A "Fresh-Water" Version of the South China Sea?

To be clear, the situation in the Mekong is nowhere near the level of militarisation and unilateral expansion in the SCS. It is also a very different form of conflict. And yet, this article has argued that worrisome commonalities within a wider Chinese strategy of incremental regional expansion in terms of both relative power and institutional hegemony exist.

In this light, Mekong management is important for at least two reasons. For one, the region's future is likely to be characterised by greater industrialisation, consumption, pollution, resource scarcity, and unpredictable environmental changes. Second, hydropower-damming the Mekong adds to China's already asymmetric power advantage vis-à-vis its Southeast Asian neighbours. Ecological consequences aside, manipulation of natural water flow is by itself an enormous lever, to be utilised almost at will in times of dispute.

Both at the Mekong and the South China Sea, China aims for a gradual establishment of a sphere of influence in Southeast Asia.

China has a concise plan. The Mekong is not the scene of clashing of militaries, but of gradual creation of a Chinese sphere of influence in Southeast Asia. Within a sphere of influence, the hegemonic state can influence policy choices of other actors without using military coercion.[19] Coercive water-diplomacy and hydropower FDI are new foreign policy tools for Beijing. This provides de facto veto power over foreign activities, which may be conflicting with Chinese national interests, while staying just shy of escalation.

On the other end, the downstream countries have unfortunately no plan at all. Policy there is devoid of long-term strategic thinking, leverage, and most of all of multilateral cooperation. In particular Vietnam is apprehensive that Chinese hydropower infrastructure will not only be detrimental in a socio-economic and ecological sense, but also allow China to further dominate Southeast Asia by isolating and pressuring individual ASEAN members. Hence, adding to the great risk to food and environmental security is the thus gained ability to dictate terms of future regional rules and to further upset institutional coherence in Southeast Asia.

So far, China has been acquiescent and released water when requested. The region has also by and large responded positively to Chinese spawned institutions and investment initiatives. But Beijing has scored a political point by demonstrating its leverage, linking dam development directly to its BRI, and also set up institutions so as to create its own regional rules. One must be mindful, however, that states do disagree occasionally. Given Beijing's inclination towards unilateralism, as forcefully demonstrated in other international arenas, China is likely to use coercive water-diplomacy to get concessions, perhaps even submission of governments in cases of dispute, e.g. territorial disputes in the SCS.

Institutional Reset towards a Rules-Based Management System

Hydropower is a cost effective source of renewable energy, and in a region where demand will only increase, it will continue to add to the non-fossil energy arsenal. It can also have a potentially transformative impact on developing nations and allow them to leapfrog development towards becoming middle-income economies.

This article highlighted the importance of the Mekong for ecological and socio-economic security, but even more so for multilateral cooperation in Asia. Yet, even at the level of large hydropower projects, there is no effective coordination among riparian countries. The cacophony among the myriad of 15 overlapping, fragmented institutions, the Mekong region is in desperate need of institutionalised multilateral water cooperation. It also needs a code-of-conduct for effective and non-discriminatory dam operation.

Human security hinges on the wellbeing of the Mekong, making the river arguably even more critical than the SCS. Therefore, in the absence of a rules-based order, coercive water-diplomacy is a potent, potentially dangerous political instrument that must be harnessed by institutional binding, lest probable spill-over affect other areas of diplomatic and economic relations. The ecological impact is equally threatening. Hence the region's need for genuine dialogue among all stakeholders within one cohesive forum.

Some have suggested reviving the almost faded GMS.[20] In theory, this is a sensible suggestion, as, unlike the MRC, the GMS programme includes all six riparians and is financially independent of China. This is unlikely to be successful, precisely because it is independent from China. Beijing is unlikely to call it a day for the LMC. Again in theory, this makes the LMC most realistic, but legitimate questions over the equality among members immediately arise. For its being a success, China would need to demonstrate willingness and readiness to be a reasonable, responsible citizen of the regional community.

With its aggressive water politics, China risks alienating the region further.

On a positive note, it is not unthinkable that the region can work together within the LMC towards a transparent, rules-based Mekong management system. China can have no long-term interest in simply coercing its neighbours into acquiescence. With aggressive and at times manipulative water-politics, China risks antagonising the region further and may even prompt an alliance against its inevitably ever-increasing regional influence. Instead, cooperation over the shared Mekong within the LMC represents a great chance for China to buttress claims as to its peaceful rise and the "community of common destiny" President Xi frequently speaks of.[21] Moreover, apart from geostrategic considerations, for China's BRI to be a success, Beijing has a genuine interest in the region's economic and ecological wellbeing. For its part, Southeast Asia in general must continue attempts to bring Beijing to the negotiating table and convince China that its role as a responsible stakeholder will be integral to its ascent.

In this scenario, the LMC could function as a comprehensive multilateral track-1 platform, involving all stakeholders on equal terms to jointly manage a shared resource. For Beijing, this would be an appropriate micromanagement tool within the wider BRI project. For downstream riparians, this offers a chance to establish rules-based reliability and water-security without jeopardising beneficial hydropower development.

There is also room for track-2 initiatives via the MRC, which ought to focus on research and provide scientific input, informing binding decisions within the LMC framework. MRC officials have clearly articulated a desire to join forces with the LMC.[22] It could be an advisory body as to the river's health, ecological and socio-economic consequences of infrastructural development, and a generator of new ideas. This represents the best feasible outcome. And, in the absence of a mitigating actor, such as the U.S. Navy in the SCS, it represents the region's only chance to peacefully manage the "mother of water" on equal and lasting terms.

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Other Topics

Rwanda as a Model?

On the State of Development in Rwanda and the Country's Significance as a Role Model for Africa

Peter Molt

Stemming the flow of migrants from Africa requires new initiatives to promote economic development in Sub-Saharan Africa. The challenge is to fight the causes of flight and open up prospects for the African youth in their own countries. Rwanda is seen as a prime example of successful development, in part due to large-scale international support. Is its development concept truly pioneering and transferable to other countries?

After the large flows of refugees from Syria, Iraq and Afghanistan, the concern is that similar migrations to Europe are likely to emanate from Northern and Sub-Saharan Africa in the near future. To fight the causes of flight, demands are being voiced for new initiatives to promote economic development in Sub-Saharan Africa. Despite international organisations and industrialised countries having provided substantial development aid, many of the African countries still suffer from a lack of political and economic stability and consequently future prospects for the rapidly growing numbers of their young people. In Libya alone, over a million migrants from Sub-Saharan Africa are thought to be waiting for an opportunity to flee across the Mediterranean. Taking steps to try to stem the migrant flows is therefore high on the agenda of German and European foreign and security policy. It will take sustainable reforms that not only result in substantial economic growth but also in as much employment as possible to reduce the incentives for people to consider migration to Europe.

Many international and national development experts and politicians refer to Rwanda above all as a prime example of efficient development policy in Sub-Saharan Africa. The only reservations mentioned have to do with its authoritarian system of government. That is not, however, seen as an obstacle to the country's further development as the government is believed to pursue realistic goals in an efficient manner. Rwanda is considered a model developmental dictatorship.[1]

The main indicators for this positive evaluation are the growth of the gross national income (GNI), the per-capita income (PCI), the change in the poverty rate, and the country's overall ranking (163 out of 186) in the Human Development Index (HDI). All these indicators are positive, as is the one for migration since there has been no significant emigration to date despite high demographic pressure.

Restoration of the Rwandan State

Initially, the main goal of the Rwandan Patriotic Front (RPF), which had emerged victorious from the civil war in 1994 under the leadership of today's President Paul Kagame, was to consolidate its power and establish a new political system. Financially, this was made possible through massive economic reconstruction aid provided by international organisations, the EU, the UK, the Scandinavian and German-speaking donor countries and the USA; that aid was particularly generous because of the genocide perpetrated towards the end of the civil war. After the dictator Mobutu had been overthrown with substantial support from the Rwandan army and L. D. Kabila had taken power in the DRC (Democratic Republic of the Congo), Rwanda's leadership elite was hoping that in return its country would benefit from the economic potential of the DRC. However, it fell out with Kabila as early as 1998. During the resulting regional conflict, considerable economic resources in eastern Congo remained under Rwandan influence. Even after the peace accord in the DRC, Rwanda was able to avail itself of

considerable revenues from the mining of cassiterite, wolframite, coltan, gold, etc., in later years also via rebel movements under its control. These interventions came under increasing criticism from the donor countries. They were finally brought to an end by an extended mandate for the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) and by sanctions imposed on Rwanda by its major donors.

Vision 2020

It was not until the Rwandan government encountered mounting difficulties with its Congo policy that the development strategy entitled Rwanda Vision 2020 gained in importance, which had been devised in conjunction with the UN Millennium Development Goals (MDG). The purpose of the programme is threefold. It is meant to overcome the deep rift in Rwandan society through new common goals and prospects, motivate the donor countries to provide generous support and offer guidance for the envisaged far-reaching socioeconomic reforms.[2] The main goal was defined as the creation of a knowledge-based economy[3] and of a service hub of international importance so as to foster Rwanda's development into a middle-income country that would become independent of external development aid. The key pillar is to be a strong and efficient state with a productive and market-oriented agricultural sector, a competitive private economy focusing on services, effective education and healthcare systems and a modern infrastructure.

Initially, international experts were not convinced that the programme had significant chances of being realised. Meanwhile, they have been impressed by the fact that the transformation has been successful in many areas. The poverty rate among the population has decreased, primary school attendance is approaching 100 per cent, the number of university students has risen to 87,000. By 2013, the public health insurance scheme covered 90 per cent of the population, and annual population growth had decreased to 2.6 per cent.[4] While it must be acknowledged that this progress was made possible to a large extent thanks to international reconstruction and development aid, the implementation by the Rwandan administration has been relatively efficient by contrast with other countries in Sub-Saharan Africa. Special efforts were made to meet the conditions imposed by the international development organisations, particularly the demands for rigorous measures to fight corruption and mass poverty, improvements to the social conditions, and administrative efficiency.

Agricultural and Land Reform

Initially, the new political elite showed little interest in agriculture although it provided over 80 per cent of the population with their livelihoods. After the failure of the Congolese adventure, it became clear that the development goals could only be achieved if the country's agriculture was modernised. Greater productivity was essential for feeding the rapidly growing population and for the foreign currency revenues from exporting cash crops.

The main problem of Rwandan agriculture is the scarcity of arable land due to population density and its uneven distribution. Almost all of the 1.6 million hectares of suitable land are cultivated in the form of small farms. 24 per cent of farms with an average size of two hectares cover some 70 per cent of the country. A further 30 per cent with an average size of 0.76 hectare own 24 per cent of the country. The largest group, 36 per cent, cultivates just six per cent of the arable land with an average size of 0.11 hectare. 11.5 per cent of rural households no longer own any land.

As one of the prerequisites for the reform, a scheme to register the entire land ownership was started in 2008 with aid from Germany. The traditional rights in land were replaced by tenure rights; the state became the owner of the arable land and granted a type of leasehold for hillside land parcels for 99 years to small farming businesses corresponding to the previously existing rights in land. The titles can be traded

in order to facilitate a land market and loans. However, there is a restriction on dividing land into parcels covering less than one hectare. Valley floors and alluvial plains remained the property of the state and were leased commercially.

The systematic registration of the entire land use was completed in 2013. The land right arrangements enabled the setting up of a Crop Intensification Programme (CIP), intended to transform the subsistence agriculture into a commercial agriculture. The goal is a substantial increase in productivity. In terms of techniques, the measures that are put in place represent conventional solutions. Gradually, small farms are integrated more or less voluntarily into production cooperatives or collectives, in which they jointly engage in the sowing, cultivating, fertilising and harvesting of crops chosen by the Agriculture Board (besides the export crops of tea, coffee, and pyrethrum the staples of maize, wheat, rice, beans, potatoes, manioc and bananas). These collectives receive improved seeds, pesticides and herbicides, and artificial fertilizer. Where appropriate, the land is terraced and erosion protection measures are put in place. People are required to give up their individual huts and move into village settlements.

Reports about the results of the reform efforts to date indicate progress, but remain vague on some important details. Thanks to the use of chemical fertilizers and improved seeds, agricultural output had doubled by 2012. The conditions for increasing production have since been improved further. It is reported that 80 per cent of fields at risk of erosion have been protected, 40 per cent of the fields on sloping land where terracing was possible have been transformed and in part equipped with irrigation systems. The soil quality of the terraces has been improved through the use of lime and manure. Thanks to the "One Cow per Poor Family Programme", 47 per cent of farming households have at least one cow and 53 per cent at least one goat. Furthermore, the area of cultivated land is to be increased by five per cent, namely by converting marshland into irrigation systems enabling two harvests of vegetables and rice and by terracing even very steep slopes. Measured by the produced volumes of crops, the reform has been extremely successful. Currently, it is thought that 40 to 50 per cent of Rwanda's land area is cultivated under the CIP; this percentage is to rise to 70 by 2020. At the same time, the proportion of people working in agriculture is to reduce from the current figure of around 70 per cent to 50 per cent of the working-age population

It has become apparent that Rwanda's agricultural reform contains considerable risks.

However, it has since emerged that the programme does contain some technical and economic risks. As the World Bank stated in its last report,[5] the structural shortcomings remain. The trend towards monocultures and the rise in livestock numbers have increased the threat of pest infestations and diseases. Criticisms focus in particular on the fact that the small-scale farmers have lost virtually all control over what and when they sow or plant, how they cultivate their fields, what inputs they must use, what they must pay for them and at which price their produce is sold. By law, all these decisions are taken by the management of the production collective or cooperative, which in turn receives its instructions from the technical services and the local administration whose employees have vowed to the president in an *imihigo,*[6] i.e. personal contract, that specific planning targets would be achieved. The farmers themselves can be punished by the local administration and the police for violations of the constraints and stipulations by fines and imprisonment and ultimately by withdrawal of their land title.[7]

Depending on the perspective, the programme is essentially a form of land grabbing by the state or a controlled commercialisation of agriculture based on command economy principles, where

Labour market: Also due to high population pressure, the envisaged shifting through the reduction of the share of the workface engaged in agriculture will only be partially realised. Source: © Finbarr O'Reilly, Reuters.

farmers now only possess formal land rights. Field studies conducted in recent years show that this top-down, coercive system is encountering problems. Many small farmers have only adopted the modern techniques in part. The efficiency and effectiveness of the advisory services have often been inadequate. Central programme directives and the decentralised implementation of the programme may also enable a monopolistic exploitation of the farmers through the enforced purchase of the inputs on the one hand and local connections between traders, party officials and general administrative staff on the other. While small farmers in Rwanda used to be able to make themselves heard through clientelist networks if they had

a complaint, as still happens in other African countries, and this afforded them a certain level of protection of their interests, they are now at the mercy of the responsible local representatives of the state and of the RPF.

Why was the Rwandan government able to push through the programme without serious opposition from the farmers? The answer has partly to do with Rwandan tradition. Even under the precolonial monarchy and subsequently under Belgian colonial rule, the farmers had been "subjects", and they mostly retained this mentality in the post-colonial country. This pre-existing mindset of submissiveness to powerlessness was reinforced by the events of the 1990s: namely massive flows of refugees to the neighbouring countries, people returning with the stigma of involvement in genocide, and the restorative justice pursued by the new government.[8] Consequently, farmers have allowed themselves to be integrated into the CIP system without protest, while smallholders, day labourers and the landless depend on government-run employment programmes, microcredit programmes, health insurance, etc.

Labour Market Policy

The commercialisation of agriculture is inevitably affecting the labour market. According to government estimates, the aim of reducing the number of people working in agriculture to 50 per cent of the working-age population means that 200,000 new jobs need to be created each year. However, as this figure is already short of what will be needed for the strong cohorts of the current population under sixteen and there are at least a further 350,000 people who currently still work in agriculture expected to join the number of job seekers plus some 430,000 urban unemployed, it is unlikely that the planned restructuring of the labour market will be successful.

Although the modern private sector benefits from the government's infrastructure projects, it is still too small to satisfy such a large demand for jobs. There are also limits to the potential of encouraging informal employment through microfinance. The same goes for the demand for simple services by the upper and middle classes. The development of modern information, communication and financial services is in its infancy, and tourism, while very lucrative, has limited potential. Mining too will not provide many more jobs. Construction is the only sector where there is an increased demand for labour. But its boom

is mostly state-funded and will therefore ultimately come to an end. Then, the only option for the Rwandan labour market is labour-intensive industry and skilled trades. But there are hardly any examples of those types of jobs emerging.

The goals of Vision 2020 will probably only be achieved to a very limited extent where the labour market is concerned. That means that there are likely to be well over two million unemployed or underemployed young people. The government will try to keep most of them in rural areas and small towns, but the pressure to move to the metropolis of Kigali or to attempt illegal emigration will increase.

Financial Problems

Another challenge has been the funding of the state administration and infrastructure. Rwanda received substantial reconstruction and development aid after the 1994 genocide, 8.5 billion U.S. dollars from OECD states alone. Rwanda is one of the countries receiving most aid worldwide in relative terms, i.e. per capita of the population.[9] By means of clever negotiation, the government succeeded in persuading the donors to provide a substantial part as budget aid. This allowed the government to limit the country's large budget deficit resulting from its ambitious infrastructure projects. But Rwanda's high dependence on foreign aid remains, and this also applies to the balance of payments and balance of trade. The main export commodities are still tea, coffee and mining products, together making up approximately 45 per cent of all exports. However, the volume of imports, including food, was roughly three times the volume of exports in 2015. Of course, this affects the balance of payments. The transfers from abroad – predominantly development cooperation funds and some direct foreign investments – cover less than half of the balance of payments deficit. Consequently, foreign debt is rising. However, as Rwanda's entire debt was written off in 2006 the amount of public debt is not yet at a dangerous level, but its rapid growth is cause for concern.

Rwanda as a Development Model?

The Rwandan government will encounter mounting problems over the coming years. The World Bank fears that economic growth will slow down. This still depends on state interventions. The completion of the delayed major power grid projects and the expansion of the Kigali Convention Centre and the further expansion of the new agriculture structure are currently still fuelling economic growth. Once this phase comes to an end, it will become apparent to what extent the high dependence on foreign development aid will have reduced, whether the country will be capable of financing its social projects from its own funds and whether it will have achieved the move into the category of a middle-income country.

There are some serious doubts on that score. The success of the Kigali Convention Centre and lucrative tourism – both important potential sources of foreign currency revenue – will depend greatly on stability in the region. But this is set to come under serious pressure in the next few years in three of the four neighbouring countries. Burundi is suffering from an open constitutional crisis, massive oppression of the opposition, civil society and the free media. The danger is that civil unrest can flare up at any time. In the DRC, the incumbent president has been preventing the elections stipulated by the constitution since the end of 2016 and it is only a question of time before the population sets against this glissement (slippage). In Uganda, the end to the rule of President Museveni, which has lasted for over 30 years, could result in political turbulences.

However, even if there is no disruption from outside, a self-sustaining development process is unlikely. The difficulties with the CIP and land consolidation have already been mentioned. Another issue to be highlighted relates to the increasing problems of the food supply as the population keeps growing, albeit at a slower pace. Other important sources of income, such as the export of minerals, coffee and tea, are limited in terms of production volumes and

suffer from fluctuating prices. Consequently, the dynamics of the Rwandan economy will continue to depend very substantially on a public budget financed by high international subsidies or loans. Whether the Rwandan government will succeed in convincing the major bilateral donors of the USA, the UK and the EU member states to continue providing subsidies and loans in the required amounts will be down to political decisions. While Rwanda is not one of the new key countries in terms of the migration issue, the most important donors will most likely not want to give up overnight on a showpiece that they have supported for decades, even if it is obviously not suitable to serve as a model for other countries.

Rwanda as a Model Society?

The issues affecting Rwandan development have to do with the social consequences of the transformation from an economy based on traditional subsistence agriculture to a combination of a state-controlled modern agriculture and an urban service economy. The thinking in this area has been influenced by the realisation of the Rwandan government that retaining the existing structures could no longer satisfy the basic needs of a growing part of the population. The concept for the country's future development was also influenced by the fact that the current government cannot found its legitimacy either on tradition or on democratic legitimisation and therefore relies on the promise of a new society of economic prosperity. Performing the role of a knowledge society and of an international service hub is in line with

Unrests: The political instability in the neighbouring countries – as seen here in Congo – poses a threat to the Rwandan development process. Source: © Finbarr O'Reilly, Reuters.

the interests of a partly cosmopolitan ruling elite, for which the appropriate economic, technical, cultural and academic infrastructure and educational opportunities have developed in Kigali. The members of this elite pin their hopes on scientific and organisational solutions aimed at social engineering, such as land consolidation and the CIP.

The growing proportion of the landless proletariat carries the risk of serious social upheavals in the long term.

Heading the new society is the former leadership of the RPF and its military wing, the RPA, both of which were marked by the Rwandan civil war. Below this leadership tier is a wider tier of government officials, professionals and academics, media representatives and businesspeople, many of whom lead a modern lifestyle. Below that is the tier of the lower administrative officials and the RPF, the teachers, healthcare workers, police officers, soldiers and small business owners, salespeople and office workers, etc. All in all, this upper and middle class probably makes up around ten per cent of the population.

The lower class, some 90 per cent of the population, includes people from various milieus of partly varying interests. There is thus an urban lower class comprising construction workers, factory workers, tradesmen, seasonal labourers and domestic staff. The small-scale farmers with at least 0.75 hectare of land are the target group of the land consolidation. Below them come the smallholders, who often work an area of just 0.2 hectare, and the farm labourers with regular work.

Finally, at the very bottom, there is a large number of landless people, who do casual labour in agriculture or work on a cash-for-work basis, but which the government concept envisages working outside agriculture in future.

They do not figure in the Vision 2020, but their numbers increase by hundreds of thousands each year, most of them young people. Only some of them can actually find work. The occasionally voiced opinion that the problem of this group of people without land or employment can be solved with microcredits is an illusion considering the situation in Rwanda. Neither the knowledge economy nor commercial agriculture will provide sufficient jobs. As in other emerging countries, the solution could lie in highly labour-intensive industrialisation. But how can that be realised under the difficult geographic and demographic conditions, such as the lack in energy and raw materials, high transport costs and the low level of industrial competence? The government is hoping for direct foreign investments and has made great efforts to achieve a good ranking in the Global Competitiveness Index – without significant effect to date.[10] The only other option would be migration – but where to? In any case, a solution will need to be found. In the long term, the growing numbers of the landless proletariat carry the risk of serious social upheavals – and a definite failure of the Rwandan model.

Lessons for Development Cooperation

By labelling Rwanda a model for development cooperation, a "darling" or "shooting star", international Development Cooperation has not done itself any favours. The factors affecting structural development, lack of land, overpopulation, lack of raw materials, the landlocked location, rulership traditions, civil war and genocide, are not replicated even remotely in other African countries, maybe with the exception of the sister state of Burundi. One should not disregard the fact that Rwanda's government has devised a development strategy and embarked on major reforms and infrastructure projects, set up a relatively efficient administrative apparatus and is making somewhat effective efforts to combat low-level corruption. One must credit the leadership for putting the country's economic and social problems on the agenda as a unique challenge. But that is not enough. On the negative side is the realisation that there

are covert arrangements and practices in place behind the declarations of intent and principles promoted to the outside world in this authoritarian state[11] that don't serve the supposed goal but the aim of stabilising the power structure, granting advantages to some and discriminating against other and ultimately contributing to an explosive disparity.

What Lessons Should Be Learnt from This?

Lesson 1: Because of the security interests, which include the limitation of the causes of flight and the prevention or stemming of migrant flows, the decision to allocate development cooperation funds cannot be based solely on criteria of democratic and good governance. When engaging in cooperation with authoritarian states, it is therefore all the more important to carefully analyse the political, social and economic consequences of the particular programmes and to configure the cooperation in such a way as to avoid strengthening the concentration of power and conflict potentials.

Lesson 2: Because of the social and political dimensions and the increasing importance of development cooperation, a joint binding analysis should be conducted by the European donors at least and appropriate coordinated action taken to avoid problematic measures.

Lesson 3: The most urgent challenge in most Sub-Saharan countries is the lack of jobs affecting millions of young people – a problem that had been given low priority in the Millennium Development Goals, although it was already on the horizon 20 years ago. It was illusory even then to assume that most of the young people could be induced to stay on the rural areas even with improvements in agriculture.

Lesson 4: Replacing traditional subsistence farming by private or state-controlled modern commercial agricultural businesses or pseudo cooperatives, such as those in Rwanda, do not constitute a solution. Not only does that approach involve land grabbing, it also reduces the farmers' sense of responsibility and independence, encourages the rural exodus and international migration and increases vulnerability to climate-related and other risks.

The decision to allocate development cooperation funds cannot be based solely on criteria of democratic governance.

Lesson 5: In countries with a land shortage and an oversupply of agricultural labour, labour-intensive industrialisation is the only medium-term solution to underemployment, unemployment and a lack of prospects. The deregulation of the national economies that has taken place in Africa over the last few years has in part contributed to deindustrialisation. It would therefore be wise to examine the effects of the existing arrangements and instruments. It is to be hoped that the so-called Investment Compacts initiated by the Federal Ministry for Economic Cooperation and Development (BMZ) in collaboration with the G20 Africa Partnership can be kept free from political instrumentalisation and stifling national and international bureaucracy.

There are no signs as yet of a departure from the entrenched ways of development cooperation and of any fundamentally new initiatives. A concentration of bilateral and multilateral European development cooperation on large investment funds that would promote a labour-intensive processing industry in Africa and accept the entailed risks combined with appropriate comprehensive education measures would ultimately be more cost-effective than emergency aid and measures to fight people smugglers, advisory centres and assistance for returnees even if some losses did materialise. It would be important to open up real economic opportunities for as large a number of dynamic young adults as possible. Migration to Europe must not remain the only way for them to escape the lack

of economic prospects. Because the continent's fundamental problems had been ignored for decades, this challenge has now taken on such proportions that only large-scale solutions will have a chance of succeeding. The "Marshall Plan" for Africa that Federal Minister Müller has called for will be successful if it differs from the prototype in not being based primarily on state planning, state structures and collaborations but offering better opportunities to dynamic forces in all parts of society.

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1 Particularly among economists, Rwanda is considered a rising star, ruled by the strong hand of the enlightened dictator Kagame. In that country, agreements with the donors are supposedly not only agreed, but implemented as well. Cf. Frankfurter Allgemeine Zeitung 2016: Rising Star mit Schönheitsfehlern, 27 Dec 2016. A study com missioned by the UK Department for International Development DFID put forward the thesis that Rwanda's "developmental patrimonial regime" differs fundamentally from the "authoritarian clientelist systems". It maintained that Rwanda's government was not subject to any pressure to serve the interests of powerful clientelist systems or short-term party and voters' interests and therefore had the potential to become an agricultural success story. Cf. Booth, David / Golooba-Mutebi, Frederick 2012: Policy for agriculture and horticulture in Rwanda: A different political economy?, Working Paper 038, Future Agricultural Consortium, Mar 2012, in: http://bit.ly/2gJGje4 [26 Jul 2017].

2 Cf. Republic of Rwanda, Ministry of Finance and Economic Planning 2000: Rwanda Vision 2020, in: http://bit.ly/2f6jaCL [26 Jul 2017].

3 The concept is in line with the decision by the United Nations Commission on Science and Technology for Development that the developing countries should integrate information and communication technology (ICT) into their strategies in order to participate in the knowledge economy. Cf. The United Nations Commission on Science and Technology for Development (UNCSTD) 1997: Report 1997, in: http://bit.ly/2wbwGe2 [26 Jul 2017].

4 Unless otherwise stated, all figures from: National Institute of Statistics of Rwanda (NISR), 2015: Statistical Yearbook 2015 Edition, in: http://bit.ly/2wK3iiC [26 Jul 2017].

5 Cf. The World Bank 2016: Rwanda Economic Update, Rwanda at Work, 26 Feb 2016, in: https://goo.gl/LvnRpz [26 Jul 2017].

6 Cf. Scher, Daniel 2010: The promise of Imihigo: Decentralized service delivery in Rwanda 2006 – 2010, in: http://bit.ly/2wLfmP7 [26 Jul 2017]; The Institute of Policy Analysis and Research (IPAR-Rwanda) 2015: Imihigo Evaluation FY 2014/2015, Aug 2015, in: http://bit.ly/2wbecKQ [26 Jul 2017].

7 Cf. Ansoms, An / Cioffo, Giuseppe / Huggins, Chris / Murison, Jude 2014: The reorganisation of rural space in Rwanda: Habitat concentration, land consolidation, and collective marshland cultivation, in: Ansoms, An/Hilhorst, Thea (eds.): Losing Your Land: Dispossession in the Great Lakes, Martlesham, UK. In the same volume: Huggins, Chris: 2014: Land grabbing and land tenure security in post-genocide Rwanda.

8 After hundreds of thousands of people suspected of genocide had been imprisoned for a long time, some of them for years, without being charged since the RPF had taken power in 1994, the gacaca justice system was set up in 2005 to deal with the crimes, involving community courts that operated until 2012. It convicted 860,000 perpetrators out of just over a million accused, i.e. roughly a fifth of the adults resident in the country in 1994. Cf. Hankel, Gerd 2016: Ruanda: Leben und Neuaufbau nach dem Völkermord: Wie Geschichte gemacht und zur offiziellen Wahrheit wird, Springe, p. 380.

9 This was 91 U.S. dollars in 2014. Only Sierra Leone, the West Bank and some microstates receive larger amounts. Cf. The World Bank: World Development Indicators, Net ODA received per capita (current US$), in: http://bit.ly/2vP0923 [7 Sep 2017].

10 Cf. e.g. GTAI / GIZ 2016: Neue Märkte – Neue Chancen. Ein Wegweiser für deutsche Unternehmer: Ruanda, Bonn, in: http://bit.ly/2fRPnhm [8 Sep 2017]. The brochure describes the good investment climate, but cannot report major achievements: "'What Rwanda needs now is two or three international companies moving their regional headquarters to Kigali,' say observers. 'Once the first has arrived, the ice will be broken and others will follow'" (here: p. 4).

11 Cf. Eckert, Andreas 2017: Nur die Fassade ist mustergültig, in: Frankfurter Allgemeine Zeitung, 14 Mar 2017, p. 6.

Source: © Ueslei Marcelino, Reuters.

Other Topics

A Shadow of the Past?

Latin America's Fight against Corruption

Marie-Christine Fuchs

News stories about corruption cases in Latin America are ubiquitous. Most recently, the bribery scandal relating to the Brazilian construction company Odebrecht made headlines worldwide. Despite or maybe because of these frequent bad news stories there has been a significant increase in anti-corruption measures in Latin America since the beginning of this year. The continent still has a long way to go in its efforts to fight corruption effectively. But there are signs that a turn-around may for the first time finally be possible.

Instances of corruption in Latin America have proliferated in the global headlines of late. While Petrobras and the Panama Papers were the talk of the town already, things really heated up from 21 December 2016 onwards. That was the day when it became public knowledge that the Brazilian construction company Odebrecht had acquired public contracts by paying bribes worth millions to high-ranking public officials throughout the Latin American continent between 2005 and 2014. The allegations and investigations against leading Latin American politicians pertaining to their involvement in the Odebrecht scandal or similar corruption cases spread ever wider.[1] Most recently, the spotlight fell on former head of state Luiz Inacio "Lula" Da Silva, who was sentenced to nine years and six months in jail for corruption and money laundering in July. The presiding judge deemed it to have been proved that Lula had received a luxury apartment in return for giving preferential treatment to the construction giant OAS. Lula can, however, appeal and remains out of prison for now.[2] On 13 July, Peru's former president Ollanta Humala and his wife Nadine Heredia were remanded in custody. The couple is accused of having used illegal moneys, some from Odebrecht but also some from the Venezuelan state coffers, to fund Humala's 2006 and 2011 election campaigns.[3] Since the beginning of this year there are reasons to suspect that the recent election campaign of Colombia's president Juan Manuel Santos, who received the Nobel Peace Prize for the peace negotiations with the FARC rebels as recently as 2016, has been funded with bribes running into the millions.[4]

Latin America appears to be sinking into a morass of corruption. This impression is reinforced when you consider that the limits of what are trivial offences in the eyes of the judiciary and society are often still fluid. Former Colombian president Julio César Turbay for instance said during his term in office that corruption merely needed to be reduced to the 'right proportions'.[5] With this statement he suggested that politics involve corruption as a matter of course.

However, the worldwide reaction to the above-mentioned scandals illustrates that Latin American politicians can no longer ignore the efforts made in the fight against corruption for years by international organisations such as the United Nations (UN), the Organization of American States (OAS) and the Organisation for Economic Co-operation and Development (OECD) with its Latin America Anti-Corruption Programme or non-governmental organisations such as Transparency International. In response to media pressure and increasing unease among the population, intensive efforts to combat corruption have been in evidence this year in many Latin American countries. Government programs are being set up, penal laws are being tightened and public anti-corruption bodies are being established. Corruption has become a political issue and will figure as a key topic

in the 2018 presidential election campaign in Colombia and Mexico, for instance. It appears that Latin America has finally woken up from its deep slumber.

What Exactly Does Corruption Entail?

Corruption is the perversion of the rule of law and human rights. It stands in direct opposition to values such as equal opportunities and the separation of powers. But what exactly is corruption? According to the anti-corruption organisation Transparency International, the term corruption is as opaque as the structures in which it flourishes. The organisation therefore defines corruption generally as the "abuse of entrusted power for private gain".[6] Consequently, perpetrators can be state actors in politics and the judiciary as well as private individuals in business and other parts of society. The crucial criterion is the abuse of power.

In criminological research, corruption is defined in much more concrete terms. It is the "abuse of a public office, a position in the economic sector or a political mandate in favour of a third party, upon their instigation or one's own initiative to obtain an advantage for oneself or a third party, with the occurrence or in the expectation of the occurrence of damage to or a disadvantage for the general public (in official or political functions) or for an enterprise (if the offender holds a pertinent position in the economic sector)."[7] Corruption offences can therefore be active or passive in nature. According to the German Penal Code (*Strafgesetzbuch*, StGB), both granting and accepting a bribe (sections 331 and 333 StGB) and giving bribes and taking bribes (sections 332 and 334 StGB) constitute a criminal offence. The persons granting or accepting the benefit can be public servants, public sector employees or other person entrusted with special public service functions who abuse state power. But they can also be politicians or business functionaries.

The benefit need not necessarily accrue to the perpetrator him- or herself. The action also constitutes an offence if it benefits a third person. According to the definition used here, the provisions cover not only the actions of persons obtaining personal gain from the abuse of power but also the conduct of independent third parties who knowingly benefit from the corrupt practices of others.[8] The provisions in Latin America are no different, and corruption is generally defined very broadly.[9] It is not clear whether tax evasion is covered by the term of corruption in the narrow sense. According to the definition used by Transparency International, this would not be the case as there is no abuse of power involved. That said, tax and corruption offences have a number of similarities and frequently go hand in hand.[10]

One characteristic of corruption crime is that it is a "victimless" crime, which is regularly conducted in a relationship between two perpetrators, the "corrupter" and the "corrupted". As a matter of principle, these two parties are not interested in the criminal activities coming to light. The actual victims, frequently the public purse and therefore ultimately the taxpayers, are generally not party to the relationship and have therefore no knowledge of the perpetrators' activities. That makes corruption a very difficult crime to solve.

The Damaging Effects of Corruption

The material damage done by corruption worldwide is enormous. It is considered the greatest obstacle to economic and social development.[11] Every year, approximately one trillion U.S. dollars are paid in bribes,[12] while states lose an estimated 2.6 trillion U.S. dollars through corruption.[13] That corresponds to more than 3.5 per cent of global GDP.[14] The losses on the Latin American continent are in a similar ratio. According to the organisation Global Financial Integrity, some 143 billion U.S. dollars are lost each year due to corruption.[15] This means that governments lose out on extensive revenues that could be put to good use for education, healthcare and social services. At the same time, the circumvention of market mechanisms and disruption of fair competition result in overpriced or low-quality products and services.[16]

The enormous financial losses from corruption are outweighed by the immaterial losses.

What is potentially even more serious is the immaterial damage that corruption inflicts. When large numbers of corruption scandals become public, citizens will assume that politics and business are in cahoots to engage in corrupt practices. They will lose confidence in government institutions and in politics. The state is soon seen as the enemy and rapidly becomes unstable as it no longer has the citizens' backing. The repercussions include the violation of basic values of the democratic and social rule of law as well as human rights,[17] the blocking of development and innovation, encouragement of the black economy and increasing degradation of political morality.[18] In addition, corruption produces disappointment and a lack of commitment among those who cannot obtain any benefit for themselves. It fosters inequality with respect to the distribution of power and prosperity and ultimately results in bolstering populists, who benefit from the fact that the electorate is losing faith in the established parties.

National and Regional Regulatory Framework

Because of the serious damage caused by corruption, the need for action was already recognised at an international level over a decade ago. The UN consequently adopted the UN Convention against Corruption (UNCAC) in December 2005. This agreement is the first contract under international law that is globally binding; it has been signed by 181 states (as at December 2016), including all Latin American states.[19] It obligates the contracting parties to punish various forms of corruption involving officials and to engage in international cooperation. It includes implementation obligations for the contracting states in areas including corruption prevention (see Chapter II UNCAC, which contains a list of the preventive measures specified by the UN), criminalisation and criminal prosecution. The implementation of the contractual obligations by the individual member states is evaluated by means of a so-called Peer Review Mechanism created in 2009.

At the regional level, the members of the OAS adopted the Inter-American Convention Against Corruption even earlier, namely in 1996.[20] With the exception of Cuba, all OAS member states have signed the agreement. Since 2002, the Mechanism for Follow-Up on the Implementation of the Inter-American Convention against Corruption (MESICIC) has been in place. But both conventions lack a court of law where action could be taken against the member states for any violations of the respective convention.

The Prevalence of Corruption in Latin America

Not least because of the lack of legal enforcement measures for international and regional anti-corruption agreements, their ratification by member states has so far not made the envisaged contribution to solving the problem. This can be seen from the current corruption index of Transparency International, which provides an informative picture of corruption in Latin America. The index rates countries by the degree to which the civilian population is aware of corruption among public officials and politicians. In 2016, the average figure for the Latin American countries was 44 out of a maximum 100 points, with figures below 50 indicating that the government had in fact failed in the fight against corruption.[21] Uruguay, Chile and Costa Rica are the only countries in the upper third percentile of the ranking.

Considering Venezuela's current political, social and economic situation, it comes as no surprise that it is one of the world's 15 most corrupt countries and has dropped a further eight places to 166 since last year.[22] Inflation is at an all-time high, people are suffering from a lack of food and need to

pay high bribes to obtain basic food at all as well as the most essential medicines. In addition, the investigations in the Odebrecht scandal have shown that the construction giant sent slush funds to Venezuela as well.[23] Whistle-blowers have mentioned a payment of three million U.S. dollars for the illegal funding of Nicolas Maduro's election campaign from 2012 to 2013 in this context.[24]

While Venezuela ranks bottom within Latin America, Mexico has seen the strongest deterioration in 2016 within the continent, dropping from 95th to 123rd place. One illustration of Mexico's rapid drop in the corruption index and the entanglement of politics and organised crime in the country is the alleged conduct of the governor of the federal state of Veracruz, Javier Duarte, whose government has been accused by Mexico's Office of the Comptroller General of having embezzled at least 1.7 billion U.S. dollars. The national government had looked the other way for years.[25]

Latin American countries regularly occupy places in the middle and lower percentiles of corruption rankings.

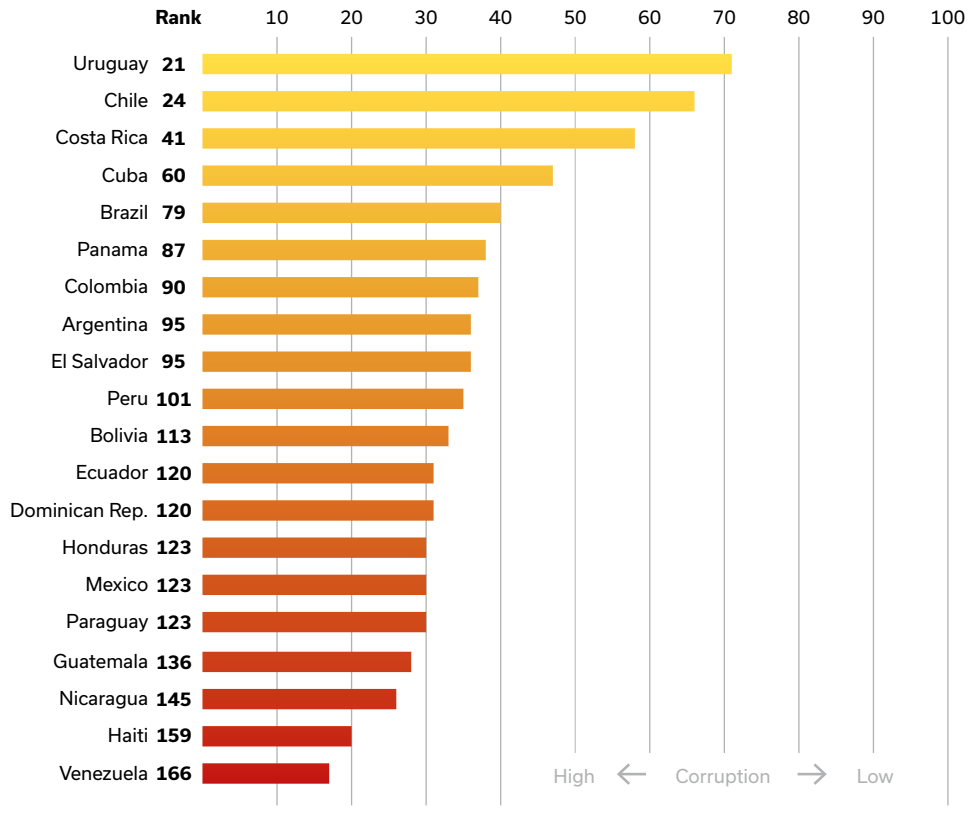
Colombia has also experienced a number of setbacks in recent years, as far as corruption is concerned, dropping from 83rd to 90th place. The Odebrecht scandal, in which some senior Colombian politicians appear to be involved as well,[26] has been in the headlines for months and is set to act as a sword of Damocles in the 2018 presidential election campaign. President Santos' former election campaign manager is accused of having received bribes totalling a million U.S. dollars for Santos' re-election in 2014.[27]

The Petrobras scandal had already produced negative media reporting on Brazil; in connection with the Odebrecht scandal, the country has now turned into the stage of the largest corruption scandal in Latin American history. And since May 2017, Brazil's current president Michel Temer himself has been in the crossfire of the investigations. He is being held responsible for allowing hush money to be paid to the former president of the Chamber of Deputies, Eduardo Cunha, and is under investigation by Brazil's Federal Supreme Court on that account. However, at the beginning of August, the Brazilian parliament decided that no further action should be taken against Terner for the time being although there appeared to be clear proof against him.[28] While the country dropped a few places in the index – from 76th to 79th – the uncovering and rigorous prosecution of these corruption cases by the investigating authorities can be counted as a partial success.

The Latin American "most improved" country of the year in terms of the fight against corruption is Argentina. Despite being embroiled in the Odebrecht scandal and corruption allegations relating to the entourage of former President Cristina Fernández de Kirchner, the country was able to rise twelve places, from 107th to 95th, owing to a strict new anti-corruption program and now figures in the mid-section of the index.

The ranking further shows that three countries have been able to maintain consistent values for years. Ranked 21st, a place that it has been able to maintain since the last Transparency International Index 2015, Uruguay is in the vanguard of the fight against corruption in South America. Chile follows in 24th place and Costa Rica in 41st. The positive values of these three countries may well have to do with their higher GDP and per capita income compared to other Latin American states. However, there is still no unanimity in discussions on theory and practice as to whether a country's wealth alone can allow conclusions to be made about the level of state corruption.[29] Argentina is a case in point. At some 14,000 U.S. dollars, the country's average income is higher than that of Costa Rica and Chile,[30] but it lingers in 95th place of the corruption index. This suggests that it is

Fig. 1: Latin American States in Global Ranking of Corruption 2016



Source: Own illustration based on Transparency International 2017: Corruption Perceptions Index (CPI) 2016, n. 21.

the distribution of the wealth that matters, as this is relatively even in Uruguay in particular. In this context, the economist Hans Peter Grüner, for instance, stresses that once the income distribution becomes too imbalanced this jeopardises social cohesion and encourages corruption.[31] And in fact, many countries in Latin America are still characterised by a great disparity between rich and poor.

Search for the Root Causes of the High Corruption Rates in Latin America

The causes and factors that facilitate corruption in Latin America are many and diverse. According to one explanation, it is fostered by the enormous financial benefits offered by high positions in public office, and particularly in politics, in Latin America. While a political career in Western Europe and the USA – particularly compared with private sector jobs – frequently does not seem very lucrative, a high-ranking position in Latin American politics provides access not only to power but also to money. That has historical reasons, seeing that the state has frequently been seen as the origin of wealth in Latin America since colonisation. Latin American countries traditionally generate modest revenues from manufacturing. Their main source of income is mining. Half of the world's most important exporting countries dealing in mineral resources, for instance, are located in Latin America, and a third of all global mining takes

Obscure: Dubious structures and the entanglement of politics and economy characterise corruption and make the fight against it so difficult. Source: © Ueslei Marcelino, Reuters.

place in this region.[32] As the state frequently was and still is responsible for the allocation of land rights, the population soon found out that it requires above all good relations with the state, rather than physical and intellectual effort, to gain access to prosperity.[33]

Once acquired, the political elites seek to retain their privileges across the generations. Nepotism and family networks are common. Political posts are passed on within the family in some instances. In this context, political parties appear to be mere vehicles to serve the interests of their leaders.[34] The way this influences recruitment in the political sector means that the deciding factor is loyalty rather than objective attributes such as education and training and professional experience. This makes a restructuring of the government apparatus almost impossible.

Finally, the fact that the bureaucracy operates at a sluggish pace throughout the continent encourages citizens to try and speed up the services provided by public authorities through corruption. In the Doing Business Index of the World Bank, for instance, which looks at obstacles encountered by start-ups in their dealings with the national authorities, almost all Latin American countries are ranked towards the bottom. Argentina, for example, is ranked 116th, Brazil 123rd and Venezuela as low as 187th. Ranked 47th, Mexico is the only Latin American country among the top 50. This indicates that society generally sees corruption as a legitimate solution to overcoming such deficiencies in the public sector.[35]

In some cases, the moral justification of corruption goes so far that political parties in fact deem it necessary, for instance to be able to finance

election campaigns from funds provided by private sources. Such generosity from businesses is subsequently often rewarded by government contracts. There are now regulations on state funding for political parties in place in many Latin American countries. Section 109 of the Colombian constitution, for instance, imposes a limit on state funding for political parties. The problem is that transparency, regulation and capping of private party funding are frequently inadequate. In this context, Chile has found a possible solution by adopting Law 20900 in April 2016, implementing an extensive ban on party donations by legal entities.

Corruption is also furthered by a lack of effective prosecution of corruption offences and ultimately by myriad instances of impunity in many Latin American countries. Often the financial means are simply not available nor is there sufficient commitment on the part of the state to fight corruption.[36] According to the Global Immunity Index, charges are only filed in seven out of a hundred cases of corruption in Mexico and over 99 per cent of the offenders get away scot-free.[37] As long as the judicial authorities cannot guarantee objective, politically independent and effective investigations, bribery and favouritism will continue to represent a lucrative business model.

Noticeable Increase in Anti-Corruption Measures in Latin Ameica – Is the Tide Turning?

That said, the most recent corruption scandals, which brought the astonishing scale of the problem very clearly to public attention, and increasing pressure from the civilian population now appear to have woken many governments as well as judiciaries on the continent from their complacency. There have been signs of a veritable "anti-corruption activism" in many countries of late. One fact that gives cause for cautious optimism is that anti-corruption efforts are increasing, particularly in those states that figure in the middle and lower sections of the Transparency International index.

One small country has been acting as a trailblazer in the fight against corruption for some years now: 2006 saw the founding of CICIG (*Comisión Internacional contra la Corrupción e Impunidad en Guatemala*) in Guatemala, an international commission against impunity that operates under the aegis of the UN. CICIG investigates corruption offences perpetrated in the country as an independent body working in collaboration with the Public Prosecutor's Office. Its activities are intended to strengthen the judicial system and advance the fight against crime, thereby helping to reduce the flagrant impunity in the country. As a body involved in international cooperation, CICIG does not have any prosecution authority and cannot influence the Public Prosecutor's Office directly. But it assists and advises judges and public prosecutors in their work.[38] In April 2015, the commission's work helped to uncover a high-ranking corruption network in the area of customs and taxes, in which former president Otto Pérez Molina and the vice president were involved.[39] After the findings of the investigation were made public, there were large demonstrations by the middle class, organised in part via social media such as Facebook. Due to public pressure, the president resigned in September 2015 and has since been charged.

An agreement to set up an international anti-corruption mission was also established in Honduras, this time under the patronage of the OAS. This mission was initially to run for four years. International experts, selected by the OAS, have been working on the ground in Honduras since April. This step was prompted by anti-corruption protests in 2015 and took into account the results from a dialogue with civil society moderated by the OAS at the government's request. The mission's remit envisages legal experts to monitor corruption proceedings and judicial reforms, to supervise the activities of the justice system and to provide advice.[40]

Under massive pressure from civil society, Mexico's government has also made efforts for some time to control corruption through a number of reforms. In the spring of 2015, for instance, a constitutional reform involving the

introduction of a comprehensive set of anti-corruption measures was implemented, resulting in the creation of the so-called National Anti-Corruption System (*Sistema Nacional Anticorrupción,* SNA) among other things.[41] The SNA envisages the establishment and expansion of various national bodies with the intention of improving cooperation between state institutions at national and regional level in matters relating to corruption and enabling a better exchange of information between the different authorities.[42] A further innovation is stronger citizen participation through the founding of a citizens' committee (*Comité de Participación Ciudadana del SNA*).[43] Only people who held no political office and were not members of a political party were eligible for serving on the committee. These innovations were instigated above all by the action group #Ley 3de3.[44] However, one of the group's most important demands, namely that all public servants would have to disclose their assets and income, was rejected by the senate on the grounds of privacy.[45] It remains to be seen whether the new institutions, which took considerable public funds to set up, will actually prove to be able to make inroads against corruption or whether it was merely a case of creating an additional "administrative monster".

Some of Latin America's most corrupt states have drastically expanded their anti-corruption efforts of late.

To bolster Colombia's ambition to join the OECD, the Colombian government ratified the OECD's anti-corruption convention back in 2013 and joined the Open Government Partnership initiative.[46] The latter involves a concrete commitment on the part of the government to foster transparency, strengthen citizen participation, fight corruption and make use of new technologies to strengthen governance within a so-called National Action Plan. In addition, the national Secretariat for Transparency (*Secretaría de Transparencia*) was created. Citizens can report incidents of corruption to this department and access information on ministers' and delegates' incomes at its offices.[47]

In Brazil, the instrument of plea bargaining, *delação premiada*, which was used in the course of the investigations relating to the Odebrecht scandal, brought the procedural breakthrough. As emphasised by Sérgio Moro, the criminal court judge who gained in popularity through the Odebrecht prosecution, the fact that corruption is a "victimless" crime means that only the perpetrators themselves can help bring cases of corruption to light and provide the necessary information.[48] This leniency policy allowed for those involved in the corrupt system to act as witnesses for the prosecution in return for milder sentences. With a reformed Public Prosecutor's Office and judiciary working independently, Brazil has already succeeded in charging dozens of leading politicians and businesspeople and sentencing some of them to long prison sentences. This type of action against corrupt individuals in the top elite is unprecedented in Latin America.[49]

In the course of the investigations and criminal prosecution of this case, also referred to as *Lava Jato* (Car Wash), a special Public Prosecutor's Office and a team of eleven criminal supreme court judges were established, who worked exclusively on this case and conducted investigations particularly against the private sector representatives involved in the corruption scandals. Brazil's Federal Supreme Court, on the other hand, is responsible for the investigations of high-ranking corrupt politicians. The Brazilian Federal Supreme Court judge Teori Zavascki played a particularly sensitive role as he oversaw the investigations against some 200 high-ranking politicians active at national level, who all appeared to be embroiled in the *Lava Jato* case. Shortly before the investigation documents were due to be made public, the judge was killed in a plane crash. All the more remarkable that his designated successor Edson Fachin published a list of 76 leading politicians involved in the Odebrecht scandal in April 2017, clearing the way for official investigations against them to be initiated.

Argentina's new government, elected in 2015, has also committed itself to take more vigorous action against corrupt practices and is therefore rightly seen as Latin America's most improved state in the fight against corruption as confirmed by the corruption index. The government of new President Mauricio Macri enacted a law for promoting transparency in public administration and improving access to information and also introduced plea bargaining. More effective criminal prosecution of corruption cases by the Argentinian judiciary also helped to improve matters.[50] And finally, the newly created Argentinian anti-corruption office has developed legislation on the criminal responsibility of legal entities in connection with corruption offences involving public administration personnel. The fines imposed on companies can be as high as 20 per cent of their annual gross turnover, which makes them an effective deterrent.[51]

Arrest: Especially resolute prosecution – as seen here against a senior prison officer – is required to successfully fight corruption. Source: © Jose Cabezas, Reuters.

By these measures, Macri has succeeded in making a start in regaining the trust in state institutions that had been lost under his predecessor Cristina Fernández de Kirchner.

When one looks at Uruguay, Chile and Costa Rica, it becomes clear that overcoming the problem of corruption in the long term and sustainably requires solid state institutions and a functioning separation of powers, which these three countries possess. In addition, it requires an independent and effective criminal justice system that is not subject to any political influences. In Chile, corruption was acknowledged as a serious problem as early as 1994 and appropriate measures were taken from then on. An ethics committee (*Comisión Nacional de Ética Pública*) was founded over 20 years ago, which enacted various laws to curb corruption. This included the introduction of transparent processes for awarding public contracts.[52]

Conclusive Assessment and Outlook

Neither the ratification of international conventions nor the enactment of national laws or the creation of commissions or other institutions to fight corruption are by themselves likely to be immediately successful. Instead, progress depends on the will of governments and economic elites to act in a manner consistent with the rule of law. There have been calls of late for a change in leadership in all Latin American states. Some people believe this is the only way to break up fossilised structures and put an end to nepotism. However, a wholesale changing of the guard appears unrealistic because – as the saying goes – who would want to bite the hand that feeds them? The uncovering of the corruption scandals has also made the public extremely disillusioned about politics, which has the effect of preventing the rejuvenation of the political class. Citizens refuse to become engaged in politics themselves.[53] What needs to happen, therefore, is to do everything possible to increase the motivation among the existing leadership elites to act in line with the rule of law. Consequently, it will be enormously important to use judicial reform and changes in legislation to set up control mechanisms and to make people contemplating corruption think twice for fear of detection.

The mobilisation potential of social media could also be used in the fight against corruption.

Considering that the topic of corruption is riding high in the media throughout the continent, Latin America currently has a historic opportunity of finally conducting an effective fight against corruption. One key to success could be the possibility of using social networks to mobilise large numbers of people against corrupt public officials at relatively low cost, as happened in Guatemala in 2015. When looking at the big picture, there have never before been as many protests in the streets and on social media on the Latin American continent. According to Transparency International, the pressure exerted via social media will force the Latin American governments to create more transparency in the next few years if they want to ensure social peace in their societies.[54]

In addition, fundamental institutional changes would be desirable. The principle of merit must be applied more strongly in the public sector once again. This goes for all three powers of the state, which means judges and public prosecutors must be nominated in a transparent process. Applying a "political bias" to become a member of electoral committees for judges must be avoided. And to ensure effective monitoring of the principle of merit, it may be helpful to allow legal action by competitors, a concept known in Germany as *Konkurrentenklagen*: if a competitor for a job believes they are better qualified for a vacancy than the person selected they can bring a legal case against the employment of the competitor – potentially involving an injunction. This type of "social monitoring" of recruitment decisions in the public sector has proved extremely effective in Germany. In addition, all

public servants and judges must receive an adequate salary to reduce the incentive to accept illegal payments. Courts must be forced to operate with transparency and accountability. The length of court proceedings must be reduced. The awarding of public contracts must be conducted via a transparent system of public tenders.

Furthermore, the election systems on the continent and the rules on private party donations must be subject to critical appraisal, and not only at election time. National and international election monitoring as well as curbing the possibilities of influencing voters will reduce potential election manipulation. In any case, election campaign funding should be kept in check by setting upper limits for campaign spending and reforming the electoral systems. The same applies to party funding in general. Private donations should be limited and more emphasis should be placed on state funding. Political parties should also be subject to stricter rules on disclosure and accountability.

The majority of citizens have come to realise the need for a comprehensive change to a culture of legality.

Turning away from corrupt practices and embracing rule-of-law structures and transparency appear feasible. Throughout Latin America, there are signs of an increasing awareness that corruption is a cause of poverty and responsible for deficiencies in public transport, poor conditions in hospitals and a lack of money to fund state schools.[55] People appear to have realised that there is a need for comprehensive social change on the continent, moving from an institutional and structural culture of corruption to a culture of legality. Future decision-makers must be made aware of the fact that the state is neither their enemy nor an end in itself and that a commitment to the common good contributes to everybody's wellbeing. But this is only possible if people observe the law and pay their taxes in return.

In order for citizens to regain trust in the state, the state must convince them that observing legal stipulations will benefit them. That can only be achieved through a comprehensive strengthening of the welfare state as well as basic economic and social rights by guaranteeing things such as a minimum income, adequate healthcare and affordable access to education. In addition, it will require healthy economic growth, for instance through foreign investments to strengthen the secondary and tertiary industries, which are virtually non-existent in many Latin American countries, as well as technological progress. That is the only way to reduce the dependence of Latin American industry on mineral resources and therefore on volatile factors such as oil and gold prices and its dependence on the goodwill of the state apparatus distributing the resources.

Latin America has a long journey ahead of it. But the way politicians and civil society have put corruption on the agenda in recent months suggests that Latin America appears to be seizing the historic opportunity of finally tackling this phenomenon comprehensively and sustainably.[56]

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