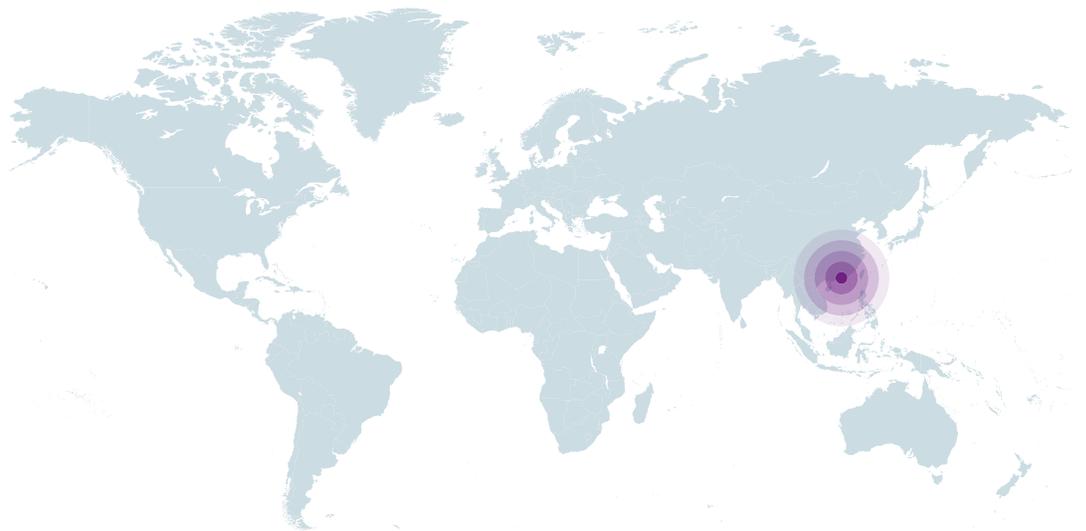


At the Limits of Endurance

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

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

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

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

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

politics and economies to a direct cause, let alone to quantify the effects. It would be better to borrow a term from medicine and speak of a stress “syndrome”.

Climate Change as a New Cause of Fragile Statehood

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





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

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

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

The stress “syndrome”, which is already affecting these countries today, will only be exacer-

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

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

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

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

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

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

Not only are these countries taking insufficient action to mitigate climate-damaging behaviours and promote the change to a different, sustainable development path. The states should also already be making substan-

tial efforts to protect the population against the future impacts of climate change and to strengthen the resilience of the infrastructure. The increasing degradation of the environment, e.g. by air pollution, drinking water pollution and toxic waste, is superimposed by climate change phenomena such as storms, droughts, flooding and heatwaves, which are occurring with increasing frequency and intensity. Climate change is thus turning into a serious threat to “human security”. In the period from 1970 to 2011, almost three-quarters of all natural disasters worldwide occurred in the Asia-Pacific region.⁴ People living in this region are affected by natural disasters at twice the rate of people in Africa and as much as thirty times as frequently as those living in Europe or North America. Fragile states usually suffer the largest numbers of casualties. Between 1990 and 2008, half the population of South Asia was affected by extreme weather events, leaving some 60,000 people dead and causing 45 billion dollars in structural damage.⁵ The negative impacts of climate change are particularly strong in fragile states such as Pakistan and Bangladesh: “Glacial retreat in the Himalayas will jeopardize the water supply for millions of people, changes to the annual monsoon will affect agriculture, and sea-level rise and cyclones will threaten human settlements around the populous Bay of Bengal.”⁶

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

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





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

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

and for extremist networks, whose actions add to the breakdown of the rule of law and pose a threat to regional security.

Climate Change and Migration

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

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

climate change. Particularly where the indirect consequences of climate change are involved, one cannot seriously maintain that reliable links can be made. Depending on the factors assumed to be at the root of migration, estimates about the migrant numbers in recent years differ greatly. Where the Asia-Pacific region is concerned, people often cite figures from the Asian Development Bank (ADB),⁹ which include both temporary and permanent migrants. According to these figures, there were over 13 million climate migrants on the continent in 2009.¹⁰ The following year, the figure surged to almost 32 million, dropping back down to just under eleven million in 2011. These huge fluctuations were due to sudden natural disasters. In 2011, the migrants were distributed relatively evenly across East,

Southeast and South Asia, while countries in Central Asia and the thinly populated islands in the Pacific hardly figured at all as migration destinations up to that time. The majority of migrants moved relatively short distances *within* a country, and only a minority across national borders. There is currently hardly any climate migration *from Asia to other continents*, such as Europe, in evidence.

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



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

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

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

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

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

sudden deluges with devastating consequences (landslides, flooding). The intensity of tropical storms and the damage they cause are also on the rise (e.g. in the Philippines and in the Bay of Bengal).

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

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

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

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

Resource Conflicts: New Challenges to National Sovereignty and Regional Security

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

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

To advance their economic development, many Asian states have begun to exploit their own resources on a grand scale. However, the rapidly rising demand for various natural resources and energy frequently exceeds national reserves. In the case of rare natural resources, such as the so-called rare earths, there are only a small number of deposits around the globe, which means that there is a great dependence on imports. This pressure on resources encourages the tendency of states to try to enforce their claims to territorially disputed areas. This is frequently the case in maritime zones, such as the South and East China Seas or the waters bordering Thailand and Cambodia. In these cases, general sover-

Drought: The upsurge in extreme → weather conditions has a direct impact on the availability of resources in general.

Source: © Ajay Verma, Reuters.

eignty claims overlap with the desire for access to (assumed) oil and gas reserves. In the case of the Senkaku/Diaoyu Islands, a conflict that had simmered for decades has heated up in recent years because of speculations about extensive undersea oil and gas reserves in the area. A resolution is not expected any time soon.¹⁴

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

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

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





Earthquake: Message wall in Seoul for the victims of the April 2011 Fukushima Earthquake. An earthquake followed by a tsunami resulted in the death of 20,000 people. Source: © Truth Leem, Reuters.

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

While states may enter into formal arrangements regarding the joint exploitation of resources, these can also result in political and social tensions between the societies concerned. P.R. China plays a central role in the resource conflicts in Asia.¹⁶ To cite just one example, China has leased huge swathes of agricultural land in several Central Asian countries, displacing local agricultural producers on a massive scale. China has further made extensive and long-term agreements on joint resource extraction with countries

rich in fossil fuels. China promotes the expansion of oil and gas production and is investing strongly in various areas of development in its smaller neighbouring countries, simultaneously securing access to the resources.¹⁷ Once again, the interests of the local population are frequently given little regard.

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

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

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

Conclusions for German and European Foreign Policy

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

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

Germany and the EU can make important contributions to the development of regional and global governance systems. Particularly in the post-COP21 phase, Europe is called upon to supply both ideas and funding to help realise the

opportunities offered by the Paris Climate Agreement even before 2020. The importance of adaptation and resilience is highlighted in the agreement and should also be given greater priority in the development of new instruments of climate protection funding.

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

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

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