

Climate and Development Outlook

Stories of change from CDKN

Pakistan Special Edition

SOLUTIONS TO PAKISTAN'S CHALLENGES LIE IN THE SDGs

By **Ali Tauqeer Sheikh**, Regional Director, CDKN Asia

The solution to Pakistan's three central challenges – development, democracy and defence – lies in the Sustainable Development Goals (SDGs). The Goals provide the glue that holds this fragile triangle together. Implementing the United Nations' 2030 Agenda for Sustainable Development, if realised as an integrated policy package, will also lead to long-term economic prosperity and human and environmental development. Aside from external threats, a poor scorecard on meeting the 17 SDGs and the 169 targets specified by the UN would pose a serious, non-traditional threat to the country's national security. It is time to address what could, if targets remain unmet, turn out to be more like 17 socioeconomic risks to Pakistan's security and progress, especially those related to poverty alleviation, gender empowerment and climate change adaptation.

The SDGs cut across all areas of government – from health and education to ending poverty and achieving gender equality, through to tackling climate change and utilising natural resources sustainably. The objectives underpin good governance and integrate three dimensions of sustainable development – economic development, social inclusion and environmental sustainability. These are ambitious and complex goals requiring clearly mandated institutions and unflinching commitment to provide resources from the national exchequer for a decade and a half. And this implies a commitment as strong as that for acquiring nuclear technology. Present and future civilian and military leaderships will need to follow through on this commitment.

If these goals and targets are too many for the country's present resource capacity, then Pakistan can still decide to pick half, or even one-third, during this initial

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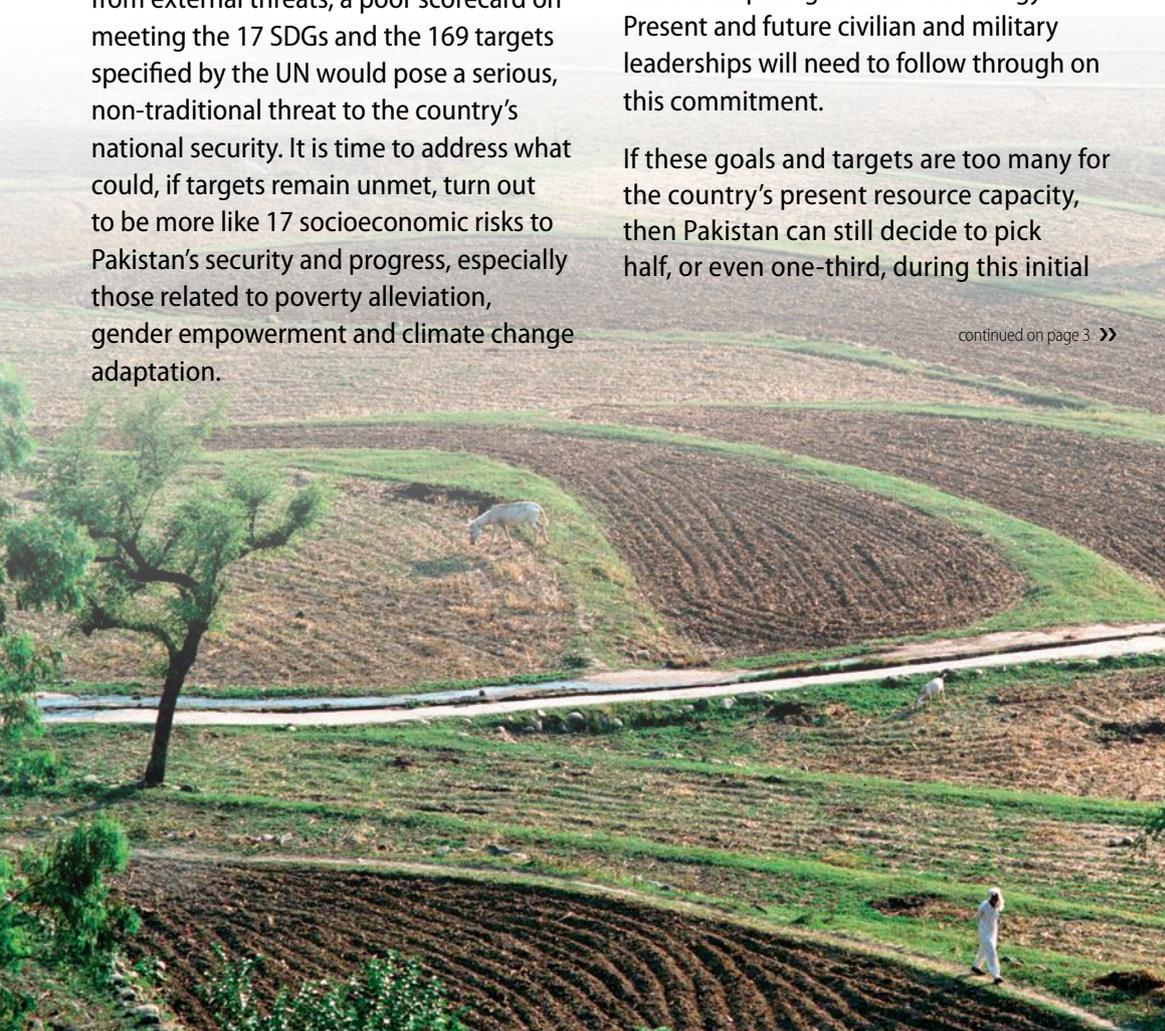
Helping developing countries to design and deliver climate compatible development

Pakistan's climate and development scenario

Pakistan is at an important crossroads. It is in the midst of a major economic growth period, with its GDP projected to grow by more than 5% in the current fiscal year – the highest growth in a decade. The country's Vision 2025 provides for major industrial expansion and the launch of new infrastructure projects, especially under the China–Pakistan Economic Corridor, all of which would result in increased energy demand.

But Pakistan is vulnerable to climate change and faces negative climate impacts. The country's leaders are aware of the requirement for climate mitigation and adaptation in order to ensure long-term sustainability. With that in mind, Pakistan aims to decouple greenhouse gas emissions from economic growth and development, and to pursue a new, low-carbon pathway that is consistent with development frameworks, including Vision 2025 and the SDGs, and its Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change (UNFCCC). In order to do this, the Government has sought suggestions from both national and international experts for a low-carbon development pathway that will place Pakistan on a trajectory towards becoming a climate-responsive member of the global community, while also strengthening the national economy. CDKN is pleased to have contributed to this national conversation.

For more information see <https://cdkn.org/regions/pakistan-asia/>



A NAMA FOR SIALKOT CITY, PAKISTAN'S CENTRE OF INDUSTRY

By **Juan Pablo Osornio**, Ecofys

Pakistan's energy sector is in crisis. Inadequate electricity supplies cost the country US\$14 billion annually, and some 11,000 small and medium-sized enterprises (SMEs) operate at just 60% of capacity. Sialkot City in the Punjab is one of Pakistan's most emblematic industrial hubs. Most of the 6,500 SMEs in Sialkot are export-oriented, generating over US\$1.5 billion in revenue every year. On average, these companies suffer almost three hours of load shedding per day, forgoing at least 10% of additional revenues.

In 2015, CDKN was approached by the Government of Pakistan and the

Provincial Government of Punjab to assess the potential of renewable energy as a solution to Sialkot's electricity shortages. A consulting team performed a pre-feasibility assessment, which found that solar rooftop photovoltaic (PV) panels are the most viable renewable energy option, based on affordability and the potential to scale up the technology. Despite enthusiasm from Sialkot's trade associations, challenges of technology acceptance, technical support and access to finance needed to be addressed before the PV panels could be deployed.

The current project seeks to develop a viable approach to planning and designing a support package for the Government that can help create awareness of PV panels in Sialkot and increase technology acceptance; build the technical support schemes needed; and, most importantly, help raise investment to deploy PV panels in the city. The project follows the framework of a Nationally Appropriate Mitigation Action (NAMA) to provide the Government of Pakistan

with a policy instrument to deliver the renewable energy solutions that Sialkot's industry needs.

This project enjoys broad support from the national and Punjab governments. Further, the donor community in Pakistan is engaged in finding the most appropriate funding channels. Coupled with strong technical analysis based on on-site engineering surveys in a sample of SMEs for solar PV panel installations, and the accompanying financial estimates, we believe the project is on track to succeed.

The project could be made more effective by brokering deals among stakeholders, and it should be resourced in a way that ensures there are ample resources for doing this. Alignments need to be formed, not only between funders, government and the Sialkot SMEs, but also within each of these groups. Having strong data analysis on an issue that is important to all of them helps, but it is not enough to push the project up the political agenda. Political support is essential to achieve funding from international donors, particularly the Green Climate Fund, the preferred sponsor to finance the project.



“This project will support green transformation for Sialkot’s industrial sector. Switching to renewable energy will provide a clean and reliable energy source for our industrial sector. The success of this project will encourage the industry overall to focus on alternate and renewable energy sources for meeting the ever-increasing energy needs of the industrial sector.”

EHTESHAM GILANI, EX-VICE CHAIRMAN,
SIALKOT CHAMBERS OF COMMERCE AND INDUSTRY

Read the case study on renewable energy solutions for Punjab's industrial sector

The CDKN-led project to assess a Nationally Appropriate Mitigation Action (NAMA) as a policy tool to provide renewable energy to the city's industrial sector showed that the use of photovoltaic panels for industry could mitigate up to 377,000 tons of carbon dioxide and gain average savings of US\$27,400 per year on electricity costs (see article by Juan Pablo Osornio, opposite). CDKN and Ecofys staff subsequently took part in a reflective learning exercise to consider the strengths of the project and what lessons they could apply to this and other NAMA development processes in the future. Together, we concluded the following lessons:

1. Industry should have the opportunity to influence the NAMA process from the start, validate results mid-way and have a permanent presence in subnational decision-making on climate change. This builds trust, increases the legitimacy of results and improves management.
2. Sharing preliminary data with stakeholders can help to spark debate. It is not necessary to await 'perfect' data before engaging; rather, data and analysis can be improved through stakeholder feedback.
3. Providing examples of financial schemes from other NAMAs or similar projects can help to unlock the dialogue and stimulate action to secure investment.

You can read more about CDKN's project experience and download a full case study from www.cdkn.org/regions/pakistan



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phase. While learning how to deliver sector-based integrated targets and indicators, the Government can expand its ambition. There is no international obligation to deliver on all goals, targets or indicators. Government ambition has to be measured against its ability to carry out policy and institutional reforms.

Most national and provincial policies and action plans are developed in silos and are not backed by financial resources, timelines or strong political will. Provinces will need to champion and drive the process of localising and prioritising action. If the history of vertical projects is an indicator, leaving it to federal level decision-makers will be risky and too top-down for the present political culture. Therefore, the Federal Government should provide added support for certain SDGs via the National Finance Commission awards in order for these goals to be reliably anchored in provincial annual development plans.

Fortunately, the Planning Commission of Pakistan has begun to engage provincial and development departments that would serve as nodes leading to the formation of special units or SDG centres. Other provinces can learn from Sindh, where

the government has taken the lead in working on these development goals. But more important is sustained capacity-building of those tasked with initiating and implementing work on approved development projects. The bottom line is clear: every rupee spent on SDGs in public expenditure needs to be tracked through a uniform and transparent budget-coding system, and individual projects within provincial annual development programmes must be measured against SDG indicators. This will provide a rare opportunity to improve interprovincial coordination in development plans where the policy landscape needs to be SDG-compliant.

In addition, political parties must work to mainstream sustainable development within the national discourse. Their manifestos may highlight social and economic issues, but ensuring they are SDG-compliant would anchor the electoral debate

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to specificities rather than broad rhetorical pledges. National and provincial assemblies can also lead this process, particularly as the Federal Government has already created a non-partisan parliamentary task force comprising national and provincial parliamentarians, and has allocated funds. This task force should work with think tanks and the Pakistan Institute of Parliamentary Services. This in turn will prompt the media and political pundits to follow suit.

As if that wasn't enough, Pakistan's budgetary planning requires streamlining on modern lines; as do its capability to design, implement and monitor social sector projects through more appropriately defined indicators. That the SDGs will provide an opportunity to revisit the way the Government approaches and undertakes development is something to be explored. Meanwhile, Federal and provincial governments need to determine governance structures and accountability mechanisms required at national and local levels. This must not be sidestepped. Likewise, the provincial and development departments will need

to formulate six prerequisites for successfully implementing the SDGs: governance and oversight; goal and indicator setting; implementation mechanisms; coordination; developing budgets; and allocating resources.

Going forward, new models of public-private partnership need to be tested. Policy-makers should begin by proactively engaging the private sector, research universities, think tanks and civil society, including professional associations. The SDGs are perhaps the best vehicle to lift more than 50 million people out of poverty (earning less than two dollars a day) by enriching their lives and livelihood options. Delivering on these goals will also help Pakistan emerge as one of the world's leading economies and, while doing so, strengthen national security.

A DISASTER-RISK INSURANCE FRAMEWORK FOR PAKISTAN

By **Bilal Khalid**, Focal Person, CDKN Pakistan Country Programme

While Pakistan is a small contributor to greenhouse gases, adding a mere 0.8% to global emissions, it is

consistently identified as one of the worst casualties, reflected in various climate vulnerability indices. The most serious impacts are an increase in the frequency and severity of floods, droughts, cyclones and heat waves, which cause severe damage, not only to people's lives and property, but also to the economy of the country as a whole.

Global warming has caused extreme weather events throughout the world. The Loss and Damage Mechanism is now being prioritised through international accords to address issues that the Adaptation Mechanism cannot. As a result of discussions on loss and damage mechanisms, COP21 in Paris focused on risk transfer mechanisms to address the issue. Risk insurance facilities have been specifically referred to as an instrument for future loss and damage mechanisms in post-COP21 decisions.

Pakistan's National Disaster Management Authority (NDMA) has charted a plan to design a disaster-risk insurance framework that provides low-income households with easily accessible and affordable insurance. In this regard, NDMA has requested



CDKN to support its cause to develop a risk transfer mechanism to protect the lower-income population against extreme events, which are expected to increase in frequency due to climate change. The main purpose of developing a national disaster insurance framework would be to set up an effective and transparent mechanism with streamlined distribution channels and adequate funds, to be in place before disaster strikes, ensuring that money reaches the beneficiaries in the shortest possible time.

This approach is a paradigm shift from the historical disaster-response model, which is applied on a case-to-case basis and relies on domestic budgets, including diversion of resources from other projects, and on extensive financing from international donors. While ex-post disaster funding from donors and multilateral financial institutions can be an important part of a government's catastrophe risk management strategy, over-reliance on this approach has major limitations in terms of efficiency, effectiveness and sufficiency. By ensuring that sufficient liquidity exists very soon after a disaster, modern funding approaches, such as micro-insurance for vulnerable communities, are being considered to help recovery and ensure that scarce government funds are well utilised.

The first phase of the CDKN project provided the Government of Pakistan with a set of design options for a national disaster insurance fund. The project consortium, led by the Munich Climate Insurance Initiative along with a number of experienced international experts on insurance, risk management and fund design, reviewed some of the most successful models worldwide and applied lessons learned from international best practices. Drawing on these examples, the project consortium made recommendations for the most

suitable options for Pakistan in line with the Government's objectives, capacity and needs. Analysis of these options took into account the country's diverse climate, topography and cropping systems; its risk exposure; and its socioeconomic, cultural, political and geographical factors.

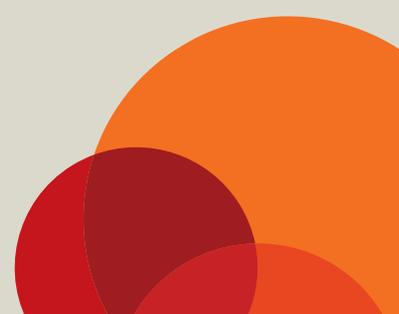
During a subsequent phase, the project team developed and implemented a market demand survey for the creation of weather-risk insurance products for low-income groups in Pakistan. A central building block in the overall design for a disaster insurance framework for Pakistan, the demand study provided insight into the types of climate stressors faced by people in Pakistan, and how they are affected. It also garnered insights into people's ability and willingness to pay premiums. Based on the results of the demand study, the project consortium has developed a disaster risk insurance framework that includes governance options, legal structure and risk transfer.

This pioneering work on risk transfer mechanisms in Pakistan was facilitated through access to international expertise via the international consortium headed by the Munich Climate Insurance Initiative. The project has enabled NDMA to drive the implementation of risk transfer mechanisms on the ground. It has also sensitised and connected a broad stakeholder base in Pakistan around the challenges and opportunities associated with an insurance-based disaster management approach. The proposed insurance product under the project incorporates inputs from a variety of key stakeholders including the Securities & Exchange Commission of Pakistan; Pakistan Space and Upper Atmosphere Research Commission; Ministry

“LEAD Pakistan, through its CDKN programme, has supported NDMA in developing the framework for the proposed disaster risk insurance fund. I am very pleased to see this report as an important contribution to this endeavour, which will provide a stepping stone for NDMA as we move towards establishment of a disaster-risk insurance fund for Pakistan.”

**MAJOR GENERAL
ASGHAR NAWAZ,
CHAIRMAN, NATIONAL DISASTER
MANAGEMENT AUTHORITY**

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of Commerce; National Insurance Corporation Ltd; Pakistan Reinsurance Corporation Ltd; and the Insurance Association of Pakistan.

The delivery of this project coincides with a number of important developments around risk transfer mechanisms in the disaster risk management landscape of Pakistan, which provide exciting opportunities for uptake of this work. The Asian Development Bank is giving support, along with the Government of Pakistan, for the establishment of a National Disaster Management Fund with expected seed funding of US\$1 billion. This fund is slated to have a special window for financing risk transfer instruments such as the insurance fund proposed under the CDKN project. There is also a strong interest at the subnational level, where the provincial disaster management authorities in at least

two provinces are working on risk transfer mechanisms, including the World Bank-funded Sindh Resilience Project.

These initiatives clearly indicate a strong future for risk transfer mechanisms in Pakistan. These initiatives will be critical for protecting a vulnerable population against rising climate impacts. NDMA, as the apex disaster management authority of the country, will play a central role in setting up risk transfer mechanisms in future. CDKN's engagement in this area has strengthened NDMA's capacity in risk transfer mechanisms and has sensitised a broad set of stakeholders.

The present momentum around risk transfer mechanisms presents an opportunity for Pakistan to redefine its disaster management approach

and enhance the resilience of the country's vulnerable population.

A SUITE OF OPTIONS FOR PAKISTAN TO GO LOW CARBON

By **Philip Gass**, International Institute for Sustainable Development

Pakistan's economy has been booming in the past two to three years, with increasing demand for power and energy sources to fulfil its industrial and development needs. Aware of this, and mindful of addressing its international obligations to maintain low-carbon pathways, the Government has sought expert inputs to help balance these demands.

One of the initiatives under way is the CDKN-funded Low Carbon Scenarios project. Over the past year and a half, the project has worked to strengthen the mitigation



planning evidence base in Pakistan by establishing a business-as-usual reference case for emissions growth. The project has also identified low-carbon development options in key economic sectors to provide guidance for Pakistan on potentially reducing its emissions between now and 2030. The project team consists of international organisations, including the International Institute for Sustainable Development and the Energy Research Centre of the Netherlands, as well as Pakistan-based partners such as the Centre for Climate Research and Development at COMSATS Institute of Information Technology and PITCO Ltd. The project is nationally focused, with the main Government counterpart being the Ministry of Climate Change. The project team has sought to be as thorough as possible in checking its results by engaging intensively with many national stakeholders,

including key sectoral ministries, the Planning Commission, the Environmental Protection Agency, the Global Change Impact Studies Centre and others, in an effort to ensure the research is grounded and reflects the viewpoints of all important stakeholders.

During meetings with stakeholders, it quickly became clear that Pakistan has many options for actions to put the country on a low-carbon development pathway. The options were developed based on a review of key Pakistani documents as well



as suggestions from stakeholders. They were then prioritised based on their technical feasibility, barriers to implementation, potential for greenhouse gas mitigation in the desired timeframe and potential co-benefits. The project team was eventually able to scale down the many suggestions received to approximately 50 individual actions across the key sectors of energy, agriculture, industry, forestry, transport and waste. These include elements such as the capture and utilisation of landfill gas for energy; expansion of mass transit options; new manufacturing processes for goods such as cement and bricks; and the expansion of renewable energy generation.

Taken together, these 50 actions, which are deemed to be low cost, implementable in the short term and having few barriers, represent as much as a 100 megaton reduction in Pakistan's annual emissions by 2030. The results of the analysis clearly show that Pakistan can adopt a low-carbon development future without sacrificing economic development and growth. The project team has catalogued its results and shared them with partners, and is now moving into finalising the project.

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With the main project deliverables now in the hands of the Ministry of Climate Change, the project team continues to plan how this work can be continued and used after the formal project ends. The goal is for this work to be used in tandem with other ongoing projects as Pakistan plans its strategies in relation to reducing emissions, undertaking growth and planning social development within the country over the long term.

In the medium to long term it is hoped that the outputs of the project will be incorporated into Pakistan's ongoing efforts on climate change as well as its international reporting on greenhouse gas emissions and an improved national evidence base. The project's analysis and recommendations have the potential to guide the Government in developing both its national communications to the UNFCCC and its sectoral development strategies.

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aims to help decision-makers in developing countries design and deliver climate compatible development. We do this by providing demand-led research and technical assistance, and channeling the best available knowledge on climate change and development to support policy processes at the country and international levels. CDKN is managed by an alliance of five organisations that brings together a wide range of expertise and experience.

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