**[Carbon potential](https://www.dawn.com/news/1875260/carbon-potential)**

[Qurat ul ain Siddiqui](https://www.dawn.com/authors/978/qurat-ul-ain-siddiqui) Published November 28, 2024

THE floods in Pakistan in 2022 highlighted the urgent need for effective climate action. Over 1,700 lives lost and a staggering $30 billion in damages served as a brutal wake-up call: climate change isn’t just coming — it’s already here, and Pakistan sits squarely in its crosshairs. This reality hits particularly hard in a country where agricultural prosperity and human survival are intricately linked to climate patterns.

While no policy can reverse Pakistan’s immense losses, Islamabad must move forward with solutions to safeguard future generations. The National Carbon Market Policy (NCMP) is a crucial step in our broader strategy to build climate resilience and prevent further disasters. It establishes frameworks for both voluntary and compliance-based carbon trading across the energy, agriculture, waste management, and forestry sectors.

Carbon markets offer a way to balance environmental protection with economic development and transform our forests, agricultural practices, and even waste management into valuable assets. It’s like turning environmental responsibilities into economic opportunities while adhering to Article 6 of the Paris Agreement. For a developing nation like Pakistan, this represents a crucial pathway to sustainable development that doesn’t compromise our economic aspirations.

Also, we’re not complete newcomers to this field. Pakistan’s earlier experience with the Clean Development Mechanism under the Kyoto Protocol showed us what’s possible. Projects in landfill gas recovery, afforestation, and initiatives like the Delta Blue Carbon Project have demonstrated the opportunity to leverage natural ecosystems for climate solutions. Not only has the Delta Blue Carbon Project helped sequester significant carbon, it has also improved coastal resilience.

Carbon markets offer multiple developmental co-benefits.

Of course, the path ahead will have its challenges. We need to improve our ability to measure and verify carbon reductions; for that, our institutions and infrastructure require strengthening. Moreover, a limited understanding of carbon markets among stakeholders continues to hinder adequate participation, while volatile carbon prices add to market uncertainties — challenges the NCMP is now expected to address.

Several countries provide instructive examples for Pakistan’s carbon market development. Kenya’s Agricultural Carbon Project demonstrates effective integration of sustainable farming practices with carbon credit generation, creating a viable model for rural development. Similarly, Vietnam’s implementation of the REDD+ strategy has channelled international funding into large-scale forestry projects, leading to measurable reductions in deforestation and improved carbon stock management. These cases offer valuable insights into overcoming implementation challenges and illustrate the potential benefits of well-structured carbon market mechanisms.

Pakistan’s climate goals are ambitious: a 50 per cent emissions reduction by 2030, with 15pc from domestic efforts and 35pc reliant on international support. This includes sourcing 60pc of power from renewables and having 30pc of new vehicles to be electric. Achieving this is challenging, but carbon markets could provide crucial funding and expertise.

Carbon markets offer multiple developmental co-benefits beyond emissions reduction. Forest protection initiatives, while generating carbon credits, also create employ-ment, enhance biodiversity, and strengthen natural defences against climate impacts. Similarly, improved waste management systems reduce methane emissions while ad­­vancing urban sanitation and public health objectives. These benefits are vital for Pa­­kistan given the country’s multifaceted development chal­­lenges.

Pakistan’s pot-ential for carb­­on sequestration projects is substantial. With strategic plann­ing, initiatives like afforestation and improved land-use practices can yield verifiable carbon credits, enabling monetisation while supporting environmental goals. The country’s diverse geography, from coastal mangroves to mountain forests, presents ample opportunities to attract international investment in these projects.

Getting this right won’t be easy. It will require well-defined rules and effective monitoring systems. To get there, addressing institutional and technical barriers directly will be essential, with transparency and accountability required to build trust with international partners and ensure the credibility of our carbon credits.

Ultimately, carbon markets are far from a silver bullet without targeted development of renewable energy infrastructure, electrification of transportation, and moving towards sustainable fuels. For Pakistan, this moment calls for a careful balance between environmental and economic priorities, as pressures mount on both fronts.

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