

# Adaptation Fund: An Instrument to Combat Effects of Climate Change in Developing Countries

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**Abstract**—*The Destructive impacts of climate change are one of the major global concerns today, which poses a fundamental threat to sustainable development. The challenge of the hour is not just limited to how to mitigate climate change; the greater challenge is how to adapt these climate changes. The severity of the problem is more complex in the case of developing countries as they are more vulnerable to the risk of climate change. Their contribution to climate change is relatively smaller than their capacity to prevent and cope with the consequences of climate change. They also lack adequate resources for adapting to climate change. However, adaptation fund set up by the UNFCCC is an important instrument to help developing countries to confront climate change. US\$ 331 million funds have been allocated to climate adaptation activities while 3.5 million is direct beneficiaries in developing countries. Therefore, this paper basically reflects on the genesis, mechanism, and beneficiaries of adaptation fund. It also sheds light on India's experience with adaptation fund.*

**Keywords:** *Adaptation, Adaptation Fund, Climate Change, Developing Countries, UNFCCC.*

## 1. INTRODUCTION

Climate Change is perhaps the greatest threat the mankind has ever faced on the planet. Its repercussions are highly correlated with the sustenance of entire ecosystems. Moreover, the projections done by the Intergovernmental Panel on Climate Change (IPCC) suggest that global warming is further likely to aggravate in the coming years.

The consequences of climate change, i.e. increase in mean temperature, erratic and prolonged precipitation, rising sea level, etc. corroborate to be a peril to sustainable development regardless the level of development across the nations. However, the climate crisis is more serious in the case of developing countries as compared to developed countries because the variability in climate apparently affects the poor and marginalized more ruthlessly. Lack of adequate resources to build resilience to adverse impacts of climate change further intensifies their problem.

Despite the fact that developed countries hold the major share in the emission of greenhouse gasses (resulting from the burning of fossil fuels, emissions from industrial and agricultural activities, etc.), they are less likely to suffer from its adverse effects. Therefore, the developing countries stand in the worse situation even though their contribution to global warming is relatively smaller.

Also, the challenge of the hour is not just limited to how to mitigate the climate change; the greater challenge is how to adapt these climate changes. Thus, there has been a divergence in the approach to fighting climate crisis from mitigating to adaptability. But, the cost of adaptation is very high and varies across the nations. There is a consensus that developing countries are impotent in meeting such costs of adaptations. The United Nations Framework Convention on Climate Change (UNFCCC) has identified that adaptation costs in the range of \$28 – 67 billion per year for such countries by 2030. [3] Therefore, Adaptation Fund was created to cater to the need of building and improving adaptive capacities of the developing countries by way of collecting funds from the developed countries in the form of donations or levy on carbon emissions.

## 2. OBJECTIVE OF THE STUDY

The main objective of the study is to understand the meaning, genesis, objective, operation and significance of the Adaptation Fund (AF) particularly from the perspective of developing countries. It also studies the experience of India with Adaptation Fund.

## 3. ADAPTATION FUND: MEANING AND GENESIS

The Adaptation Fund was established under the Kyoto Protocol (1997) of the United Nations Framework Convention on Climate Change (UNFCCC), an international environmental treaty which aims at controlling greenhouse gas emissions, at the 7th Conference of the Parties (COP7) in Marrakech, Morocco in 2001. [10]

Adaptation Fund (AF) is an efficient financial instrument designed to support climate change adaptation projects and programs targeting the most vulnerable groups. It is basically developed to provide funds to all those most susceptible countries, sectors, communities, etc. who endeavor to build resilience to the adverse effects of climate change. It is a multilateral fund disbursed in the form of grants to all those developing countries that are parties to the Kyoto Protocol. It grants funds at the full costs of projects.

However, Adaptation Fund became operational in 2009 and since then over US\$ 331,000,000 has been effectively allocated to the objective of supporting different concrete adaptation activities all over the world. [9]

### 3.1. Purpose Of Adaptation Fund

Therefore, the twin **objective** of Adaptation Fund is to:

- Build resilience to destructive impacts of climate change through specific adaptation projects and programs.
- Target for the most vulnerable groups of the world who often lack adequate resources.

### 4. AREAS OF OPERATION OF ADAPTATION FUND

An adaptation fund primarily supports all the following major activities:

- Water resource management, ocean and coastal regions
- Land management, agriculture, health, infrastructure development etc.
- Monitoring diseases and vectors caused due to climate change
- Improving forecasting and early warning systems
- Improving disease control and prevention
- Supporting capacity building for disaster management due to climate change
- Strengthening and building information network centered on the national and regional level for immediate response to extreme weather conditions etc.
- Supporting fragile ecosystem.

### 5. GOVERNANCE OF ADAPTATION FUND

The adaptation fund is governed by principally four bodies – Adaptation Fund Board, Accreditation Panel, the Secretariat and Trustee. [10]

- The Adaptation Fund Board: The supervision and management of Adaptation Funds are done by the Adaptation Fund Board (AFB). It is composed of sixteen full members and sixteen alternates which meet at least twice a year.
- Accreditation: It reviews the application of mobilization and disbursement of the Adaptation Fund.
- Secretariat: The Global Environmental Facility (GEF) serving as the interim secretariat provides Secretariat

research, advisory, and administrative services to the Board.

- Trustee: The World Bank serves as the interim trustee of the Adaptation Fund. It performs two fundamental functions. Firstly, it sells the Certified Emission Reduction certificates that chiefly support the fund. Secondly, it manages the Adaptation Fund's trust fund.

## 6. FUNDING MECHANISM

The funding mechanism of Adaptation Fund can be understood in terms of mobilization and allocation of these funds.

### 6.1. Sources Of Adaptation Fund

The capitalization of Adaptation Fund is a shared source of parts of the proceeds from the Clean Development Mechanism (CDM) projects, the government of developed countries and private donors. However, its principal source is CDM amounting to 2% of levy on the proceeds of Certified Emission Reductions (CERs) obtained from the Clean Development Mechanism (CDM) projects under Kyoto Protocols.[10]. Furthermore, this is an innovative feature of the Adaptation Fund.

At present, US\$ 196.03 million have been mobilized from the CERs sale proceeds. Total contributions to the fund amount to US\$ 539.67 million with a balance of US\$ 350.39 currently.

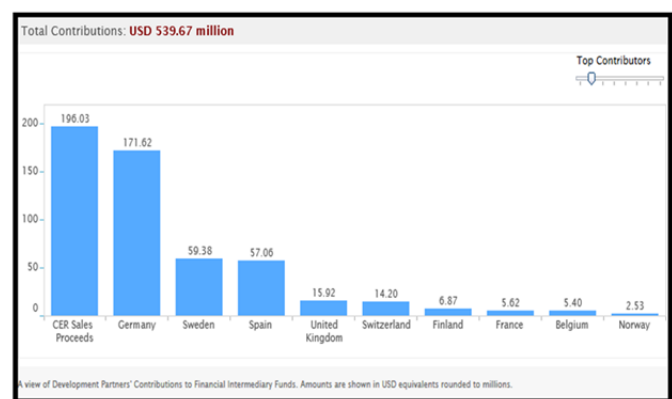


Fig. 1: Showing Top Ten Contributors of AF.

Fig. 1. Shows the top ten contributors (equivalent to US\$ 534.63) of the Adaptation Fund as on 8<sup>th</sup> March 2016. The major ten sources of the fund are CERs sales proceeds (36.32%), Germany (31.8%), Sweden (11%), Spain (10.57%), UK (2.95%), Switzerland (2.63%), Finland (1.27%), France (1.04%), Belgium (1%) and Norway (0.47%) respectively.

### 6.2. Disbursement of Adaptation Fund

Funds are disbursed primarily through three channels called Implementing Entities at national, regional and multilateral levels.

Henceforth, there are 15 National Implementing Entities (NEI), 2 Regional Implementing Entities (RIE) and 10 Multilateral Implementing Entities (MIE).

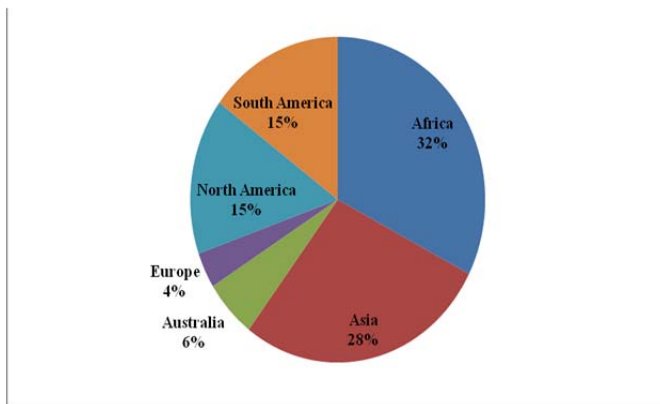
Any organization seeking the Adaptation Fund is required to submit an application for accreditation and supporting documents specifying that it fulfills the fiduciary standards of the Board to the IEs. Thereafter, the Accreditation Panel examines the application and accordingly suggests the AF Board. Consequently, the Board makes a pronouncement regarding the accreditation to that organization.

The major receivers of the Adaptation Fund continent wise are shown in the following table 1.

**Table 1: Continent-wise distribution of AF.**

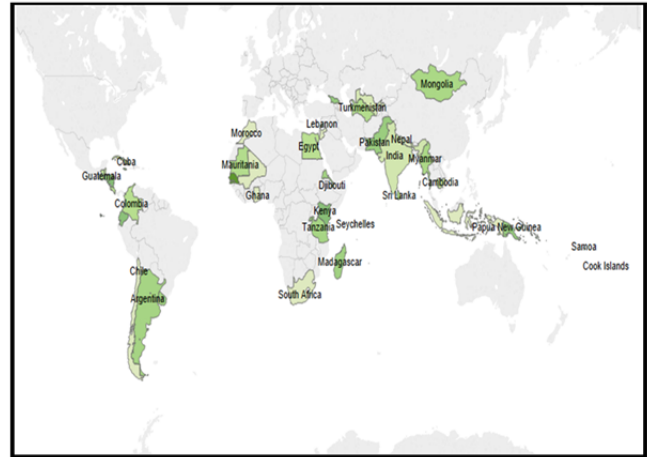
Continent	Funds Disbursed (in US\$)
Africa	48,848,141
Asia	41,707,392
Australia	8,665,794
Europe	5,316,500
North America	23,327,739
South America	22,283,310
<b>Total</b>	<b>150,148,876</b>

Source:www.adaptationfund.org.



**Fig. 2: Distribution of AF Continent-wise.**

Fig. 2 shows the proportion of the adaptation fund allocated continent-wise. It is evident that Adaptation Funds are largely allocated to support adaptation projects in Africa. Asia is the second largest receiver of the AF. North America, South America, Australia and Europe are the next major receivers of AF respectively.



**Fig. 3: Geographical Disbursement of AF.**

Fig. 3 shows the geographical disbursement of the Adaptation Fund in the world.

**7. BENEFITS TO DEVELOPING COUNTRIES**

One of the most important features of the Adaptation Fund is that it gives voice to the developing countries in the decision-making process. Also, it imparts full ownership of adaptation projects, from planning through implementation, whilst ensuring monitoring and transparency at every stage.

The other most innovative feature of the AF is its “Direct Access” to climate financing. “Direct access provides developing countries with the opportunity to strengthen local capacity and to build on local expertise”

-Fundecooperación para el Desarrollo Sostenible (Costa Rica’s NIE). It enables all eligible entities to AF to directly access financing and manage all aspects of the projects, from designing through implementation to monitoring and evaluation. [12] To further strengthen this mechanism ‘Readiness Program for Climate Finance’ was launched in 2014 which is designed to portray and share the growing experiences of AF direct access.

The key benefits accruing to developing nations from Direct Access of AF can be summarized as follows:

1. Funds, as well as projects, can be directly managed by the country itself. Hence, no outside interference in the project process.
2. Promotes the issues relating to climate change and adaptation at the national level.
3. Enhances intragovernmental collaboration and strengthens stakeholder voices.
4. Promotes transparency and competition in the process of formulation of projects.
5. Maintains institutional knowledge and enhances internal management.

**Table 2: Projects Financed by AF in India.**

S. No	Name of the Projects	Sector	Date of Approval	Funds Granted (In US\$)	Funds Transferred (In US\$)
1	Building Adaptive Capacities of Small Inland Fishers for Climate Resilience and Livelihood Security in Madhya Pradesh	Food Security	4/10/2015	1,790,500	447,620
2	Climate Proofing of Watershed Development Projects in the States of Rajasthan and Tamil Nadu	Water Management	10/9/2015	1,344,155	-
3	Climate Smart Actions and Strategies in North Western Himalayan Region for sustainable livelihoods of agriculture – dependent hill communities	Agriculture	10/9/2015	969,570	-
4	Enhancing Adaptive Capacity and Increasing Resilience of Small and Marginal Farmers in Purulia and Bankura Districts of West Bengal	Agriculture	10/10/2014	2,510,854	376,628
5	Conservation and Management of Coastal Resources as a Potential Adaptation Strategy for Sea Level Rise	Coastal Management	10/10/2014	689,264	161,367

## 8. ADAPTATION FUND AND INDIA

In India, the National Bank for Agriculture and Rural Development (NABARD) has been accredited by the Adaptation Fund Board of UNFCCC as National Implementing Entities (NIE). NABARD has been granted the full responsibility for the overall management of the projects and programs which are financed by the Adaptation Fund. It is also entitled to bear all financial, monitoring, and reporting responsibilities. It can appoint Executing Entities to execute adaptation projects and programs under its supervision. Any government body, research institutions, universities, NGOs, etc. are eligible to submit projects directly to NABARD and to act as Executing Entities. [15]

The Adaptation Fund Board has approved five projects in India with the objective of enhancing adaptive capacity to climate vulnerability in various sectors such as agriculture, water management, coastal management and food security. All these adaptation projects help India to build its resilience to the risks of climate variability in different regions of the nation. Table 2 shows all the projects working in India.

## 9. CONCLUSION

The innovative design features of the Adaptation Fund have contributed significantly to the global efforts to combat adverse effects of climate change in many developing countries around the globe. The source of mobilization of the Adaptation Fund through sale proceeds of CERs is indeed robust. However, its resources can further be enhanced if the voluntary contributions from developed countries increases. The operation of the Adaptation Fund also demonstrates that poor countries can be given full ownership rights and freedom to make decisions regarding the projects whilst maintaining good transparency.

In just a few years, the Adaptation Fund (AF) has established a well focused, effective, and transparent climate financing instrument that directly targets the most vulnerable communities in developing countries. This is clearly evident from the fact that Adaptation Fund has supported activities on the ground in 54 countries, which directly benefits 3.5 million people. It has restored or preserved over 119,845 hectares of natural habitat by allocating over US\$ 331million into climate adaptation activities.

Although the Adaptation Fund is quite modest, yet it has proved to be an effective instrument of climate financing.

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