

# **10 Billion Tree Plantation Financing**

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## **Executive Summary**

Pakistan has been hit by a range of climate change related disasters, especially in last decade the intensity and recurrence of such disasters have increase manifolds, bringing the issue of climate change on forefront. The matter of threat requires not only Pakistani government's ownership but also ownership of individuals and countries across the world, thereby financial contribution for mitigation and adaptation purpose.

Given the magnitude of problem, this policy paper gives an overview of all the possible funding options available to implement 10 Billion Forestation Project throughout Pakistan.

The paper discusses about the green funding and loan option available to Pakistan. Funding option include exploring the funding mechanisms of Global Climate Fund (GCF) and Green Environment Fund (GEF). Both established by United Nations Framework Convention on Climate Change (UNFCCC), GCF being the most recent one established under Paris Agreement. Based on the record of GCF and GEF funding trends for forestation project, we estimate Pakistan can approach both these entities with project proposal 200 million USD to began its 10 billion tree project.

For the Green loan, the paper discusses green bonds options available under World bank's International Finance Cooperation (IFC), Asian Development Bank (ADB) and Bank of China (BOC).

The paper further discusses some indigenous funding sources as well. These option include Public private sector partnerships which can be enhanced and utilized for the purpose. Private sector can play important role in promotion of forests, and plantation through involvement of various private organizations, industries, labour organizations. The paper also discusses the potential of Crowd funding which may be obtained from Pakistani expatriate specially residing in developed world, countries such as USA, Europe, Australia and Asian developed nations. A mechanism maybe developed through launching any one or more schemes under which people can pay a small amount for planting a tree saplings with an attached tag of donor's name. Donor will be notified of success of his contribution through a system.

Voluntary Solidarity Tree Fund is also explored an option, a fund may be developed and funneled to Green Fund for 10 Billion Tree Plantation. Plantation of trees is considered as one type of divine investment, especially in a Muslim society it has been used as an incentive for promo-

tional purpose. Many individuals, philanthropic organizations may be motivated to contribute for plantation. Options to collect funds under Corporate Sector Contribution have also been discussed. Corporate Sector contribution can be involved into this program by developing options adjustable to needs and priorities of the interested companies. Under this option, a number of companies are willing to contribute in plantation movement according to their own preferences, for which certain number of packages may be developed and offered to the willing corporate companies. The paper suggests that Corporate Social Responsibility (CSR) Contribution may also be made a source of financing through CSR Law for any private company operating in Pakistan, on its earning in certain percentage of, profits. Which would enable the companies to contribute to Green Fund or participate in green activities.

The Paper concludes by suggesting some implementation measures to successfully approach the international funding. The suggestion include establishment of a Fund Cell by the Government of Pakistan with joint management of Ministries of Climate Change and Planning . To conduct National Planning Meeting on the planning and development of funding proposals. To Establishment GIS Based Monitoring System so that monitoring of ongoing activities of the project may be carried out and to establish Online Data storage through which data about the project may be available to all the stakeholders, government, public organizations, private sector agents, corporate companies, individuals.

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# **10 Billion Tree Plantation Financing**

## **Introduction:**

After successful plantation of Billion Tree Tsunami Project (BITP) by PTI government in Khyber Pakhtunkhwa Pakistan, setting a goal of 10 Billion Tree Plantation would be a huge task with expected outcome on world's climate, weather, temperature, protection and preservation of atmospheric health, reduction in green house gas effects, lowering cases of random floods, lowering rains, droughts and other biodiversity supportive actions. The objective is to plant trees throughout the country with expectation that will contribute in improving the life of all living beings on the globe. (Priovani., 2018)

For a developing country such as Pakistan, a series of extreme weather events and climate change has turned the attention of development professionals and government alike to give high priority to invest in forest resources development, including promotion of plantations. In general, the developing countries also give prominence to forest industries, utilization or other value-adding activities, while their external partners have recently tended to show increasing favor towards natural resource conservation. Success of BITP is banked upon indigenously available financing, highest level of commitment and dedicated management, while for plantation of 10 Billion Tree the Government will have to explore financing sources, high level of commitment and effective integrated management.

## **Goal setting:**

A high level goal is being set for wellbeing of present and future generations in the world, which need greater level of ownership of living beings across the world. A humanity centered endeavor needs a number of inputs at several levels. Four main stages need ownership and contributions: i.e. 1. Planning stage, 2. Financing arrangements 3. Implementation systems 4. Sustainability and protection.

This paper focuses on devising financing strategy for successful implementation of 10 Billion Tree Plantation across Pakistan.



This endeavor holds importance for not only Pakistan, but aims to serve its benefits for all human beings, irrespective of their country. It is therefore pertinent for all human beings to recognize the importance of this project and contribute to the cause.

The overall objective of the paper is to provide the financial basis for strengthening personnel and institutional capacities at local, provincial and national levels in policy design, implementation, monitoring and evaluation of forest plantation throughout the country. Specific objectives are:

1. To identify financing sources from Pakistan to promote plantation.
2. To explore modes of financing for forest plantation through crowd funding.
3. To identify international funding through various sources in order to increase forest cover.
4. To assist provincial governments in attaining the fund in-order to support similar innovative green projects to increasing green cover in urban and rural areas.

### **Significance of the Study:**

No work so far is available on comprehensive and diversified financing sources for plantation of trees. Therefore, this paper attempts to identify viable sources for financing and implementation of 10 billion Tree Plantation. This may include coverage of sources drawn on the basis of existence of beneficiaries at local, non-local and global level.

### **Methodology and dataset:**

The research involves qualitative and quantitative methods literature review and analysis of existing data. The methodology is based on desk study of the existing literature present on number of sources related to climate change, forestation and sustainability, and financing options. This study takes stock of a number of options being adopted for similar activities around the world and considering those options weighs out Pakistan's stand at successful acquisition of these finances.

## **International Green Financing Sources**

Forestation and allied environment friendly activities have been recognized, ratified and owned by almost all the countries, governments organizations and innumerable individuals as contribution to human being, living-being, bio-diversity, ecosystem of the globe in general and of respective part of the world in particular. A number of conventions, conferences, and summits turned up in the shape of either obligatory or optional agreements and commitments amongst members of the world community.

A certain number of local, regional and international institutions have been developed for implementation, support and monitoring of environment related programs and activities. A number of institutional arrangements exists for environment supports which include Green Environment Facility (GEF) and Green Climate Fund (GCF).

### **The Global Climate Fund (GCF)**

The Green Climate Fund (GCF) is a global fund created to support the efforts of developing countries to respond to the challenge of climate change. GCF helps developing countries limit or reduce their greenhouse gas (GHG) emissions and adapt to climate change. It seeks to promote a paradigm shift to low-emission and climate-resilient development, taking into account the needs of nations that are particularly vulnerable to climate change impacts. GCF recognizes the need to ensure that developing country partners exercise ownership of climate change funding and integrate it within their own national action plans.

Under GCF funding, Accredited Entities partner with the Green Climate Fund to implement projects. Guided by the Fund's investment framework and the priorities of developing country governments, Accredited Entities convert concepts into action. They work alongside countries to come up with project ideas, and submit funding proposals for the GCF Board to approve. Responding to the climate challenge requires collective action from all countries, cities, businesses, and private citizens. Among these concerted efforts, advanced economies have formally agreed to jointly mobilize USD 100 billion per year by 2020, from a variety of sources, to address the pressing mitigation and adaptation needs of developing countries. According to GCF portfolio dashboard, so far only 3.75 billion has been committed on 73 projects. (GCF Portfolio, 2018)

**The Global Environmental Facility (GEF)** operates on the basis of collaboration and partnership among the Implementing Agencies, as a mechanism for international cooperation for the purpose of providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits.

The GEF works towards supporting projects related to climate change in countries covering a wide scope of actions. In this regard, a total of US\$910 million has been already dispensed to individual countries to enable them develop and support their national climate change mitigation policies and strategies, increase share of renewable energy supply to their main grid and thereby help them become more energy efficient. These efforts also include developing a sustainable transport and urban design, promoting climate smart agriculture, and develop a climate resilient urban and rural communities that can face short-term climate induced disasters.

The GEF has also been working toward enabling countries to participate UNFCCC -related reporting and assessments, including Intended Nationally Determined Contributions (INDCs), and to help incorporate their findings into national policy planning and implementation. In this regard GEF has allocated US\$225 million to ensure that reporting mechanism on INDCs remains efficient, accurate and timely. In addition to that, the GEF is looking to spend up to US\$1.4 billion towards enhanced resilience, adaptation and disaster risk reduction.

The table below shows overview of type of Projects that get most funding by GCF (GCF August, 2018), (GCF Insight 2016) and GEF:

**Table-1 International Green Funding.**

Funding Streams	Adaptation Funding	Mitigation Funding	Funding for Forest cover
GCF	0.876 billion USD	1.497 Billion USD	10 approved projects with USD 314 Million investment

Funding Streams	Adaptation Funding	Mitigation Funding	Funding for Forest cover
<b>GEF</b>	1.18 Billion USD	4.2 Billion USD	380 Project with 2.1 billion USD investment
<b>ADB</b>	2 Billion USD	4 Billion USD	—No projects directly linked with forests so far
<b>IFC</b>	1.2 billion USD	4.4 billion USD	56 sustainable forestry Project with 1.5 billion USD investment

Source: The author has drawn on the GCF, GEF, ADB and IFC data available on websites.

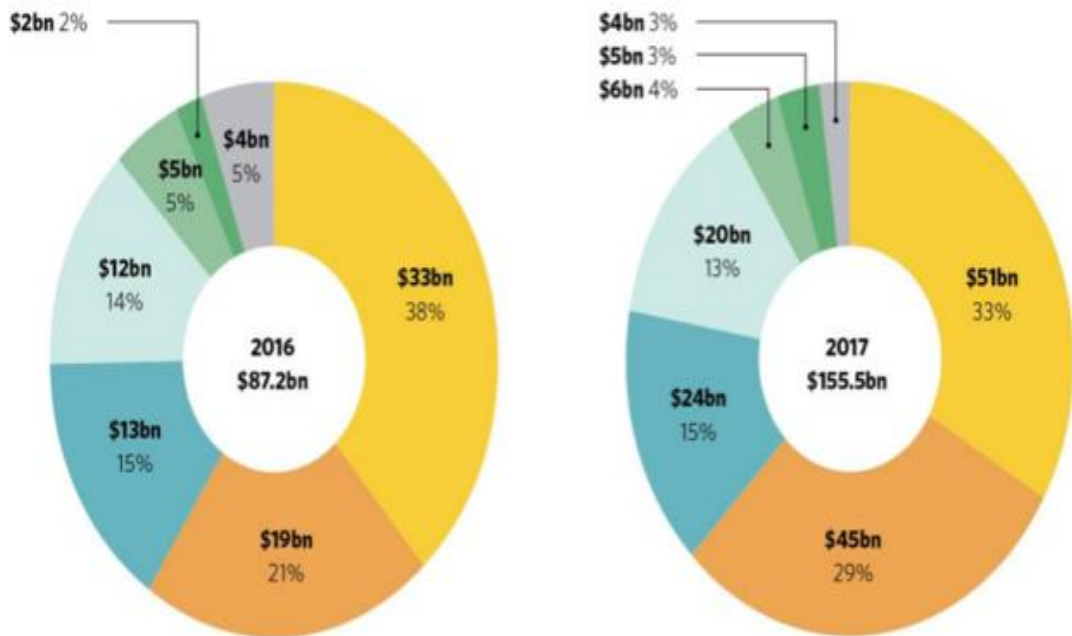
### **Green Bonds:**

In addition to the funding agencies such a GEF or GCF which work on principle of dispensing money to projects related to mitigation or adaption to climate change, Green bonds are a way of lending money and thereby financing projects which are environment friendly and serves the adaptation and mitigation purpose. Green bonds in simple terms are bonds allocated for environment friendly projects. Green bonds is an emerging trend in the bond market and the amount being credited or deleted in green bond market is expected to rise with coming years. 2017 alone saw green bond trade amounting to 155 billion dollars (Kenney 2018). Following sections mentions some of the leading green bonds creditors and gives overview of their funding trends:

**International Finance Cooperation (IFC)** is the leading funding stream for green bonds when it comes to supporting climate-smart projects for developing countries. They ensure that the climate smart aspect of a project is given highest priority while making investment decisions. The advisory services also enable project planners to develop a sustainable and climate-smart initiative. So far IFC has invested \$18.3 billion in long-term financing from its own account and mobilized another \$11 billion through partnerships with investors for climate-related projects (IFC

2017). The figure taken from Climate Bonds below shows how bulk of green bond funding is earmarked for projects related to renewable energy, infrastructure, and building (Climate Bonds, 2017). Around 10% of total green bond funding goes into adaptation related projects.

**Table-2 Climate Bonds Funding** Source: Climate Bonds (2018) website.



December 2017

IFC was also one of the earliest issuers of green bonds, launching a green bond program in 2010 to help catalyze the market and unlock investment for private sector projects that support renewable energy and energy efficiency. As at 30th June 2017, IFC's had issued \$5.8 billion in green bonds in twelve currencies (World Bank 2017). A considerable part of those green bonds are focused on sustainable land use and investment in forest cover.

**Green Bond from ADB:** ADB gives funding to projects which are identified by using the joint multilateral development bank approach for tracking and reporting climate change mitigation and adaptation finance.

ADB recognizes that Asian region will have to spend and estimate of around \$200 billion per year specifically for climate change mitigation. ADB's green bond program was launched in early 2015 and has so far raised \$3.3 billion. ADB has issued its first green bond in May 2017 in the offshore Indian rupee linker market raising ₹3 billion (\$47 million equivalent) with maturity in February 2021.

ADB's financing of climate mitigation and adaptation reached a record \$4.5 billion in 2017, a 21% increase from the previous year. ADB is now in position to achieve its \$6 billion annual climate financing target by 2020. Out of the \$6 billion, \$4 billion will be dedicated to mitigation through scaling up support for renewable energy, energy efficiency, sustainable transport, and building smart cities, while \$2 billion will be for adaptation through more resilient infrastructure, climate-smart agriculture, and better preparation for climate-related disasters.

**International Green Financing Commitments and pledges:**

**Table-3**

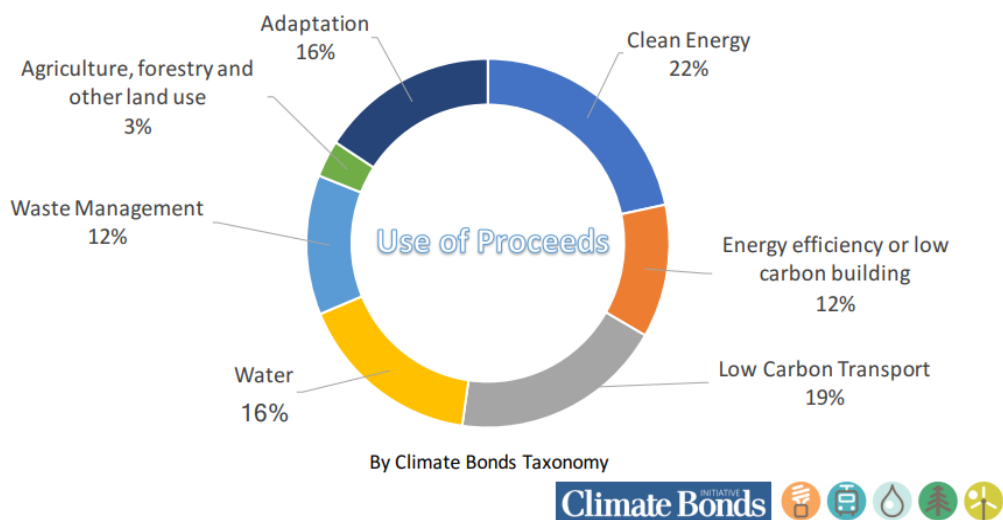
<b>Funding Streams</b>	<b>Total Green Funding Pledges</b>	<b>Committed finances so far</b>	<b>Future Pledges</b>
<b>GCF</b>	USD 100 billion per year by 2020	3.7 Billion USD (form 2010 to 2018 )	10.3 Billion USD as of 2018
<b>GEF</b>	Above 4 billion for each 4 year cycle	20.56 Billion USD (form 1992 to 2018)	4.1 billion as of 2018 (new 4 year cycle called GEF-6)
<b>ADB</b>	6 billion USD per year by 2020	750 million (in Green Bonds only)	60 billion USD by 2030 (75% of total)
<b>IFC</b>	\$18.3 billion in green bonds (+11 billion through partnership)	5.8 billion in Green Bonds	2 billion USD each financial year

Source: The author has drawn on the GCF, GEF, ADB and IFC data set available on websites (2018).

**Green Bank of China Funding:** Bank of China Limited (BOC) has extensively been promoting environment friendly projects through green bonds in land and offshore.

**Table-4**

**China green bond market : use of bond proceeds**



Source: Climate Bonds Website

The country issued over \$23 billion in green bonds in the first 10 months of 2017, representing 22 percent of total bond issuances of \$106 billion in the same period, (Bank of America Merrill Lynch, 2018)

According to the Annual Report on Bank of China’s Green Bonds, Bank of china dispensed green bonds related to Renewable Energy (Wind & Solar) to the amount of 1,239.10 million Chinese Yuan, Green Bonds on Waste Water Treatment were amounted to 50 million Chinese Yuan and Green Bonds on Clean Transportation (Electrified Metro) amounted to 18,485.36 Mil- lion Yuan in 2017 alone 3% of China’s green bonds are being used for improving forest cover (Wilson Center 2017 )

China is looking to mobilizing 2 to 4 trillion Yuan (\$315-630 billion) in green investments per year (China Daily, 2018).

Pakistan may make a case containing its achievements in Billion Tree Tsunami, future expected returns and contribution to global environment and individuals across the world. CPEC centered activities may be used as strength to capture the potential.



## **Strategy for Financing Sources**

Plantation of 10 Billion Tree will positively contribute to, seasonal effects, whether, reduction of green house gas effects, reduction in degradation of environment, improvement in level of oxygen and other gasses for better atmosphere, reduction in Ozone layer's depletion, improvement in bio-diversity, reduction in environment center morbidity, improvement on water sources, livelihood access availability of bio-mass and various other contribution. It would have direct impact on, life, health, income and social cohesion of individuals and living-beings in Pakistan with an additional spill-over effect on human and living beings access the world. The stakeholder mapping of this program is beyond the level of a single country and human being. The recognition and ownership of 10 Billion Tree will have to be made at local, national regional and global level, by the governments, organizations, diversified sectors and individuals. Financing Strategy for this program may be devised in view of stakeholder mapping, ownership and coverage across Pakistan and the world. A number of financing sources are being incorporated in the strategy in view of earlier base, potential level and future expected positive externalities on these stakeholders.

For financing 10 Billion Tree a Green Fund may be developed for systematic and random financing for implementation. Financing may be drawn on indigenous and exogenous resources streams, including seed money through diversion of available funds at different places in the country. Most countries follow this approach to attract international funding to better manage their green finances.

In view of above, potential areas for financing 10 Billion Trees can be visualized, one can get an idea about scale on which a certain type of project is preferred over the other. Projects directly aiming to increase forest cover comes in the category of both adaptation and mitigation category. Given the scenario, we are faced with question of how Pakistan can acquire funding for its 10 billion reforestation project. Before we go on further assessing the chances and poetical of funding, its important to the note that Pakistan has already developed a good image when it comes to exhibiting its political will and sincerity regarding reforestation efforts given the success of KPK's Billion Tree Tsunami project. So its important to recognize that the project's positive portrayal on international media platforms (The Washington Post 2018)(IUCN 2017)(Independent

2017) has already provided us a solid launching pad to begin advocacy efforts in the international green funding arenas.

In view of positive implications of the project on multiple stakeholders at international, national and local level, a number of financing options may be explored. Since, the project will contribute to improvement of atmosphere, global environment, biodiversity and international green cover, therefore following multiple international financing sources may be explored.

**Development of a Green Fund or 10 Billion Tree Fund;** For financing 10 Billion tree a Green Fund may be developed for systematic and random financing for implementation. A number of institutional arrangements exists for environment supports facilities including Green Environment Facility (GEF), Green Climate Fund (GCF), Reduction Emission Desertification and Deforestation (REDD+). Financing may be drawn on indigenous and exogenous resources streams, including seed money through diversion of available funds at different places in the country. Most countries follow this approach to attract international funding to better manage their green finances.

Post Paris Agreement (UNFCCC 2018), International environmental facilities have been developed which can be effectively capitalized for the purpose.

GCF has 10 approved forestation projects with USD 314 Million in investment and GEF has completed 380 Projects with 2.1 billion USD investment in forestation sector. These International Financial facilities have pledges and commitment based budgets for promotion of forestation, which can be used as an opportunity for promotion of plantation, specially with credibility of achievement of Billion Tree in Khyber Pukhtunkhwa (KP). Therefore following proposals may be worked out:

**GEF funding** may be considered as a source to capitalize existing and future commitments for promotion of green cover. Under GEF, Pakistan is a member of a constituency comprised of the following countries: Afghanistan, Jordan, Iraq, Lebanon, Pakistan, Syria, Yemen. GEF funded 51 number of Projects amounting to 237.75 Million, with additional co- financing 641.38 Million (GCF Pakistan 2018)

GEF follows a well defined and charted out policy on co-financing. They make sure that a certain level of co financing is achieved, in this regard that have set a policy to reach a ratio of “Co-Financing to GEF Project Financing of Small Island Developing States or Least Developed

Countries of at least 5:1”. But this ratio is not a fixed number and countries are encouraged to raise even higher levels of Co-Financing.

Pakistan can make a package for GEF by blending with other co-financing sources, which would arise matching contribution from GEF. Pakistan can therefore Approach GEF with estimate of 20-30 million USD project proposal, while maintaining flexible co-financing ratio of under its Sustainable Forest Management Fund (SMF) program.

**GCF funding** may be approached through appropriate homework for capitalization of early and future green cover activities. GCF, in partnership with Climate Change Development Knowledge Network (CDKN) have developed a project approval tool kit which aims to support the accredited entities in preparing and developing projects proposals which can be later brought forward to the GCF for review and approval. As per the tool kit (CDKN, 2017), a potential GCF (adaptation, mitigation or cross-cutting) project or program should demonstrate how it will contribute to achieving a paradigm shift to a country’s low-emission and climate resilient development pathway. Such tool kits can be used for Ministry of climate change before drafting a proposal to ensure higher chances of success. Pakistan may approach GCF for 20-30 million \$ funding on co-financing basis on negotiable terms.

These funds have diversified scope for expansion of forestry activities in its allied and complementary activities. Both GCF and GEF have included services to agriculture sector as part of their forestation projects. These projects usually include elements of agro-forestry, improving agricultural value chains, restoring dry lands and degraded landscapes.

**ADB Green bonds;** in Pakistan ADB has been tagging most of green funds dispensed in Pakistan for projects mostly related to renewable energy, Its published in most recent Fact Sheet on Pakistan (ADB Fact Sheet, 2018) while giving an overview of its investments clearly mentions that its giving priority to projects related to energy, infrastructure, and institutional reforms. This trend also indicates its soft policy, as shown in its newly published working paper titled “Green Finance in Pakistan: Barriers and Solution”(Malik et. al, 2018), which divulges priority to projects related to green energy and infrastructure. ADB plans to raise around \$23 billion from the capital markets in 2018. ADB Strategy 2030 also mandates that at least 75% of the number of ADB’s committed operations will be supporting climate change mitigation and adaptation by 2030 with climate finance from its own resources reaching \$80 billion for the period 2019–2030 (Asian Development Bank 2017)

10 Billion Tree Plantation may be floated for ADB green financing in a package form by developing appropriate mechanism for allied and complementary competitive activities.

**IFC Funding:** IFC on the other hand has been showing great support to projects related to forestation in Pakistan (The News, 2017) and has already agreed to dispense 100 million USD for Green Pakistan Program. Given this scale of support in loans, Pakistan can submit a proposal for a forestation project asking for green bonds of around 200 million USD to 150 million USD. The figure below shows how bulk of green bond funding is earmarked for projects related to renewable energy, infrastructure and building (Climate Bonds, 2017). Around 10% of the total green bond funding goes into adaptation repeated project.

**Open market carbon credit** selling may also be adopted as an option. Pakistan can earn a noticeable amount in foreign currency if the government creates carbon credit certificates and sell them in the international open market.

**The Public private sector partnerships** can be enhanced and utilized for the purpose. This sector may have a role in promotion of forests, and plantation through involvement of various private organizations, industries, labour organizations etc.

The Private partnership can play a vital role in mobilizing the required funding since the investment required from 2016 to 2030 to remain below a 2 degrees Celsius rise is estimated to be approximately at USD 7 trillion per year, as reported by Organization for Economic Co-operation and Development (OECD) (OECD 2017) and New Climate Economy (NCE) (The New Climate Economy 2016) shows a need of around USD 53 trillion in joint investments to successfully move on to a low-carbon energy system from 2016 to 2035. Green Climate Fund, World Bank and other major green funding streams also recognize the need for public private partnership. GCF have established a private sector facility (GCF Private Sector Facility, 2018) and WB have established Public Private Partnership Legal Resource Center (PPLRC) (World Bank- PPLRC, 2018).

Private Sectors involvement in 10 Billion Plantation as a stakeholders may be built in through establishment of a framework that accommodate persons, entities at national and international level.

### **Crowd Funding :**

Keeping in view the global nature of the program, its impact on human beings, diversity across the world, implications on individuals, and corporate sector, contributions may be attracted from individuals and corporate companies of Pakistan. Following modes maybe used to attract crowd funding.

Crowd funding may be obtained from Pakistani expatriate specially residing in developed world, countries such as USA, Europe , Australia and Asian developed nations. A mechanism maybe developed through launching any one or more products such as:

1. A Dollar for a Tree or 1 \$ 1 Tree.
2. Fund a Tree or
3. One tree Planted or
4. Plant for Pakistan or
5. Tree Fund

This idea has already been developed by KP Forests Department and KP IT Board but not implemented yet. Tree saplings may be planted under this project with an attached tag of donor's name. Donor will be notified of success of his contribution through a system whereby the GIS coordinates location of his planted sapling will be shared through online website service.

Pakistan has around 7.6 million expatriate living abroad, out of which almost 3 million are living in developed countries. Assuming that those who have the capacity may contribute to finance 5 Trees in the program, around 15 to 20 million USD can be generated through this program. If one person is willing to contribute more than once over the years in view of progress that will be addition in total financing base.

**Voluntary Solidarity Tree Fund:** This fund may be developed and funneled to Green Fund for 10 Billion Tree Plantation. Plantation of trees is considered as one type of divine investment, especially in a Muslim society it has been used as an incentive for promotional purpose. Many individuals, philanthropic organizations may be motivated to contribute for plantation.

Local philanthropic potential may be capitalized as Pakistan has bagged 14th spot on World Giving Index 2017, and according to a study conducted by Pakistan Centre for Philanthropy Pakistanis give around Rs240 billion to charity and other local causes annually.

A framework will have to be developed for promotion of plantation by Philanthropic organizations with full operational, supervisory and monitoring autonomy in a transparent manner to the tree promoters; individuals and organizations. The philanthropic organization may either donate finances or may take over plantation of certain number of trees, forests etc.

**Corporate Sector Contribution** can be involved into this programme by developing options adjustable to needs and priorities of the interested companies. In Pakistan more than 73000 companies are registered with Security Exchange Commission of Pakistan (SECP) (SECP 2018). A number of companies are willing to contribute in plantation movement according to their own preferences, for which certain number of packages may be developed and offered to the willing corporate companies. It may be named as “Adopt a forest” or own a forest etc. The similar model has been adopted by KP Forest Department in Billion Trees Tsunami Project.

Corporate companies can be offered lease of forest land for a certain amount of time to maintain forest or reclaim forest land. The data, track record and further information under this project would be available and shareable with all stakeholders including donors, auditors, and other desirable state or non-state entity.

The corporate entities may fund or take over a part of forest for plantation and preservation, their contribution may be accounted in financial term as funding or may take cost of plantation.

**Corporate Social Responsibility Funding:**

Corporate social responsibility (CSR) Contribution may be made imperative through CSR Law for any private company operating in Pakistan, on its earning in certain percentage of, profits. Promoting and encouraging companies to contribute to Green Fund or participate in green activities under CSR is an effective way to ensure that companies remain aware of their position and potential to bring green change.

Corporate Social Responsibility contributions may be managed through legislation or executive orders. Under the legislation, a 0.5% amount of the total profit of corporate entities may be directed towards plantation activities. Currently in Pakistan, the total amount of companies are 73,207 out of which 65,806 are private limited companies. As of 2016 an estimated 7.31 billion PKR has been donated by Public Listed Companies (PLC). Whereas Public Unlisted Companies (PUC) and Private Listed Companies (PLC) have Donated Rs.1.03 billion and Rs. 1.48 billion respectively. If all companies are to donate to the forestation project, and amount close to 5 Billion PKR can be generated for the project annually.

**Public-Public Partnership** may be adopted for promotion of forestation through involvement of different public sector organization; Educational Institutions, HEC, Irrigation Departments, WAPDA, NHA etc. Partnership amongst all the provinces and regions may be developed through technical assistance, knowledge sharing, inputs supply management, congenial laws and procedures, financial rolls may also be shared with each other.

Existing resources with public sector organization; land, human resources and operating finances may be shared for joint achievements for 10 Billion Tree Plantation. This may be accounted for direct plantation of trees instead of financing which is also measurable as a proxy or saving.

**Property Rights** tax may also be used for promotion of forestation. A certain amount of tax from any property transaction or property holder tax can be ear-marked specifically for forestation project.

Following table gives an overview:

**Table-5: Local Funding Sources for Tree Plantation**

<b>Indigenous Funding</b>	<b>Amount generated</b>	<b>Potential amount which can be generated in future for tree plantation</b>
<b>Crowd Funding</b>	240 billion PKR	3.9 Billion PKR
<b>Corporate Social Responsibility</b>	7.31 Billion PKR	10-12 Billion PKR
<b>Government owned green fund</b>	5-6 Billion PKR	2-3 Billion PKR
<b>Voluntary Funding</b>	240 billion PKR in charity	10 billion PKR
<b>Corporate Sector</b>	7.31 Billion PKR	5 Billion PKR

Source: The author has developed the table based on potential financing sources.

## **Implementation Framework**

The Financing strategy's viability depends on key caveats; transparency, symmetric flow of Information, easy accessibility, parity of relationship, customer centered preferences, result oriented , simplification of procedures and responsiveness.

A comprehensive, well integrated, accessible system for implementation of 10 Billion Tree Plantation project with visible financial utilization and physically verifiable ground linkages having provision for monitoring and audit will have to be developed. All the implementing partners may have integrated system of results reporting and uploading on the dedicated websites.

- Fund Cell may be established by the Government of Pakistan with joint management of Ministries of Climate Change and Planning which may serve as a focal point for documenting, coordinating with other departments, communicating with international donor, working on advocacy and networking with different stakeholders. The cell may also coordinate and carry-out further activities such as mentioned below.
- National Planning Meeting on the planning and development of funding proposals should be organized to (i) clarify the main issues and conceptual/operational framework of the project; (ii) share the national experience and review progress made in the policies, approaches and strategies for planning and implementing of forestation programs and activities; and (iii) initiating networking among NGOs and other international stakeholders.
- Identification and training a core group of project planners to undertake trainings on i) on attaining fair knowledge of present funding opportunities, ii) available funding potential, iii) available local departments and funds which can access those funding and iv) and gaining in-depth knowledge of various fund's frameworks, rules and regulations. The expertise of these project planners will be crucial for the further success of the tree plantation project.
- Training Workshop should be arranged in-order to work further on training of government personnel and development agents working on the process of the planning and development of forestation and tree plantation proposals. The workshop can also be a good platform where brainstorming session could be held in-order to take stock of good ideas



coming from government personnel of different provinces keeping in mind their ground realities.

- Data Collection and Analysis of all the possible areas which can be targeted under the 10 billion tree plantation projects should also be the key to forming well charted project proposal for gaining international funding. The data collected will enable the national project planners and administrators to make adequate proposals for gaining financial support.
- Scanning Exercise: Using the knowledge collected from the technical workshop and data collection and analysis, scanning of already existing forestation and green projects and plans will be undertaken to identify projects and programmes with potential for scaling up or for dissemination of lessons learnt especially from KPK billion tree tsunami project. Based on the scanning exercise, some selected projects will be subjected to an in-depth analysis for providing inspiration and models for “how to do it”. The results of the survey and the scanning exercise will both be used for assisting the national authorities with developing a realistic national tree plantation plans, with higher probability of gaining funding form international organizations mentioned above.
- Establishment GIS Based Monitoring System: A system having inter-linkage with various parts of the country through GIS may be developed so that monitoring of ongoing activities of the project may be carried out.
- Online Data Accessibility: To all the stakeholders, government, public organizations, private sector agents, corporate companies, individuals, Pakistani expatriates may be ensured for improved transparency.

### **Conclusion:**

10 Billion Tree Plantation financing strategy may be devised on a number of international funding sources; GCF, GEF, IFC, ADB Green Bonds, China Green Bonds in view of projects cosmopolitan nature and positive contributions to human and living beings across the word. National Financing potential may be capitalized through funneling funding from, private sector, corporate sector, individuals, philanthropic organization and crowd funding being direct beneficiaries of the project. The Federal, Provincial and Local Governments, public sector organizations, may contribute in financial term, technical assistance, facilitation, saving cost and building credibility of the project. A well designed, transparent, accessible audit able and monitor-able framework needs to be developed as a foundation for other building blocks.

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