



Government of Pakistan
Ministry of Climate Change

Collaboration with CTCN - Pakistan's Experience

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Pakistan's Profile

- Pakistan's contribution to global warming is insignificant, yet there are adverse impacts of changes in global climate.
- Pakistan categorized as one of most vulnerable countries to climate change.
- Country's NDC target is subject to provision of finance and technology development and transfer, and capacity building
- Government is incurring 8.5% of budgetary resources to address Climate Change, creating extreme pressures on our economy.
- National Climate Change Policy of Pakistan emphasizes on promotion and development of cleaner technologies to implement the adaptation and mitigation measures.



Pakistan's Structured approach to address Climate Change

- National Climate Change Policy (NCCP)
- Framework for Implementation of NCCP
- Institutional Structure
- Legislation
- Climate Finance Framework
- Engagement with international processes:
 - NDC's roadmap is being developed
 - Collaboration with CTCN
 - Green Climate Fund
 - National Communications/BURs



Collaboration with CTCN

CTCN, on the request of Ministry of Climate Change, carried out Technology Needs Assessment (TNA) in Pakistan:

- to produce implementable Technology Action Plans (TAP)
- to play an effective role in reducing green house gas emissions as well as increasing resilience against climate change vulnerabilities through innovative technological solutions.
- to provide enabling framework for the transfer and diffusion of cleaner technologies.
- to support in the implementation of recommendations of National Climate Change Policy and Framework for Implementation of NCCP.



Objectives of TNA Project

TNA I: Identification & prioritization of technologies

- To identify & prioritize through country-driven participatory processes, technologies that can contribute to mitigation goals of participating countries, while meeting their national sustainable development goals & priorities

TNA II: Barrier Analysis & Enabling Framework

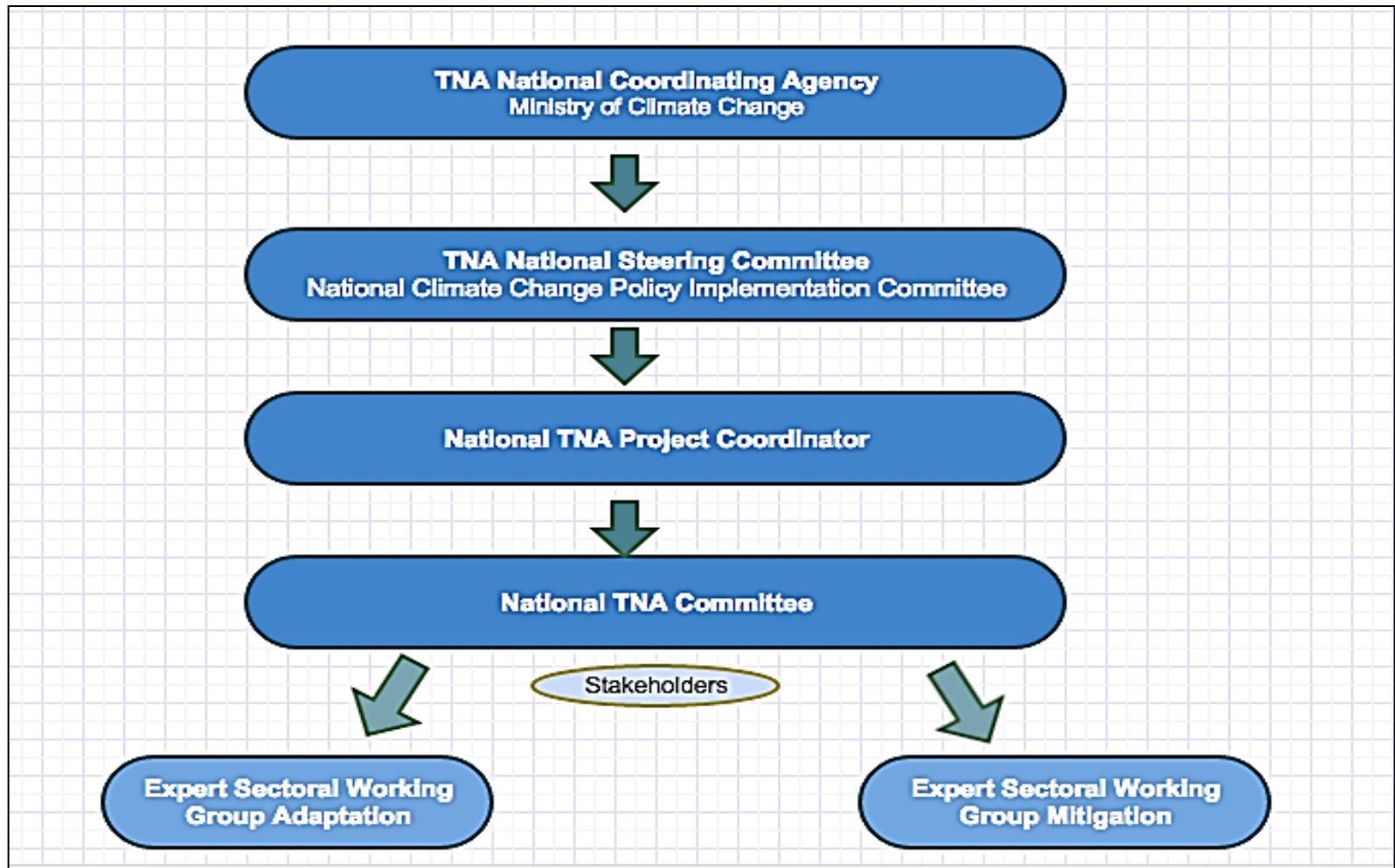
- To identify barriers hindering acquisition, deployment, & diffusion of prioritized technologies

TNA III: Technology Action Plan (TAP)

- To develop Technology Action Plans (TAP) specifying activities & enabling frameworks to overcome barriers & facilitate transfer, adaptation, & diffusion of selected technologies in participant countries.



TNA Institutional Structure in Pakistan



Institutional Structure TNA

- National TNA Committee - Composition:
Senior Officials of Federal & Provincial Ministries responsible for:
 - Climate Change;
 - P&D;
 - Environment;
 - Renewable Energy;
 - Industries;
 - Science & Technology;
 - Water & Power;
 - Food & Agriculture
 - Research Institutions.



Steps in Preparing TNA

Step
1

- **Technology need assessment (TNA)**

- Prioritizing technologies through stakeholders involvement for further market analysis and final inclusion in the action plan

Step
2

- **Barrier analysis**

- Legal, institutional, social, knowledge

Step
3

- **Policy options – enabling framework**

- Legal, institutional, Finance

Step 4

- **Technology action plan**

- Prioritized policy options

Sectors & technologies prioritized (Adaptation)

Water Sector	Agriculture Sector
Rainwater harvesting Priority-1	High efficiency irrigation systems for irrigated and rain-fed areas Priority-1
Strom water management . Priority-2	Climate monitoring and forecasting - early warning system- Proirity-2
Groundwater recharge Priority-3	Drought tolerant crop varieties- Priority-3



Sectors & technologies prioritized (Mitigation)

1. Energy

- Solar PV at household & institution level
- Micro & small hydropower plants

2. Forestry

- Sustainable Forest Management Plan
- Social Forestry

3. Transport

- Bus Rapid Transport
- Computerized Vehicle tune up



Possible Benefits

- Implementation of National Climate Change Policy
- Possibly support implementation of NDCs and achievement of long-terms goals of sustainable development
- Institutional structure have been established to achieve our national targets with regard to technology development & transfer.
- Strengthened the capacity of relevant departments at federal as well as provincial levels.
- Opportunity for penetration of new environmentally sound technologies
- TAPs and project ideas attracts potential investors and donors to invest in technology transfer



Follow-up of TNA

- As a follow up of TNA, a project concept note is being developed focusing on Balochistan's water and agriculture sectors for implementation of climate resilient technologies, indentified and prioritized during country's TNA process.
- Further enhancing engagement with CTCN.
- Development of more project ideas to access GCF

Thanks

