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Presentation Layout

• Country’s National Action Plan
• Validity Year of Plan
• Target and Indicators
• Program and activities
• Plan to address SDGs
• Any program in Plan linking with particular SGD
• Link between Plan with SDGs target and indicators
Ministry of Science and Technology

• The role is to integrate the programmes and initiatives being undertaken by other Ministries and Departments at Federal and Provincial levels:
  
  i. Coordination and implementation of National Science and Technology Policy
  ii. Promotion and coordination of research and utilization of the research results
  iii. Development, production and utilization of nuclear energy, and
  iv. Coordination for utilization of scientific and technological manpower

12 R&D Organizations in almost all sectors & 02 Universities

Pakistan Council of Research in Water Resources

To conduct, organize, coordinate and promote research on all aspects of water resources including irrigation (surface and groundwater), drainage, soil reclamation, drinking water, wastewater management etc.
Pakistan Vision 2025

- Improve efficiency of water usage in agriculture by 20%
- Ensure access to clean water for all Pakistanis
- Reduce food insecure population from 60% to 30%

SDGs for Water

- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

National Water Policy (Draft)

- Exploitation of the available water resources through reservoirs, conservation and efficient use
- Improving availability, reliability and quality of fresh water resources and controlling groundwater mining
- Improving watershed management
- Promoting integrated water resources management and appropriate technologies for rainwater harvesting
- Upgrading water sector information system

Partnerships Building – No Work in Isolation

National organizations

Universities (national & international)

Provincial Government Departments

International organizations (research and development)

Industry

Communities
**Research Infrastructure**

- Headquarters Islamabad
- Regional Office, Lahore
- Regional Office, Bahawalpur
- Gilgit, Muzaffarabad, Karachi
- DRIP, Tandojam
- WRRC, Quetta
- WRRC, Peshawar

**Research Infrastructure**

- Regional Water Resources Research Centers (8)
- Research & Demonstration Farms (7)
- GIS and Geo-Hydrological Laboratory
- Lysimeter Stations (4)
- Tile Drainage Facilities
- Desertification Control & Demonstration Stations (5)
- Water Quality Laboratories (24)
- Commercialization and Innovation Cell
- Library, Documentation & Information Center

**Building on MDGs to SDGs**

**MDGs lessons learnt and SDGs:**

- MDGs were officially acknowledged in 2004 and localization started in 2010
- Development framework remained alien to MDGs
- Timely and pro-active reaction on SDGs by Government of Pakistan
- Economic policies and development framework is aligned to SDGs framework
- SDGs demands disaggregation of data by sex, age and other salient socio-economic characteristics, including income/wealth, location, class, ethnicity, age, disability status

**Decentralized Governance Structure in Pakistan**

- Where provinces are empowered to plan and execute - implementation of SDGs, especially those related to social sectors, fall under the preview of provinces.
- This calls for localization and ownership of SDGs at the lowest administrative tier as key to SDGs achievement.
Our Approach to SDGs

Building Awareness
Integrate SDGs in Plans and Programs
SDGs Indicators Development
Review of Institutional Mechanisms

Approach to SDGs Institutional Framework

- Strengthened and reformed the coordination role of Planning Commission at national level
  - Enhance effectiveness of inter-governmental coordination and collaboration
- Reposition - Local Government as the SDGs focal tier
- Improve coordination with the private sector including corporates, CSOs and development partners
- National Committee on SDGs to include corporates, academia, parliamentarians, civil society etc.
Institutional Coordination Mechanism

- National SDGs Support Unit (Planning Commission)
- Provincial SDGs Support Unit (in each Planning & Development Dept.)
- Sector Specific & Thematic Coordination
- National Coordination Committee
- Provincial Coordination (across provinces)
- Federal Cabinet Committee
- Parliamentary Secretariat on SDGs
- Provincial Cabinet Committees

Vertical Policy Coherence: Institutional coordinating mechanisms to foster partnerships and coordination across levels

Horizontal Policy Coherence: formal partnerships and coordination across sectoral line ministries and agencies

Targets of NAP for SDGs

- Sustained job-creation for rapid economic growth
- Closing infrastructure gaps for providing essential services to all
- Universal access to education and health to harness Pakistan’s youth bulge
- Universal social protection and financial inclusion
- Addressing food security and hunger with sustainable agricultural productivity improvements
- Promoting gender equality and women’s empowerment through entrepreneurship
- Climate Change adaptation strategies
**Data, Monitoring & Evaluation**

<table>
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<th>S.#</th>
<th>Availability of data</th>
<th>Suggested Reporting Level of Indicator</th>
<th>Total Indicators</th>
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<td></td>
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<td>1</td>
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<td>3</td>
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</tr>
<tr>
<td>4</td>
<td>Indicator is not reported at this level</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Indicators</strong></td>
<td><strong>13</strong></td>
<td><strong>60</strong></td>
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</tbody>
</table>

**Key Milestones Achieved so far**

- **SDGs embedded in 7 pillars of Vision 2025 (August 2014)**
- **National launch of SDGs as “Pakistan Development Goals” (October 2015)**
- **Sub-national SDGs Launch (Dec 2015)**
- **Minister Planning nominated as UNDP’s Champion to promote SDGs (February 2016)**
- **Pakistan’s Parliament became 1st to adopt SDGs and establishment of SDG Secretariat (February 2016)**
- **Launched a 5 years-National Initiative on Agenda 2030 (2016)**
Pillars of Pakistan’s Development Agenda (Pakistan’s Vision 2025)

Pillar 1: Putting People First - Developing Human and Social Capital
Pillar 2: Achieving Sustained, Indigenous and Inclusive Growth
Pillar 3: Governance, Institutional Reform & Modernization of the Public Sector
Pillar 4: Energy, Water & Food Security
Pillar 5: Private Sector led Growth
Pillar 6: Developing a Competitive Knowledge Economy through Value Addition
Pillar 7: Modernizing Transportation Infrastructure & Greater Regional Connectivity
Linkage between Vision 2025 and SDGs

**Water**

- Increase water storage capacity, applicable to the requirements of each province, in line with defined strategic needs and international benchmarks: from currently 30 days to 45 days by 2018, and 90 days by 2025.
- Invest in proven methods and technologies to minimize wastage (e.g. in the agricultural sector), promote conservation and gain efficiencies through rationalization of pricing.
- Enable more effective allocation with direct reference to national & provincial priorities and related social and economic considerations.
- Establish institutional mechanisms (e.g. a National Water Commission) to effectively manage all sources of water (surface, subsurface, rain) and their sectoral and regional allocations (agriculture, industry, urban).
- Provision of access to a minimum baseline of suitable water to every person in Pakistan.

**Food Security**

- Protect the most food-insecure segments of the population through effective relief measures, including long-term arrangements and adaptation mechanisms.
- Create a modern, efficient and diversified agricultural sector – aligned with associated water and energy infrastructure – that can ensure a stable and adequate provision of basic food supplies for the country’s population, and provide high quality products to its industries and for export.
- Optimize production and supply mix in line with current and projected needs by leveraging our unique strengths.
- Ensure that the entire supply-chain related to food security is geared towards provision of stable and affordable access to adequate, nutritious and safe food for a healthy life.
- Use the resource base in an efficient and sustainable manner—with outcome-based benchmarks agreed in line with regional and global standards.
Linkage between Vision 2025 and SDGs

**Climate Change**

- Design water, food and energy security policies and plans of the country with specific reference to the profound challenges posed by climate change.
- Explicit recognition of the relevant risks (and associated economic and social costs and implementation of well-defined mitigation and adaptation strategies / measures).
- To promote long term sustainability, conservation and protection of natural resources.

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Implementation on tasks related to WASH - Goal 6 (6.1, 6.2, 6.3)

- Focal Ministry: Ministry of Climate Change
- Key Partners: PCRWR, UNICEF, Provincial Departments
- Consultation: Initiated recently in July 2016
- Baseline indicators setting
- Data acquisition formats
- Monitoring mechanisms
Challenges

• Pakistan needs at least 10-15% of GDP including social investments to achieve SDGs agenda
• PPP in key areas, pooling resources with private sector and CSR could be complementing additional resource mobilization efforts
• For data, monitoring and accountability to accurately track SDG progress, statistical system needs substantial capacity building efforts
• Extensive coordination efforts at inter-ministerial and federal, provincial level are required

Conclusion

• Pakistan has proactively started localizing SDGs
• SDGs were embedded in 7 pillars of long-term roadmap Vision 2025
• SDGs Unit in Planning Commission is connected to SDG Units in provinces (Punjab has already established and Sindh at advance stage)
• Pakistan’s Parliament became 1st to adopt SDGs and establishment of SDG Unit
• Development framework is well aligned with SDGs framework
• Pakistan will built upon failures of MDGs
Presentation Layout

- Country’s STI Policy
- STI program and activities
- STI to support NAP targets and indicators
- STI support to achieve SDGs targets and indicators
- Country’s challenge and opportunity on STI
- STI gaps and needs to accelerate its achievement

National Science, Technology and Innovation Policy 2012

- In 1960, the National Scientific Commission of Pakistan was constituted; how best scientific research can be promoted and ensured that its results are utilized for overall development of the country.
- The recommendations of the Commission paved way for basic and applied research in universities and R&D institutes and laid the foundation for the S&T policy.
- The first “National S&T Policy” was approved in 1984
- Followed by National Technology Policy and Technology Development Plan- 1993.
- Updated as National Science, Technology and Innovation Policy - 2012
Vision - STI

To achieve the security, prosperity and social cohesion of Pakistan through equitable and sustainable socioeconomic progress using science, technology and innovation as central pillars of development in all sectors of economic activity.

Major Aims and Objectives of STI

• To improve the quality of life of common people in line with the parameters of Millennium Development Goals and International Human Development reports
• To create an industrial and economic environment
• To make Pakistan self-reliant with respect to its strategically important needs
• To encourage natural inquisitiveness of young students in elementary schools
• To assist the educational system at secondary and tertiary level
• To strengthen R&D activities in Higher Educational Institutions
• To take measures for creating a competent corps of technicians and engineers principle
STI Planning & Management Structure

- The National Commission for Science and Technology (NCST) – Chair: Prime Minister of Pakistan
- The Executive Committee of NCST (EC-NCST) – Chair: Federal Minister, S&T
- Ministry of Science and Technology (MoST)
- Pakistan Council for Science and Technology (PCST)
- Provincial Departments of Science & Technology, Planning & Development

Policy Actions

- Declaration of the political will that S&T capacity building would be a central pillar of national development strategy and the R&D expenditure would be enhanced to 1.0% of GDP by 2015 and 2.0% by 2020.
- Commitment to create a long-term non-partisan ST&I policy with the consensus of all stakeholders and putting in place a legal framework for ensuring continuity of the policy and allocation of required funds.
- Issuing the guidelines for shifting the focus of R&D towards demand side with full participation of private sector and employing mechanisms to foster innovation.
Policy Focus

• Socio-economic Development
• Human Resource Development
• R&D Infrastructure
• S&T Management System

Policy Programs and Activities

• Human Resource Development
  (Trainings, incentives, motivation, popularization)
• Indigenous Technology Development
  (high tech, incentives, socio-economic focus, codification and intellectual rights, innovation fund)
• Technology Transfer and Creation of Absorptive Capacity
• International Cooperation (multi & bilateral)
• Thrust Areas (standards, quality, genetic, bio-tech)
STI support towards SDGs

<table>
<thead>
<tr>
<th>STI</th>
<th>NAP</th>
<th>SDG</th>
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<tbody>
<tr>
<td>Socio-economic Development</td>
<td>Programs on water, agriculture, climate and technology innovation</td>
<td>Goals 1 to 17</td>
</tr>
<tr>
<td>Human Resource Development</td>
<td>Capacity building, users trainings and Higher Education Institutions</td>
<td>Goal-4, 8 and 17</td>
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<tr>
<td>R&amp;D Infrastructure</td>
<td>Strengthening of R&amp;D Institutions and support to Provincial Departments</td>
<td>Implementation and problem solving towards SDG achievements</td>
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<tr>
<td>S&amp;T Management System</td>
<td>Database developments in water, industry, scientists and professionals</td>
<td>Helping to provide baselines in all SDGs Goals and indicators</td>
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**Pakistan Water Development Report (PWDR)**

- Focus upon meeting Water SDG’s in Pakistan: Challenges and Opportunities
- The concept of PWDR report;
  - Assessment of current state of water sector and water resources
  - Comprehensive analysis of key issues and challenges
  - Baseline situation analysis with respect to each target defined
  - Pathways for achieving different targets
  - Prioritization of future policy and research agenda to advance the implementation of targets
- The team of Technical experts encompasses;
  - Pakistan based experts: PCRWR, Pak-US CAW-MUET, SDPI, IUCN, Government of Sindh, Planning Commission of Pakistan, COMSATS
  - US-based partners; Experts from University of Utah and University of Nevada
Chapter-wise outline of PWDR report

<table>
<thead>
<tr>
<th>Chapter 1; Pakistan’s Water Economy</th>
<th>Chapter 6; Water Quality (Target 6.3)</th>
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<tr>
<td>Chapter 2; Water Governance in Pakistan</td>
<td>Chapter 7; Overcoming Water Scarcity (Target 6.4)</td>
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<tr>
<td>Chapter 3; Transitioning from MDG’s to SDG’s</td>
<td>Chapter 8; Implementation of IWRM Plan (Target 6.5)</td>
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<td>Chapter 4; Drinking Water Supply (Target 6.1)</td>
<td>Chapter 9; Protection and restoration of Water-related Ecosystems (Target 6.6)</td>
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<tr>
<td>Chapter 5; Sanitation and Hygiene for all (Target 6.2)</td>
<td>Chapter 10; The Way forward, An implementation plan</td>
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National Workshop, Pakistan Achievement of Water-related SDGs, 14-15 March, 2017

Project in 5-countries (Ghana, the Republic of Korea, Pakistan, Tunisia and Costa Rica) to support collaboration for evidence-based policy and decision making for SDGs

PCRWR in collaboration with United Nations University, Canada and Ministry of Planning, Development and Reforms
Regional Dialogue on SDG 6.0  
February 15, 2017

In collaboration with Tajikistan Embassy and ECO-Science Foundation

Challenges and Opportunities relating STI

• STI policy in line with national development agenda
• Nearly 50% youth less than 20 years of age
• A large resource base of scientists and professionals available in S&T fields
• Climate change impacts – frequent floods & droughts (since 2010)
• More collaboration and joint efforts needed to accomplish SDGs targets especially in emerging areas.
STI Gaps and Needs

• Need pro-active implementation of STI
• Human resource development (high-tech tools)
• International/ regional partnerships for knowledge sharing and technical support in emerging areas (satellite technology, bio-technology, climate change, food processing, genetic engineering, health....)

Thanks for Listening

Terima kasih untuk mendengarkan

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