

# 15th Annual Report 2022



## STATE OF THE ECONOMY Frontline Stakeholders Reaping the Gender Dividend



**BIPP 15th Annual Report 2022**

**The State of the Economy  
Frontline Stakeholders-Reaping  
the Gender Dividend**

**The Shahid Javed Burki  
Institute of Public Policy at NetSol**

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# The Shahid Javed Burki Institute of Public Policy at NetSol

BIPP aims at synergizing the research, education, think tank and knowledge management functions to become a Centre of Excellence in Public Policy. Its mission is to improve the welfare of the citizenry with particular emphasis on identifying policy measures that will lead to inclusive, people-centered growth with equity, political stability and sustainable development besides fully harnessing the potential for regional and global integration of the country. BIPP's areas of interest are social, economic, environmental and political development and security, trade and foreign policy. The institute also provides scholarships for female students in the area of medicine, nursing, allied health sciences, computer sciences, engineering, economics and laboratory technologies to help them realize their full potential and contributes to the accelerated achievement of national development goal.

BIPP's Board of Directors comprises eminent economist, experts, member of academia and development practitioners from private public and non-governmental sectors who are committed to improving public policy development and implementation in Pakistan.

BIPP's Advisory Council comprises Mr. Saleem Ranjha, Mr. Asim Imdad, Dr. Athar Mansoor, Mr. Mujahid Sherdil, Mr. Dennis de Tray, and Dr. Mahmood Ahmad. Mr. Babar Yaqoob Fateh Muhammad also joined BIPP as Vice Chairman Operations. Dr. Muhammad Ejaz Sandhu is working as Director Operations with BIPP. BIPP have a network of Key Consultants most notably, Strateasy Consulting (SC), AKIDA Consulting, Community Development Foundation (CDF), AgriByt, Delivering Happiness (DH), and Women Economic Development Initiative Punjab (WEDIP). Dr. Iftikhar Shah and Mr. Ahsan Sarwar Khan are working as agriculture Consultants with BIPP.

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# Foreword

The underlying theme of this year's report is the role of the state in making Pakistan's economy work and the need to give special attention to gender-sensitive development planning to allow the country to harness women's full potential for achieving a high and sustainable rate of economic growth. The various chapters in this report have accordingly been devoted to explore the tangible contribution which women could make in some of the major areas of vital significance e.g., technology for economic development, women role in agriculture and livestock development, mitigating the impact of climate change on women to augment their resilience and reduce their vulnerability, etc. The first and foremost requirement is, however, to enfranchise the women through vote so that they could articulate their collective voice, preferences and choices for integration in the decision and implementation processes. There is, at the same time, urgent need to eliminate the security risks, especially the non-traditional ones, for empowerment of women and enable them to freely and meaningfully participate in the socio-cultural, economic, political and development spheres.

The report also attempts to identify the socio-economic implications of the historic gender deficit in Pakistan in comparison with some of the countries in the region and prescribe specific measures to ameliorate the existing deplorable state of affairs in the country. For the purpose, however, the Pakistani state must play an active role to comprehensively address the constraints which women face in making full use of their talent, energy and capital.

In one of my chapters, I have also briefly dwelt on the real gender-related challenges that Pakistan could face in view of the treatment being meted out to women by the Afghan Taliban rulers. Pakistan is sharing with Afghanistan Pashtun ethnic group –

there are more people of this ethnicity who live in Pakistan than in Afghanistan and hence their potential susceptibility to what is happening in that country.

The major focus and the overall message of the report is, however, to reap gender dividend by embarking on gender-sensitive and responsive development paradigm and planning. Indeed, gender equality and women's full in the mainstream development is critical for inclusive, rights-based and sustainable development of the country.

I may also emphasize that while the women's status in society and economy will have consequences that would last for a long time; the year 2022 presented Pakistan with a different set of problems that need the government's immediate involvement. If 2021 was a difficult year for Pakistan – a conclusion I emphasized in the Foreword to that year's report – the year 2022 was not much better. The country managed to recover from the Covid-19 pandemic without a heavy human toll. However, 2022 brought a different set of difficulties. Both 2021 and 2022 produced challenges for Pakistan that were not of its own making. The pandemic came to Pakistan from China via Iran while much of what happened in 2022 was because of the actions taken by today's developed countries a century or so ago. The summer of 2022 saw several past records overtaken. More rain fell than was the case for several years and there were unprecedented floods in the Indus River that inundated the lower parts of Sindh, making life extremely hard for the people who live in the area's villages. Crops were destroyed which would affect the earnings of the people who depend on them for livelihood but also significantly reduce the amount of food the poor can put on the table. There was consensus among experts who are watching changes in global weather that warming is responsible for

extreme events. No part of the globe has been spared.

In a report written a few years ago by the World Bank, the institution identified Pakistan as a country that would be among the most affected by global warming. This would happen because of the rapid melting of the ice-cover in the mountain-chains to the country's east and north. The faster melting would bring more water into the rivers than they can carry. Floods would result not only from more than normal rapid melting of ice; heavy rains would also contribute since warm air carries more moisture than is normally the case.

At the global conference held in the Egyptian resort of Sharm el Sheikh in the Sinai Peninsula, the Pakistan team took to the stage to make the important point that the countries likely to suffer the most from global warming had contributed the least to the accumulation of carbon in upper atmosphere. Most of what we are seeing now by way of weather change resulted from the use of fossil fuels by today's

industrial world to develop their economies. In several eloquent statements made at Sharm el Sheikh including the one by the leader of the Pakistani delegation, stressed that the countries that would be most seriously affected will need both finance and technology to deal with the developing situation. Developing countries are not asking for charity but for reparations for the damage they have inflicted on many parts of the developing world. In the World Bank report to which I have already referred, there was a suggestion that a cascade of storage facilities should be built after Indus River enters Pakistan. The Bank identified twelve sites of which Dasu was one. The water saved in these places would be used when the flow in the river decreases with the thinning of the ice cover. The meeting in Egypt mentioned a new facility amounting to one trillion dollars which would be managed by the World Bank and the IMF. The Pakistan state must prepare itself for participating in this new resource.



Shahid Javed Burki  
December 16, 2022

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(in alphabetical order)

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Mr. Najam is the Vice Chairman of BIPP. He has four Masters including LLM and MSc. Public Policy from London School of Economics, UK and MSc. Rural Development from Wye College London. He has more than 40 years of experience with Government of Pakistan and the UN System in policy and strategy formulation; development planning and programming; and implementation of large scale programmes for sustainable development. He joined the Pakistan Administrative Services in 1974 and held important assignments including Commissioner Lahore Division (1999-2001), and the first Chief Operating Officer, of the Punjab Board of Investment and Trade (2009). Mr. Najam held senior positions with the UN System as FAO Representative, Iran (2007-2009) and Resident Coordinator/Resident Representative of the UN system in Turkey (2009-2013).



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## **Babar Yaqoob Fateh Muhammad**

Mr Babar Yaqoob Fateh Muhammad, a recipient (2016) of prestigious Sitara-e-Imtiaz from Government of Pakistan, for public service, has been at the forefront of Public Policy challenges in Pakistan. Holding a Masters in English Literature from Punjab University, Lahore and an MSocScience in Development Administration from University of Birmingham, UK, he has been trained at Kennedy School of Government, Harvard University, US Development of Agriculture, Washington DC, LUMS etc. With a career spanning more than 40 years (1980-2022), he held his last assignment in the Government as Chairman Federal Land Commission with the status of a Federal Minister. During this period, he was instrumental, as Chairman Independent Power Producers Negotiations Committee, in voluntary revision of tariff by the Power Producers. Prior to that he served as Secretary Election Commission (2015-2020) during which term he played a prominent part in far ranging legal and procedural reforms. He has been an International Observer for National Elections in the USA, Australia, Canada, UK and Russia. He has been a Member of the Cambridge Conference on Electoral Democracy (2016-2019). He has served as Cabinet Secretary, Government of Pakistan and as well as Federal Secretary Communication and Secretary Kashmir Affairs. As Chief Secretary Balochistan and Chief Secretary Gilgit Baltistan he has been integral to institutional changes. He has a deep interest in challenges of federalism in Pakistan and dynamics of electoral processes in Pakistan.



## **Atr-un-Nisa**

Ms. Atr un Nisa holds a M.phil degree in Business Economics from Beaconhouse National University. She has vast research experience in economics. She has done various research projects for international development agencies, provincial and federal government, and private sector. Currently, she is working as a senior research fellow at BIPP and carrying out BIPP's Research and consultancy functions.

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# List of Acronyms

ADB	Asian Development Bank
ADC	Agriculture Development Corporation
AI	Artificial Intelligence
BBC	Broadcasting Corporation
BECO	Batala Engineering Company
BIPP	The Shahid Javed Burki Institute of Public Policy
BNU	Beacon house National University
BRI	Belt Road Initiative
CCP	Chinese Communist Party
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CENTO	The Central Treaty Organization
CIA	Central Intelligence Agency
CNIC	Computerized National Identity Card
CPEC	China Pakistan Economic Corridor
CSP	The Civil Service of Pakistan
DAS	Development Advisory Service
DDC	District Development Committees
DRF	Digital Rights Foundation
DRM	Disaster Risk Management
EAS	EAR Asian state
ECOSOC	The Economic and Social Council
EU	European Union
FAA	Federal Aviation Administration
FAO	Food and Agricultural Organization
FDA	Food and Drug Agency
FDI	Foreign Direct Investment
FOSPAH	Federal Ombudsman Secretariat for Protection Against Harassment
FPI	Foreign Private Investment

FY	Fiscal Year
GB	Gilgit Baltistan
GBPB	Gender-Based Planning and Budgeting
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GGGHS	Global Gender Gap Health and Survival
GGGI	Global Gender Gap Index
GGGR	Global Gender Gap Report
<i>GHG</i>	Greenhouse Gas
GPDIM	The Gender Parity District Intervention Model
GSPUs	Gender-Sensitive Planning Units
HCPs	Healthcare Professionals
HEC	Higher Education Commission
HRMR	Human Rights Ministry Report
IBRW	Indus Basin Replacement Works
ICD	International Competitive Bidding,
ICS	Indian Civil Service
ICT	Information and Communication Technologies
ID	Identity Cards
IDB	Islamic Development Bank.
IEG	Independent Evaluation Group
IFC	International Finance Corporation
IGE	Innovations in Gender Equality
ILO	International Labor Organization
IMF	International Monetary Fund
IPCC	Inter-governmental Panel on Climate Change
IRS	Internal Revenue Service
ISI	Inter-Services Intelligence
ISIS-K	Islamic State Khorasan
IWT	Indus Water Treaty

JICA	Japan International Cooperation Agency
LEAP	Local Equality Action Plans
M&E	Monitoring and Evaluation
MFA	Multi-Fiber Agreement
MIT	Massachusetts Institute of Technology
MIT D-Lab	Massachusetts Institute of Technology's Development Lab
MNSUA	Muhamad Nawaz Shareef University of Agriculture
MSMEs	Micro, Small and Medium Enterprises
NADRA	National Database & Registration Authority
NASA	National Atmospheric Science Agency
NATO	North Atlantic Treaty Organization
NCSW	National Commission on Status of Women
NDFC	National Development Finance Corporation
NIS	National Information Systems
NWR	North Western Railway
ODA	Official Development Assistance
OECD	The organization for Economic Corporation and Development
OIC	Organization of Islamic Countries
PCSIR	Pakistan Council for Scientific and Industrial Research
PCSW	Provincial Commissions on the Status of Women/Women Departments
PDNA	Post-Disaster Needs Assessment
PICIC	Pakistan Industrial Credit and Investment Corporation
PIDC	Pakistan Industrial Development Corporation
PML(N)	Pakistan Muslim League (Nawaz)
PPP	Purchasing Power Parity
PPP	Pakistan People's Party
PRC	People's Republic of China
PTI	Pakistan Tehreek-e-Insaaf
R&D	Research and Development
S&T	Science and Technology

SDGs	Sustainable Development Goals
SEATO	Southeast Asia Treaty Organization
SEZ-MIS	Special Economic Zone Management Information System
SEZs	Special Economic Zones
SLACC	Sindh Legal Advisory Call Center
STEM	Science, Technology, Engineering and Mathematics
STI	Science, Technology and Innovation
TEVTA	Technical Educational and Vocational Authority
U.S	United States
UIB	Upper Indus Basin
UN	United Nations
UNDP	United nations Development Programmed
USA	United States of America
USSR	Union of Soviet Socialist Republics
WAPDA	Water and Power Development Authority
WB	World Bank
WBG	World Bank Group
WFC	Women Friendly City
WHO	World Health Organization
WPSI	Women Peace and Security Index

# Executive Summary

The BIPP Annual Report 2022, in addition to providing an overview of the economic performance of Pakistan for the year, attempts to analyze the state of gender deficit in the country and propose specific policy directions and framework for gender equality, women's empowerment and reaping gender dividends. Gender inequality in Pakistan is a major issue of significant concern for the policymakers. The performance of the country on Gender Gap Index has been pathetically poor as it ranks only ahead of Afghanistan in the world according to Global Gender Gap (GGG) Report, 2022. The score on gender parity in the last seventeen years has remained stagnant at around 0.55 in 2006, 0.55 in 2021 and 0.56 in 2022. Pakistan ranks 145/156 for economic participation and opportunity, 135/156 for educational attainment and 143/156 for health and survival. The performance of the country on political participation and empowerment is better as it stands at 95/146 position though according to the Election Commission of Pakistan (ECP), there is still a deficit of around 12.5 million women in Pakistan's electoral rolls. Women also continue to remain underrepresented in leadership roles and are restricted from taking up positions in the political/public sphere due to systemic challenges arising from socio-cultural and patriarchal norms. The UN Women estimates that at the current rate of progress, gender parity in national legislatures will not be achieved before 2063.

Pakistan is a signatory to the 2030 Agenda, which is known as SDGs and recognizes the importance of empowering women. While all the Goals are intrinsically gender responsive, the Goal 5: Gender Equality, Goal 5 Women empowerment and Goal 10: Reduced Inequality, unequivocally acknowledge gender equality as a fundamental human right and together with women empowerment as founda-

tional principle for a sustainable world. Pakistan is also committed to CEDAW, the Beijing Platform for Action, ILO conventions and Child Rights Conventions, all directed to ensure women's rightful place in society. Despite all these pledges and endorsements, globally Pakistan has been in the bottom four countries on gender development indices for over quite a few years. Given the enormity of the gender deficit and the consequent socio-economic and development implications, BIPP's annual report of this year was devoted to bringing on the national development and policy agenda, as a matter of utmost priority, the imperative of mainstreaming gender for achieving inclusive, equitable and sustainable development of the country.

The report comprises 11 chapters. In the first chapter, Mr. Shahid Javed Burki, chairman BIPP, summarily describes the historical background of the political, planning and policy processes of Pakistan and establishment of BIPP as a policy hub to contribute to rational and evidence based policy making in Pakistan. He points out the negatives which the country is afflicted with in terms of cultural and faulty faith norms impacting women, large scale migration etc., and positives such as role of technology, CPEC/SEZs and the potential contribution of women. In his second chapter, Mr. Burki gives a brief account of sources of growth and lessons learned from history. He also covers the political problems which have economic consequences in the same chapter. In his third chapter, he attempts to highlight the role that the state and the private sector have to play in managing and contributing to growth and economic development. It also underscores the importance of mainstreaming gender development as well as making use of technology to harness the full potential of sustainable development. In his fourth chapter, he writes

about Taliban and the real stories of Afghan Women and briefly points out the real danger that Pakistan could face in view of the treatment being meted out to women by the Taliban regime.

Dr. Farukh Iqbal in his chapter “Back to the Brink: Pakistan in 2022” provides an assessment of the economic situation of Pakistan 2022. He particularly highlights the reasons of Pakistan's economic collapse and international reserves collapse. Mr. Shahid Najam and Atr Un Nisa present social-economic implications of gender deficit in Pakistan in comparison with some of the countries in the region and provide specific measures for reducing gender deficit in Pakistan.

Mr. Tariq Hussain and Atr un Nis examine the emerging challenges of climate change by focusing on the policy content on women's role as agents for successful adaptation. Dr. Mahmood Ahmed in his chapter elucidates the role of women in changing agriculture and livestock sectors, identifies constraints in transformative efforts, and provides

smart solutions to mainstream gender issues in planning and policy discourse. Dr. Daud Ahmed provides an overview of China's economic development over the last four decades, the key policy instruments and government interventions used. He also explains China's progress in Science and Technology and how it has become a world leader in this field. Ms. Fouzia Nasreen emphasizes on the technological transformation which has induced the societies to re-orient and reshape their workforce. She brings out the need for role of gender and women empowerment in new fields in STEM which will have salutary impact for providing economic strength to the economy.

Mr. Baber Yaqoob presents an overview of national and international legal commitments and literature on barriers and obstacles to women's participation in politics. He also elaborates on failure of the state in registering Pakistani women as voters according to their ratio in the population.

The Table below attempts to capture the key findings and recommendations of the 2022 Report.

## Summary Findings and Recommendations

Key Findings	Recommendations
<p>Pakistan, with 220 million people and one of the highest rates of population, is now the world's fifth largest country after China, India, the United States and Indonesia. Its current population is six and a half times larger since it gained independence in 1947. This means that the average rate of growth over the 75-year period is close to 2.5 percent a year.</p> <p>A vast number of country's women have been deprived of the skills and opportunities that would contribute not only to the betterment of their own situation but also lead to the country's overall progress.</p> <p>Pakistan is confronted with serious economic crisis characterized by high inflation, down turn in economic growth, soaring debt liability, current account and balance of payment deficits. The international reserves have declined to under two months of import cover, inter alia, due to failure to sustainably reduce the gap between imports and exports. The gap between the imports and export ratios has remained roughly constant at about 7 percentage points of GDP since 2007. The political instability has further aggravated the situation.</p>	<p>A large population needs large public flow of resources to develop its economic and social capacity.</p> <p>A number of positives like technology and women potential contribution, if properly factored into the public policy making, could lead to high rates of sustainable economic growth.</p> <p>Educating women is the most effective way of improving their own situation</p> <p>The most promising path to resolving Pakistan's recurrent reserves crises lies in expanding exports. Austerity is a short-term solution to fixing a balance of payments problem. While import compression is useful, long term development strategy must focus on exports by combining growth of output, growth of employment, reducing reliance on external borrowing.</p> <p>Market determined exchange rate policy and structural reforms need to be pursued to facilitate power supply, logistics and finance for exports. Not just carrots but sticks should be employed to ensure that companies meet export targets.</p> <p>High level political commitment spearheaded by the Prime Minister like a national campaign, using a dashboard to monthly track the progress in ensuring inter-agency coordination to spur exports as also concerted effort especially for the</p>



Pakistan's 75-year-old history of recurrent political crisis has impacted the country's economic performance. The country has also failed to develop institutions to avoid frequency of disruptions to economic development.

Technological and organizational innovation are responsible for accelerating economic growth and modernization.

The proportion of poor living in poverty at the time of partition was estimated to be 60 percent; now it is one-third that amount.

The failure of Pakistani economy is on account of: dependence on external flows engendered by geo-strategic choices; neglect of pursuit of a framework based on its natural endowments; and pervasive governance dysfunction.

Pakistan's GDP is likely to increase by about 4.5 percent year 2021-22. The country's low tax-to-GDP has inhibited development spending. It is around 17 percent of the country's national income. Publicly guaranteed external debt is estimated at \$91 billion.

No country has made economic and social progress without empowering its women who contribute to develop the economy and modernize society.

Pakistan's economy is performing well below its potential due to poor technological development and inconsistent and confusing approach towards improving the state of technology in its economy.

Pakistani firms have not invested the needed amounts to improve their technological base.

Technological progress would help to bring about Pakistan's integration with the world outside its borders.

establishment of the economic zones and creation of conducive investment climate in the country is required

The policy makers need to be focus on the following:

- raise domestic resources to finance development;
- shun past dependence and pursue endowment based growth framework including diversification of agriculture to high value crops;
- improve governance, not just at the level of the government (federal and provincial) but also in the firms and private entities;
- eliminate corruption at all levels;
- lay the ground for moving the economy and society to a higher technological plane.
- formulate a multi-year revenue mobilization strategy to broaden the tax base and raise tax revenue in a well-balanced and equitable manner;
- ensure effective public finance management to improve the quality of and efficiency of public spending.
- Political maturity and stability are fundamental to economic growth

Educating women is the most effective way of improving their own situation and also of the country in which they live.

Both the government and the private sector have roles to empower women including eradication of violence against women, providing women education, and health care and employment in the modern sectors of the economy.

The government's development program should be women responsive and sensitive.

Technological development should be internalized in policy making. The institutional structure to oversee technological development in the private sector should be rationalized.

The state and the private sector must invest in

Women have a key role to drive national and global development agenda.

The global gender gap has been abridged over the years and is estimated at 68.1% in 2022 yet it will take 132 years to reach full parity.

According to IMF, closing the gender gap in countries where it is most significant could increase the GDP growth rate by an average of 35 percent.

Women in Pakistan, however, remain the most underutilized economic asset and it continues to figure among the bottom four countries on gender development indices since many years.

It ranks only ahead of Afghanistan in the world on Gender Gap Index (GGI Report 2022). The score on gender parity in the last seventeen years has remained stagnant around 0.55 in 2006, 0.55 in 2021 and 0.56 in 2022.

In Economic Participation, Pakistan has scored 0.331 and taken 145th position, a notch above Afghanistan (0.176) as per the GGGR 2022.

In Education Attainment, though the gender gaps have decreased significantly, Pakistan still stands at the 135th position out of 146 countries in the world with a score of 0.825.

In Health and Survival, Pakistan with a score of 0.944 stands at the 143rd position in the world as per 2022 report.

In Pakistan, women participation in the national governance structures and in corporate management continues to be low all along. The situation From 2002 to 2020, their participation remained almost stagnant and indeed dropped from 21.6 percent in 2003 to 20.2 in 2020.

Chapter six describes the plight of the women under Taliban government.

education- from pre-school, to primary school, going all the way to colleges and universities with emphasis on science and technology.

There is a need for strategic investment and allocation of adequate resources to implement well targeted gender-sensitive women empowerment programs across all sectors with special focus on safety and security, health, education, employment and decent work.

Gender deficit could be reduced through ensuring women peace and security (mobility, elimination of, violence, SV and GBV, female infanticide); their development and progression (access to education and health especially universal health coverage, economic resources and physical assets); pro-women legal and regulatory frameworks (family and inheritance laws, civil and criminal laws, evidence law); political and economic empowerment (adoption of gender-parity slogan, increasing proportion of women seats in legislatures, and resuscitation of NCSW, effective accountability mechanism and role of FOSPAH, gender-based planning and budgeting, social safety nets, financial inclusion) and awareness and advocacy as to women's rights)

Gender Parity District Intervention Models should be established in terms of Gender sensitive planning units, localization of gender-related SDGs, Women friendly cities through Local Equality Action Plans

The Local Government and Women Developments should provide the necessary technical and capacity building support for implementation of LEAPs in conjunction with local NGOs.

A digital platform at the provincial/national level as a repository of necessary tools, guidelines, model templates needs to be instituted to serve as networking and lobbying arrangement for women.

Policy focus should be to bring significant change in women's status; reduce maternal mortality to a

Women are more vulnerable to the effects of climate change than men—primarily as they constitute the majority of the world's poor.

It is estimated that 70 percent of the 1.5 billion people; living in conditions of poverty are women. Worldwide, Women are 14 times more likely to die in climate events and four times more likely to be displaced because of climate change.

Pakistan's population is increasing while its stock of freshwater resources is fixed, or likely to decrease due to climate change. It is predicted that in the next 25 years: -

- surface water supply will decrease by about 40 % as Himalayan glaciers melt;
- Pakistani population will increase to 335 million
- Urbanization and industrial activity will increase significantly

Water flow in monsoon-fed river basins, driven largely by melting glaciers could hit its peak by 2025. In Pakistan, much of the present understanding of the climate, hydrology, and glacier behavior of these mountains is based on spotty analysis of a limited database. In an area of 160,00 sq km above the Tarbela reservoir, there are only five hydrometric stations and fewer than twenty manual climate stations which density is considerably less than the World Metrological organization's recommendation of one Gauge per 250 sq km After seventy years of receiving irrigation effluent, the quality of the groundwater is afflicted with over saturation of salt- called the *Salt-Balance issue of the Indus Basin*.

respectable level and increase the resilience of women and mitigate their vulnerability

- Promote economic growth to foster and expand opportunities for productive endeavors and more equitable income distribution.
  - invest in education, nutrition and health improvement to develop human capital,
  - create safety nets for the poor to offset unexpected reductions in income/consumption flows to that group.
  - reduce maternal mortality from the current 186 per 100000 live births to 20 which will have substantial collateral benefits in reducing stunting, infant and child mortalities and improving the nutritional status of women
- Adaptation policies.

Increasing water productivity in an inter-sectoral context should be following measures.

- the conservation of water through pricing and other instruments.
- protecting the freshwater aquifer by implementing a drainage Program for the irrigation effluent.
- investments in agriculture, industrial and urban water needs, and cropping pattern changes.
- Understanding the coming changes in water flows for hydropower, especially in the sphere of irrigation and water use. Optimizing the utilization of water resources in the Indus Basin.
- An evaluation of options with a fifty-year perspective in the wake of population increase and dwindling stock of freshwater resources due to climate change.

Addressing this saltwater accumulation issue is the most important action that must be taken to preserve groundwater as a complementary source for agriculture or other human uses. A parallel action should be to expand research to develop salt-resistant varieties.

Women play a significant role in agriculture and livestock (they make up more than 70% of the labor force in agriculture) production and development, however, their labor power is considered inferior because of predetermined notions that a woman's primary role is that of a homemaker. The farm work of the women is usually ignored, unpaid, and not counted as economic activity.

Women traditionally participate in value chain nodes with lower economic return than men. This chain face a large set of constraints as summarized below

- Limited access to hired labor, equipment, technology, training, finance, and markets.
- Restrictions on land ownership and tenure that limits the expansion of opportunities and lead investors to deal primarily with men.
- Sexual harassment and violence; and

Household, community, and care responsibilities, which are essential to rural wellbeing but have an important effect on women's time use.

Women have been quietly becoming water-use visionaries but are not involved in decision making.

China's economic development over the last four decades, is a phenomenal story. The country embarked on a massive reform programs: maintaining political stability at all costs; focus on the

Women's participation in the agricultural production system should be facilitated through access to agricultural practices and technologies that support climate-smart agriculture and livestock.

A holistic development strategy must consider the integration of a gender perspective, division of labor and division of benefits between men and women for facilitating equal access to resources and community decision-making processes.

Women's participation in the agricultural production system should be facilitated through access to agricultural practices and technologies that support climate-smart agriculture and livestock.

Pro-women policies should be formulated to encourage the rural poor women participation in the production of crops and livestock, particularly in agro-processing and agri-business activities to improve economic well-being; encourage women's participation in various extension programs like training, farmers' rally, farmer markets, food banks and workshops by using integrated ICT solutions. The Government needs to support providing credit or micro-financing to women for agricultural activities such as home-stead gardening, post-harvest activities, seed production and preservation, nursery, bee-keeping, food processing,

Women have to be associated in the policy, institutional and planning process for rational utilization of water resources. Introduce gender sensitive climate smart agriculture institutes, livelihood assets and food system policies.

Efforts need to be made to ensure non-discrimination in wages.

At provincial levels, necessary support need to be provided for the capacity building of women in promoting household food and nutrition security.

There is much to be learned from China's remarkable growth phenomenon in economic, social and scientific fields.

The long-term strategic vision of the successive

grassroots, bottom-up reforms (starting in agriculture, unlike industry and finance tried in other countries); promote large-scale rural industries despite their primitive technologies and environmental costs; use manufactured goods for technology and machinery import; enormous government investments for supporting infrastructure buildup; follow a dual-track system of government/private ownership instead of wholesale privatization; and a gradual move up the industrial ladder, from light to heavy industries, from labor- to capital-intensive production, from manufacturing to financial capitalism, etc. This approach was supported by many initiatives including: establishment of SEZs, National “8-7” poverty reduction plan, coastal and western development strategy, BRI, technological development and successive five years plan. Women participation in high-tech sectors, women literacy/science and technology training, women related health and social safety nets, their role in governance offer great lessons to follow. Women participation in research is 33%, Graduate study 28% and AI 22%.

The world is witnessing momentous developments in science related fields labelled as STEM (science, technology, engineering and mathematics) effecting every aspect of our daily lives. Digital technology has made it possible for women to make their impact to indifferent sectors. There is a very promising potential for them to bring about breakthroughs in technological fields; knowledge in cutting edge technology based on data analytics and computer science, medicine and biotechnology can contribute in a game changer way to agriculture, medicine, industry and other areas. They can become a source for providing economic strength to the economy.

Women in Pakistan have suffered a lack of voice among other factors through being disproportion-

leaders and a stable political system, continuity in policies and delegation of responsibilities to sub national tiers is essential for inclusive development. China undertook “privatization” of a massive portfolio of state-owned enterprises by setting aside the ownership issue and focusing on their performance/outputs through commercial behavior. Large Government investments, with clear output objectives, in essential supporting areas like education, R&D, and infrastructure created an enabling environment.

National development/growth is only possible if the female half of the population is involved in the process. To do this, cultural and legal barriers to women's participation in the labor force, higher education (including S&T), business and governance need to be addressed

Provide Incentives that encourage more women to pursue RD&I and STEM education is an integral part of public policies and policies. Pursue policies that aim at identifying and locating capable women in science related fields. A holistic policy framework recognizing the role of women in providing science based solutions is need of the hour

Special efforts should be made to prepare an inclusive electoral roll enfranchising all sexes



ately unregistered as voters. Even for women registered as voters, there are barriers to participate in electoral process impacting their turnout and as an equal partner in party politics.

It is estimated that the number of women who were not registered as voters stood at around 12 million and out of 51.5 percent voters turn out around 40 percent were women during the 2018 General Elections.

A huge backlog of 10 to 12 million unregistered women voters, because of double jeopardy (non registration as voter and absence of CNIC) points to the failure of state institutions like NADRA and the Election Commission as well of the culpability of political parties.

alike. There is a dire need to create an environment conducive enough for women to come out and vote. This will help Pakistan meet the standard set by CEDAW in Article 7 and by the International Covenant on Civil Rights Article 3. Likewise, Goal number five of Sustainable Development Goals of the United Nations for gender equality and empowerment will also be met.

A national strategy should be developed to bring women's voter registration at par with men's voter lists.

The umbrella of the Right to Good Government should be made available to women based on fair elections held on genuine universal franchise to “reposition power” and usher in the process of women's empowerment





**Chapter**

**1**

**The Focus of the Report**

# The Focus of the Report

**Shahid Javed Burki**

I will begin the introduction of this report by recalling a bit of history. This is the fifteenth report of the series we launched after the creation of what we then called the Institute of Public Policy (IPP). It was then affiliated with the Lahore-based Beaconhouse National University then headed by Sartaj Aziz who was the Vice Chancellor. On a visit to Pakistan, he invited me for lunch at a restaurant in Lahore at which he lamented the near demise of the government's capacity to make public policy based on sound analysis. He had been a prominent member of the senior staff of the Planning Commission which was assisted by the Policy and Development Departments of East and West Pakistan located respectively in Dhaka and Lahore. Pakistan then had two “wings” separated by a thousand miles of Indian Territory. The Planning Commission did important policy work on which most government policies were based.

Pakistan's first decade was chaotic. It was the subject of several works including the one by late Khalid Bin Sayeed. Sayeed wrote about what he called the country's formative years.<sup>1</sup> From 1947 to 1958, the country had several different governments in power formed by coalitions of a number of different groups of a different persuasion. Two of these were led as prime ministers by Bengali politicians. It was only

after a struggle that lasted for nine years that Pakistan was able to get a constitution. The process leading up to its acceptance by the Constituent Assembly was described in some detail by Chaudhry Muhammad Ali, who went to Columbia University to write a book covering his experience as one of the prime ministers. The delay in approving a constitution was caused mostly by the debate on what was called the “Objectives Resolution” which was supposed to lay down the principles of Pakistani nationhood – what would the newly created country aspire to be? The main question was how Islamic the country should be. We will note in this work that some of the political chaos that marked Pakistan's first post-independence decade is also reported in the 75th year of the country's birth.

This period of political chaos and confusion persuaded Muhammad Ayub Khan who had been appointed to be the first Muslim to head the armed forces, succeeded Generals Massey and Gracie, the two holdovers from the British period. As he detailed in his memoir, *Friends Not Masters*, he was persuaded that only the disciplined armed forces could save Pakistan from becoming a failed state.<sup>2</sup> Accompanied by three-star generals he traveled by train from Rawalpindi, the headquarter of the Pakistani army to Karachi, then the capital of

Pakistan. In Karachi they went to the house of President Sikander Mirza and told him that he had to step aside and hand over the country's administration to the generals. Initially Ayub Khan took the title of Chief Martial Law Administrator having abrogated the two-year old constitution and putting the country under martial law. After a few days, he put Mirza on the plane to London and became the president himself. He was to be the country's president for eleven years, from 1958 and 1969. He was followed in later years by three other generals who became president; each stepping in convinced that the civilian leadership was misgoverning.

Returning to the discussion I had with Sartaj Aziz in Lahore, I told him of the conversation I had with retired President Ayub Khan in early 1974, a few months before his death. He then lived in a house he had built on a high ground in Islamabad that backed on to the Margalla Hills. I went there to talk to him about a book I had then begun to work on Pakistan's development experience. He asked me what was my conclusion about the development experience of the country in the eleven-year period (1958-69) when he had led the country. My answer visibly pleased him. I said that according to my assessment his' was the golden age of Pakistan.<sup>3</sup> "But Zulfi doesn't think so," he said, referring to Zulfikar Ali Bhutto who had served first as his Commerce Minister and then as Foreign Minister. Leaving the Ayub Khan government in 1966, he had founded the Pakistan People's Party, the PPP, by claiming what Pakistan needed was people's democracy and not a military dictatorship. "Bhutto knew very well that I was not a dictator but a manager who relied on expert advice before I took major policy and project decisions" he declared.

Ayub Khan then recalled a visit from Washington sent by then the United States' President Eisenhower to both Pakistan and India. The delegation first came to Pakistan and then went on to India. Their mission was to find out from the leaders of the two govern-

ments what the United States could do for them to promote economic development. "I was then working to strengthen the Planning Commission and told the Americans that at the time of the country's birth, it had inherited only one fully trained economist. We needed more and would welcome American economic experts to be stationed in the Commission until the time Pakistan was able to develop its domestic resources. That request led to the stationing of economists who came from Harvard University's Development Advisory Service, the DAS. When they went to New Delhi and met with Prime Minister Jawaharlal Nehru, the Indian leader asked for the establishment of Massachusetts Institute of Technology (MIT) type institutes of Science and Technology. This was done and thus created the base for India becoming one of the world's leaders in information technology. He said, "Looking back, I think I made a mistake. Pakistan could have trained its own people fairly quickly to do work in development economics but by hosting MIT type of institutions it could have also done what India was able to do."

He then went on to explain that since he didn't know many senior people in the civil administration, he asked those he knew to identify somebody who had the ability to build a complex and operate a complex organization. He was suggested the name of Said Hasan who was not from the Indian Civil Service / Civil Service of Pakistan but had probably served in the accounts service. Said Hasan brought in people such as Mahbub Haq and Sartaj Aziz into the Commission who built the organization that came to be recognized as one of the premier development institutions in the developing world in the 1960s. The work of the Planning Commission was recognized in several books written by the American experts who worked for it for a number of years.<sup>4</sup>

At the lunch, Sartaj Aziz and I discussed the need to have a public policy institution in the private sector to compensate for the work that was not being done

in government institutions. The Planning Commission was still in existence but its work was neither well done nor influenced policymaking by the government. Aziz was of the view that I should return to Pakistan and help create such an institution. When I said that I didn't want to leave the World Bank he suggested that I should work as the visiting chairman and spend a few weeks every year at the institution. The institution could be managed by a well-known economist who was in Pakistan. The name of Hafiz Pasha came up and we agreed that he could do a good job establishing the institution. Sartaj promised that the Beaconhouse National University (BNU) would finance the institution while we'll make an effort to create an Endowment Fund which would yield resources for running the institution. However, Aziz left the BNU and went to Islamabad to join the cabinet headed by Prime Minister Nawaz Sharif. With Aziz's departure, the BNU's support stopped and I along with several other members of the Burki family made large contributions to the Endowment Fund. These contributions resulted in changing the name of the institution to the Shahid Javed Burki Institution of Public Policy, BIPP for short.

I place focus on the fundraising for the BIPP in the belief that many problems Pakistan faces in the year 2022 – the year that marks the 75th year of the country's birth – can be tackled only by developing a deep understanding of its past. We need to look at the distance we have traveled since the country's birth on August 14, 1947, view where it is today as it celebrates its 75th birthday and where it is likely to be, say, in the next ten years or so. We could try and assess Pakistan's domestic and external position in the 100th year of its birth but that would involve more speculation in what is essentially a policy document. Bearing this in the mind, the focus of this report is on both the positives and the negatives of the Pakistani situation as we in the Burki Institute perceive it.

A study of the past in order to inform the policy work we need to do today would take us into many areas and would require a voluminous piece of work. There is good reason to be selective. In being selective, we will emphasize three aspects of Pakistan's current situation that have kept the country in turmoil and three areas of public policy, if properly addressed, promise a better future. Of the three negatives, the most important is the neglect of women. The importance that we attach to this aspect of Pakistan's current situation is the reason why we have placed “women's development” on the cover page of this report. Women's situation in Pakistan is complicated by the fact there are those who have done well – in fact, better than the men in their age and class. However, a vast number of country's women have been deprived of the skills and opportunities that would contribute not only to the betterment of their own situation but also lead to the country's overall progress.

The second negative contributes to the first. Pakistan is located in a region that for reasons of culture and faulty interpretation of the faith followed by the vast segment of its citizens has made it a state policy to keep women backward. Today's Afghanistan is a vivid example of this approach to human development. Women's low social status had demographic consequences results in a larger number of births born to an average woman which means a high rate of human fertility and hence, a high rate of population growth. As revealed by the population census carried out in 2017, Pakistan has one of the largest rates of population growth. With 220 million people, it is now the world's fifth largest country after China, India, the United States and Indonesia. At the time of the country's birth in 1947, what is Pakistan now had a population of 34 million people. Its current population is six and a half times as large – this means that the average rate of growth over the 75-year of independence is close to 2.5 percent a year.

A large population needs a large public flow of resources to develop its economic and social capacity. A low level of human development means a low rate of economic growth and poor development of the social base. This is the case in Pakistan. Unless the state invests adequately in developing its human resources and provides for its improvement, this condition would continue to prevail.

The third negative is Pakistan's exposure to international migration which has brought close to six million Afghans and more may come if the situation in their country does not settle down, A subject discussed in Chapter 6.

But there are a number of positives in the Pakistani situation which if properly factored into the making of public policy should produce high rates of economic growth that could be sustained over a longer period of time than was the case with the earlier high growth periods.

Focus on technological development is one area where Pakistan's economy could realize its potential to perform well. Therefore, it needs to constitute an integral part of the economic development model. Science, technology and innovation (STI) provide impetus to modernize economy and society and facilitate Pakistan's integration with the world outside its borders.

China provides a good example of technological progress. The China-Pakistan Economic Corridor

investment program has a huge potential for the transfer of technology especially in the nine Special Economic Zones, SEZs, China is committed to developing across Pakistan. While China included SEZ's in the China Pakistan Economic Corridor (CPEC) investment program recently, the Industrial Estates were already set up in the 1960s followed by the establishment of Export Processing Zones in the 1980s. The SEZ Act was passed in 2012, followed by the setting up of the Special Economic Zone Management Information System (SEZ-MIS) and the passage of Special Technology Zones Act (STEZA) in 2021.

The other area of focus as is the main theme of the report, is the contribution women can make in the development of economy and building an enlightened society. Both the government and the private sector have roles to play in these areas. The former should mainstream gender in its development program to bring women out of their relative backwardness in the country. Educating women is the most effective way of improving their own situation and also of the country as has been in Bangladesh where women employed in the country's large garment industry came to be educated. They also became relatively independent of men, making their own decisions about matters such as the size of the family they wished to have.



**Chapter**

**02**

**Back to the Brink:  
Pakistan in 2022**



# Back to the Brink: Pakistan in 2022

Farrukh Iqbal

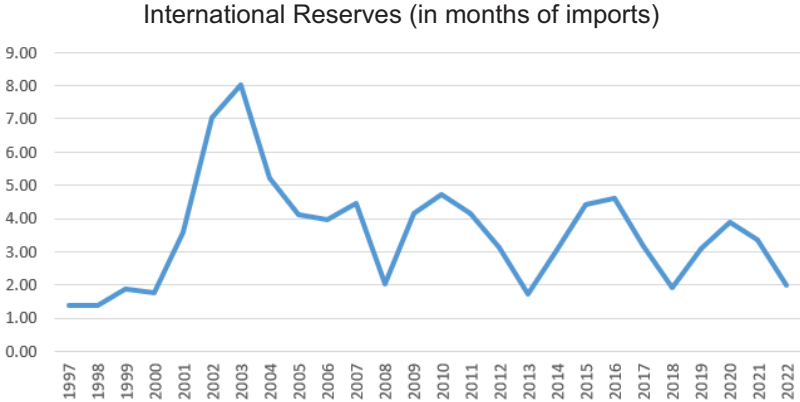
## Introduction

In 2022, Pakistan returned to the brink of an economic collapse for the fourth time since the global financial crisis of 2008-09. This is best shown by movements in foreign reserves measured in months of anticipated import needs (see Figure 2.1). By July 2022, international reserves had declined to under two months of import cover, repeating what had happened in 2018, 2013 and 2008. On each of the previous occasions, the default was averted by recourse to funding from the International Monetary Fund (IMF), which also unlocked other foreign funding sources. As of this writing

(October 4, 2022), Pakistan has once again negotiated an understanding with the IMF under which key policies and parameters are to revert broadly to what was agreed to in the program started in 2019.

The path of international reserves concisely captures Pakistan's economic dilemma over the past twenty-five years. The path takes the form of a repeating cycle in which reserves improve for a few years and then deteriorate to the point where foreign assistance is required on an emergency basis. This point is usually around a level of reserves equivalent to two months of expected imports. The rest of this chapter

**FIGURE 2.1**  
**Pakistan's Economic Dilemma seen through the International Reserves Cycle**



Source: World Bank Databank

discusses the causes and implications of the foreign reserves cycle in Pakistan.

## What were the Proximate Causes of Collapse in the Reserve's Position in 2022?

Why did the reserves position decline dramatically from a high of as much as 3.9 months in 2020 to a low of 1.7 months in 2022? The answer lies in both economic and political factors. Viewed from the perspective of early 2022, the key economic factors were a rising current account deficit, a rising fiscal deficit and a sense that economic policy was drifting far from the guardrails established by the IMF program agreed to in 2019. The current account deficit had narrowed between FY19 and FY21 from 4.2 percent to 0.5 percent but was on its way back to 4.7 percent (projected) for FY22 (see Table 2.1). In

percent in 2022. The sense of policy drift was most readily apparent in such developments as the following: grant of special energy subsidies to some sectors leading to higher power sector arrears; grant of additional tax amnesties and new preferential tax treatment for some sectors; lack of progress on a law to oversee the disposal of state-owned enterprises; and lack of progress in the recapitalization of certain private sector banks.

Among the political factors were the fall of the Pakistan Tehreek-e-Insaf (PTI) government in April 2022 and the tenuous assumption of power by a coalition of parties previously in the opposition. This transition was marked by much uncertainty. In particular, the new coalition government initially sent signals suggesting that it would not necessarily change key policies that were leading to an exacerbation of the current account and fiscal deficits.

**TABLE 2.1**

### Key Macroeconomic Indicators, FY19-FY22

Indicator	FY19	FY20	FY21 (Est.)	FY22 (Proj.)
Real Gross Domestic Product (percent change)	3.1	-0.9	5.7	6
Consumer Price Index (period average)	6.7	10.7	8.9	12.1
Revenue and grants (percent GDP)	11.3	13.3	12.4	12.1
Expenditure (percent GDP)	19.1	20.3	18.5	19.1
Budget balance, including grants (percent GDP)	-7.8	-7	-6	-7
Current account balance (percent GDP)	-4.2	-1.5	-0.5	-4.7
Gross reserves (in billion US dollars)	7.3	12.2	17.3	9.8
Gross reserves (in months of imports)	1.7	2.4	2.5	1.5
Total external debt (percent GDP)	33.5	37.7	34.9	32.5

Source: IMF Staff Report, September 2022

part, this was due to rising commodity prices, especially for oil.<sup>1</sup> The fiscal deficit had been reduced from 7.8 percent of Gross Domestic Product (GDP) to 6.0 percent between 2019 and 2021 but was on its way back to a projected 7.0

Since the IMF program was by then in abeyance and adequate external funds were not in sight, these signals pushed an already skittish stock market further down and accelerated the rupee's decline in forex markets. Meanwhile, the reserves position had

once again slipped below the two-month danger line and international agencies had started downgrading Pakistan's ratings. It took several months for the new government to come to a new agreement with the IMF following which a pending tranche was released.

### Why do Pakistan's International Reserves Collapse on a Regular Basis?

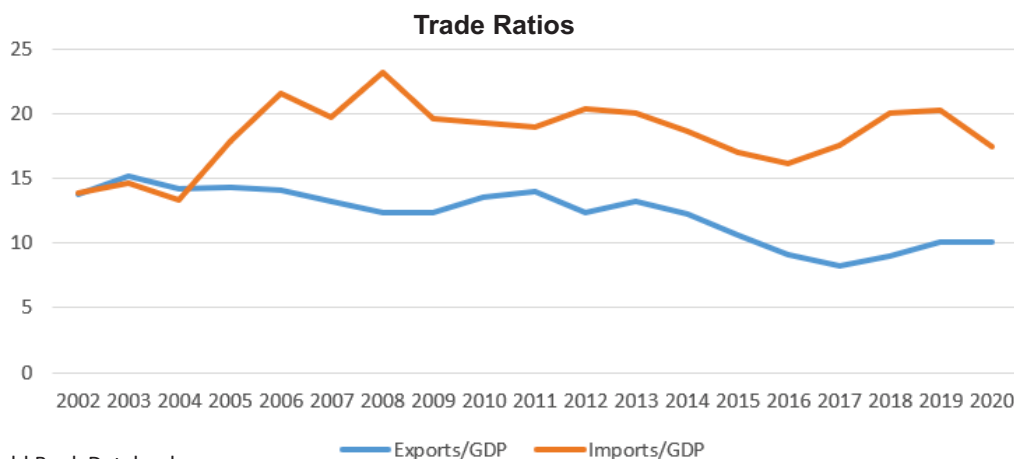
The main reason why Pakistan faces repeated reserves crises is a failure to sustainably reduce the gap between imports and exports. Both imports and exports have remained relatively stagnant to GDP over the past fifteen years and the gap between these ratios has remained roughly constant at about 7 percentage points of GDP since 2007 (see Figure 2.2). While much of this gap is offset by remittances, enough remains for Pakistan to face repeated balance of payments crises.<sup>2</sup> Exchange rate adjust-

### Why have Imports and Exports not Responded much to Exchange Rate Depreciation?

When the rupee depreciates, we would expect imports to become more expensive and exports to become more competitive. We would expect imports to decline and exports to expand, thereby reducing the balance of payments gap. How has this worked out in practice? Figure 2.2 shows that imports have remained roughly constant at 20 percent of GDP while exports have actually declined by a few percentage points over the last fifteen years, a period in which the nominal exchange rate has depreciated from roughly 75 Pak Rupees to 200 Pak Rupees to the dollar. This suggests that there are factors other than the nominal exchange rate that have a determinative effect on Pakistan's imports and exports.

**FIGURE 2.2**

#### Structural Inertia in Pakistan's Trade Ratios



Source: World Bank Databank

ment has been one tool used to influence import and export trends over this period. It has not worked as well as hoped, leaving foreign borrowing as the main instrument for resolving periodic balance of payments crises.

What might such factors be? First of all, there is inflation. To the extent that domestic inflation exceeds trade partner country inflation over time, the real exchange rate appreciates and offsets some of the benefits of periodic nominal devaluations. Other factors may also be important. On the imports side, the imports of petroleum and related products

tend to be inelastic, that is, they do not decline by much when the exchange rate depreciates. All that happens is that the rupee cost of importing rises. Since this category of imports accounts for about 25 percent of the total, it imparts a considerable degree of rigidity to the overall responsiveness of imports to depreciation.

On the exports side, it turns out that non-price factors play an important role. These include the quality of physical infrastructure (ports, roads, and power supply, in particular) and the quality of financial infrastructure (export credit and duty drawback facilities, in particular). It may also be that Pakistan's governments lack credibility with respect to being able to sustain certain economic policies. Investors may not believe that the advantages conferred upon exports via depreciation will be sustained for long. They may expect fiscal profligacy on the part of high-spending politicians to raise inflation and offset such advantages before long. So they may not take long-term investment decisions in favor of exports in response to episodes of devaluation.

In addition, a political cycle also operates in Pakistan under which fiscal and exchange rate discipline is relaxed a year or two before impending national elections (which are supposed to take place every five years). This leads to an increase in imports through both higher public spending (and its multiplier effect on consumer spending) and an appreciating exchange rate (due to higher inflation in Pakistan relative to important trade partners). Broadly speaking, a consumption boom often accompanies fiscal and exchange rate relaxation and the economy expands. All this feels good over a period of one to two years and leads to much self-congratulation among the members of the political party in power. Then the balance of payments consequences come home to roost, bringing a sudden stop to the good times. In the last three repetitions of this cycle, the sudden stop has coin-

cided with a change in government as well, from Musharraf to Pakistan People Party (PPP), from PPP to Pakistan Muslim League (PML), and from PML to PTI. In other words, while one political group went on the spending spree before elections, it was the successor government that had to pick up the pieces and approach international agencies for funds to stave off a reserve crisis.

## **Export Expansion is the Way Out**

The most promising path to resolving Pakistan's recurrent reserves crises lies in expanding exports. Austerity is a short-term solution to fixing a balance of payments problem; it is not a long-term prescription for growth. While import compression is useful at certain points, long term development strategy must focus on exports. Export enhancement offers a path that combines growth of output, growth of employment and reduced reliance on external borrowing. When successful, it raises output and employment directly. Earning foreign exchange reduces the need for foreign debt which is already at a high level in Pakistan. An export focused strategy also partly resolves the political dilemma since it does not involve such difficult choices as reducing public spending, selling state-owned enterprises, raising taxes and so on.

So the problems identified as impediments to exports must be dealt with. A market-determined exchange rate regime will have to be sustained as a matter of principle. Structural reforms will have to be carried out to facilitate power supply, logistics and finance for exports. The relevant bureaucracies will have to be disciplined in order to effectively provide information and coordination for this purpose. Public policy support to corporate elites will have to be conditioned on export performance. How do we know that a strategy focused on the above elements can work? We know this largely from Asian examples of the last sixty years. Initially, countries and territories such as Korea,

Taiwan, Hong Kong and Singapore rose to prosperity on the back of labor-intensive manufactured exports. At a later stage, countries such as Malaysia, Thailand and Indonesia rose to middle-income status in a similar fashion, although in their cases primary exports were also important. In the last three decades, Bangladesh, China, India and Vietnam have developed rapidly, again driven by exports.

In most of the above cases, competitive exchange rates maintained over long periods were critical. Critical also was sustained attention from the top political echelon, as illustrated, in particular, by the well-studied cases of Korea and Taiwan. One area in which such attention proves critical is coordinating policy across several ministries. For example, while one agency, such as the State Bank, can be relied upon to maintain a competitive exchange rate, several different ministries are involved in getting all the other elements right. These include good roads from factories to ports, effective port management to reduce dwell time for ships, and good management of power supply. Unless these efforts are coordinated across the responsible ministries, as was done via the creation of a Deputy Prime Minister position in Korea in the 1960s, the desired results may not be achieved.

Another area where a high level of political attention and direction would be useful in Pakistan is the performance of economic zones. Where other interests do not allow certain policies to be applied at the national level, countries set up special economic zones to attract exporters. Shenzhen in China is an oft-cited example from the 1980s. Why has this not succeeded in Pakistan? The most recent example of drift is the fact that whereas the China Pakistan Economic Corridor (CPEC) initiative is now entering its ninth year, not a single export zone contemplated under it has attracted significant new investment yet. One hears of delays in setting up the sites and services needed or issues with respect to the legal provisions and contracts required in

different provinces. Surely, sustained attention from above should be able to resolve impediments to the setting up of the zones in the first place and signing up exporting firms for these zones in the second. Furthermore, emerging research suggests that the overall investment climate matters a lot to the performance of a country's special economic zones while traditional instruments, such as low wages, fiscal incentives and trade preferences, do not. Following such findings, the Pakistani government should address economy-wide issues relating to the climate for investment in order to derive the full benefits of existing and new special economic zones.

### **The Current Juncture**

Neither of the two pillars to support export expansion, price and non-price, are firmly in place in Pakistan. The renewed agreement with the IMF, negotiated by the previous Finance Minister Miftah Ismail, proved unpopular with many in the new government. In late September, Mr. Ismail was replaced by former Finance Minister Ishaq Dar who then proceeded to make statements that suggest that some government commitments under the new IMF agreement may not last. For example, he has indicated a preference for exchange rates to be managed rather than determined by market forces. Previous experience with such management has typically led to real exchange rate appreciation.

As for the second pillar, there are no signs yet of an effort to ensure good infrastructure support or high level coordination for export expansion. This should be handled like a national campaign, led by the Prime Minister using a dashboard on which progress can be tracked monthly and with the Prime Minister playing an active role in resolving inter-agency coordination issues. Senior ministers should be in constant touch with prominent exporters both to exhort more effort and to find out what may be blocking progress. Not just carrots but sticks should

be employed. Unless companies meet export targets, various facilities available to them via public policy (loans, guarantees, input subsidies, etc.) should be withdrawn. It is not clear that the current government aims to implement such measures.

At present, most signs point to a difficult year ahead. First, based on the weakening signals of commitment from the PML government, it appears that the traditional politico-economic cycle will resume ahead of the next round of elections in 2023.

Second, unprecedented floods in much of the country will make economic and revenue growth difficult even if spending needs have risen. Third, the external environment is worsening in terms of interest rates, oil prices and economic growth prospects. Given these mounting difficulties, the country's international bond ratings have slipped. Pakistan may be back to the brink of a fresh reserves crisis before long.



**Chapter**

**3**

**Sources of Growth:  
Pakistan's Economic and  
Social Backwardness**



# Sources of Growth: Pakistan's Economic and Social Backwardness

Shahid Javed Burki

## Introduction

Development economics became an important component of the discipline of economics after its founding by Adam Smith whose focus was on domestic means of production and using international trade to expand the choices available to consumers. The word “growth” in the title of this chapter has a wider meaning than was intended by Smith and is normally employed in development literature. It covers not only economic growth and changes in the structure of the economy but also includes social betterment, political stability, cultural change and relations with the world outside a particular country's borders.

On April 9, 2022, Pakistan entered another period of political uncertainty when action by the Supreme Court forced the national assembly to vote on the no-confidence resolution moved against Prime Minister Imran Khan who took office after the national elections of 2018. After some political maneuvering, the assembly voted on the resolution and passed it. The prime minister's ouster would undoubtedly usher in another period of political turmoil. This has already begun to happen as the deposed prime minister started to address rallies in the country's major cities. Those held in Karachi and Lahore were attended by tens of thousands of Khan's followers.

In Lahore before a cheering crowd, Khan demanded that the national assembly should be dissolved, and fresh elections should be held within the next few months. If his demands were not met, he would ask his followers to march on Islamabad and lay siege to the capital. Pakistan was undoubtedly headed toward another political crisis. These have dotted Pakistan's 75-year-old history and have deeply impacted the country's economic performance. What should we expect in the country's economic future? This is a difficult question to answer especially at a time as turbulent as the one when this note was written.

A good place to start this discussion is to examine how economists and political scientists see the present economic and political situation in Pakistan. Beginning with the economic situation. On April 6, 2022, the Manila-based Asian Development Bank (ADB) issued its annual report, Asian Development Outlook. It outlined a number of problems the Pakistani economy faced in the year 2021-22. It projected a growth rate of 4 percent during the year, lower than the government's estimate of 4.8 percent.<sup>1</sup> The World Bank and the International Monetary Fund (IMF) followed with their own assessments which were not very different from those of the ADB. Development institutions such as the

World Bank using data from past several decades have concluded that the rate of economic growth has to be at least twice the rate of population increase to impact the incidence of poverty and improve income equality. The ADB's projection places Pakistan at a point lower than the needed growth rate to achieve these results.

Behind the lower growth rate was a slowdown in domestic demand caused by rising inflation and pressure on external accounts resulting, in part, from the conflict in Ukraine. The slowing domestic demand was also the result of monetary tightening in January by the State Bank of Pakistan, restrictions on automobile financing and fiscal consolidation measures adopted to line up a public policy with the conditions imposed on the country by the International Monetary Fund, the IMF. The ADB report estimated that the rate of inflation will remain high, averaging about 11 percent, three percentage points higher than the government's target. It attributed this to rising international energy prices, an increase in international food grain prices, and significant local currency depreciation. Since the State Bank of Pakistan has allowed the rupee to float without any intervention by it, the rupee's convertibility is governed by forces of supply and demand. On the day the Automatic Data Processing (ADP) released its report, the buying rate for dollar was Rs. 186, and selling touched Rs. 187.85. A couple of days later the rate touched Rs. 190 for one American dollar. As I pen this article towards the end of December 2022, the US dollar's official exchange rate has reached Rs 224 to a dollar but according to Forex.pk, a website that maintains accuracy by updating 'Pakistan's Open Market dollar rates received from various authentic sources' reported that on 11 December 2022, USD was selling at more than 232 to PKR. The bank saw some improvement in fiscal deficit which could be about 5.7 percent of Gross Domestic Product (GDP) that resulted from constraints placed on public sector spending as well as improvements in tax collection but that was at the beginning of this

year. In sum, 2021-2022 has turned out to be an extremely difficult year for the Pakistani economy, adding to several of those that dot the country's economic history.

Also dotting Pakistan's political history is the current political instability that has resulted in the country's inability to develop institutions that would ensure that disruptions don't occur with frequency. There is now active debate in Pakistan about the state of the Pakistani economy and how it has performed over the last few years, especially after political power passed into the hands of the Pakistan Tehreek-e-Insaaf, the party headed by Imran Khan. Khan became the country's prime minister in 2018 after the Tehreek-e-Insaaf (PTI) won the most seats in the national assembly but not a majority. This meant that the party had to form a coalition government by working with smaller parties. This implied some degree of political instability until a no-confidence motion was moved against him on March 8 which was declared unconstitutional by the assembly's deputy speaker. That resulted in the prime minister asking the president to dissolve the national assembly and hold new elections. This the president did. However, the opposition moved the Supreme Court to examine the constitutionality of these moves. On April 7, the five-member bench of the court announced its unanimous verdict, declaring the Deputy Speaker's action to be unconstitutional and ordering the assembly to reconvene on April 9 at 9.30 am and vote on the non-confidence resolution. This was done by the assembly's speaker who after allowing a number of people from the PTI to give lengthy speeches and the presiding officer, after repeated but short adjournments, the assembly finally cast its vote. Imran Khan was ousted by a vote of 174 at about midnight, two more than the needed majority in a house with 342 members. The Supreme Court determined that the deadline prescribed was not violated and reconvened in their chambers as the hour of midnight proceeded. The senior military officers also spent time in their offices.

I recount this particular episode to underscore that this is not the first political upheaval in the country's chequered history. Pakistan has seen a political crisis several times in its troubled history. Another incident was in October 1999 when then Prime Minister Nawaz Sharif prevented the plane carrying the Chief of Army Staff General Pervez Musharraf from landing in Pakistan while he was returning from a visit to Sri Lanka. The prime minister wanted General Musharraf to stay in the air while a new chief of staff was being installed. However, the attempted coup against the military leadership did not work. Musharraf's senior military colleagues mobilized, took command of the air control system and got the plane to land. Once on the ground, Musharraf put the country under martial law and arrested the prime minister. He went on to become the country's president – the fourth man in uniform to preside over Pakistan – and stayed in office for almost eight years. This time the crisis was averted without the military's explicit involvement. Does this mean that Pakistan has made some progress in developing a sustainable political system that can bring about regime change through accepted norms? If that question has an affirmative answer, it would create an environment that would move the economy forward. The question is how would this affect the course of the country's economic development over the short, medium and long term? For an answer, I will look briefly at the state of politics in the country and then go on to examine, again briefly, the way the economy has performed in recent years and in the immediate as well as distant past.

### **Sources of Growth: Lessons from History**

Pakistan's economic history – a subject I have studied for several decades and written about in several books and articles – establishes that political stability is an important contributor to economic growth.<sup>2</sup> That apart, economic historians have also argued that technological and organizational innovation are responsible for accelerating eco-

nomical growth and modernization. This is an appealing argument made by those who believe that the relationship between cause and effect are not straight forward. An important current debate is between the evolutionary and endogenous growth theories – the latter rooted in neoclassical economics. These two ways of looking at economic performance are based on fundamental differences in world views. In the neoclassical approach, cause and effect are clearly separate and growth is a steady state phenomenon; the evolutionary world view is one of historical circumstances and complex causal mechanisms. In this work we follow a path that is closer to the evolutionary approach although we will identify causes of change and their effect.

Economists believe that the state of any given economy depends a great deal on history and historical experience. They have a phrase for this: they call it “path dependence.” Where Pakistan is today reflects where it was yesterday and the day before. Most of the economic and social problems the country faces today and those that would prevent it from realizing its potential can be traced to history: the following five need to be the focus of attention of today's policy-makers. One, the inability to raise domestic resources to finance development; two, the inability to break from the past and adopt the policies and strategies that would realize the country's potential; three, weak governance, not just at the level of the government (federal and provincial) but also in the firms and private entities that are important for guiding the economy towards a better future; four, persistent cases of corruption at all levels of government that makes the state less efficient; and the fifth, to lay the ground for moving the economy and society to a higher technological plane. The fifth needs a detailed discussion which I will do in a separate section.

The annual average Pakistan's economic growth rate since 1951, four years after the country gained independence, was 4.78 percent while the popula-

tion grew at a rate of 2.6 percent a year. Although, the growth rate was less than twice the rate in population, there was a perceptible decline in the incidence of poverty. The proportion of poor living in poverty at the time of partition was estimated to be 60 percent; now it is one-third that amount. But averages don't tell the real story of Pakistan's economic history. It has periods of high rates of growth followed by periods of sluggish performance. The high growth periods were short; those during which the economy performed poorly lasted for a much longer time. This record points to one important conclusion: that the country was not able to develop institutions, adopt policies, and create an enlightened citizenry that, working together, could sustain a healthy rate of economic progress.

The 1960s, the 1980s and the early years of the 21st century were periods of respectable growth. The military was in charge during these three eras. However, that should not lead to the conclusion that the military in Pakistan has found a way of better managing the economy compared to the civilian leadership. What distinguishes these high growth periods is the fact that Pakistan received large amounts of foreign capital. This inflow came in the form of Official Development Assistance, ODA. Foreign private investment, FDI, was insignificant, one reason why Pakistan has remained technologically backward. Why that is the case is a question I will address later in another chapter. The United States was the principal source of ODA. Development banks, in particular, the World Bank Group (WBG) and the Asian Development Bank (ADB), also got actively involved in developing the Pakistani economy. There was some lending by the Jeddah-based Islamic Development Bank. (IsDB) In 1960s the Bank took the lead in financing the Indus Basin Replacement Works (IBRW) which grew out of the Indus Water Treaty (IWT) signed in 1960 in Karachi then the capital, of Pakistan. The signatories were Pakistan's President Ayub Khan and India's Prime Minister Jawaharlal Nehru. The treaty

divided the six major rivers of the Indus system into two parts, the western rivers were assigned to Pakistan and the use of the eastern rivers was allocated to India. A system of canals was built to carry water from the western rivers to those in the east when they entered Pakistan. The IBRW was to be one of the world's largest public sector investment programs and was watched over by the WBG. The Bank was also a major source of finance.

Military leaders were successful in aligning the country's external relations with America's strategic interests. During the 1960s, when General (later Field Marshal) Ayub Khan was the country's president, Pakistan joined two defense alliances launched by Washington. The Central Treaty Organization, CENTO, and the Southeast Asia Treaty Organization, SEATO, were founded to stop the march of Communism into Asia. The Communist threat then was posed by the Union of Soviet Socialist Republics, the USSR. Pakistan, in fact, was the link between the two defense pacts. In return for providing this kind of support, Washington rewarded Islamabad with large amounts of economic and military assistance. In the 1980s, back under the rule of the military with General Zia ul Haq in charge this time, Pakistan became a major player in the effort to push back the Soviet Union's advance into Afghanistan. Pakistan's Inter-Services Intelligence, the ISI, partnered with the United States Central Intelligence Agency, the CIA, to aid the fight against the Soviet troops by seven groups of Afghan mujahedeen. The highly motivated Islamic groups succeeded in expelling the Soviet Union out of Afghanistan. Moscow pulled out its troops from Afghanistan in early 1989. The humiliation it suffered led to the collapse of the Soviet Union two years after its exit from Afghanistan.

The Soviet Union's disintegration was to become a major source of resentment on the part of Vladimir Putin, who effectively became Russia's president in 2000 and has stayed in office for almost a quarter of

the 21st century. His invasion of Ukraine on February 24, 2022, was one part of his efforts to win back some of the lands his country had lost in 1991. The third growth period also saw the military in power with General Pervez Musharraf occupying the presidency. This time, Pakistan agreed to join the United States in the “War on Terrorism.” The decision to side with America was taken after a phone call from Washington but the U.S. Secretary of State, Colin Powell in which the Pakistani president was apparently told that the United States could bomb Pakistan back to the stone age if it did not side with the Americans. In *The Line of Fire*, his 2006 memoir, Musharraf does not make a reference to the “bomb you back to the stone age” threat and the American officials also declined that at any such threat was made using that kind of language. Wendy Chamberlain, the American ambassador in Islamabad, gave President Musharraf a piece of document that listed a number of demands. “Some of these were ludicrous like 'curb all domestic expression of support for the Taliban against the United States, its friends and allies. Such demands depend on the interpretation of what constitutes verbal support for terrorists, and the limits of dissent and freedom of expression.’” The Americans also asked for unrestricted access to the Pakistani communication system and the country's airspace for ferrying their equipment to landlocked Afghanistan. “How could we allow the United States 'blanket over flight and landing rights' without jeopardizing our strategic assets?. I offered only a narrow flight corridor that was far from any sensitive areas. Neither could we give the United States the 'use of Pakistan's naval ports, air bases and strategic locations on borders. We refused to give any naval ports or fighter aircraft bases. We allowed the United States only two bases – Shamsi in Baluchistan and Jacobabad in Sindh – and only four logistics and aircraft recovery. No attack could be launched from there. We gave no 'blanket permission' for anything.”<sup>3</sup>

Pakistan chose to support America. Once again, large flows of capital came to the country as a reward. Presidents Zia and Musharraf adopted policies that were to deeply affect not only Pakistan's history but also influence world affairs. The current crisis in Afghanistan and Ukraine was influenced by these decisions. However, this discussion will take me away from the main subject of this part of this work.

These episodes resulted in Pakistan becoming dependent on external capital flows to developing its economy. No – or little effort – was made to adopt fiscal policies aimed at raising domestic savings in both the public and private sectors. This meant Pakistan did not rely on its own resources to finance development. This effort would have required the establishment of a strong tax collection and management agency such as the Internal Revenue Service (IRS) in the United States that is totally unforgiving when it finds that individuals are not in compliance with tax laws and rules. It would have also required a political culture that would not tolerate underpayment of taxes or no payment at all. In Pakistan, senior political leaders were able to dodge the tax man by sending their savings abroad. They maintained large sums on money in the accounts in foreign banks in the Middle East or London or bought expensive real estate in these places. Imran Khan's 2018 campaign focused on these practices on the part of several senior political leaders. This focus on money laundering and corruption undoubtedly won him large middle- and lower-class votes. He promised that if voted into office, he would punish these leaders and bring back the money they had kept outside the country.

Each growth period ended with the withdrawal of American interest in the country and pulling out also from the geographic space of which Pakistan is a part. At the time of this writing (December, 2022), Pakistan is faced once again with the same set of circumstances. As discussed in greater detail above,



the military-dominated periods created a strong central authority that did not survive when the men in uniform went back to their barracks on their own or were pushed back by their colleagues and persuaded to retire from politics.

While the government saved little, private firms also did poorly in setting aside a significant proportion of their revenues for innovation and technological development. Firm owners diverted a good part of their revenues into real estate. By driving through any part of Lahore or Islamabad one can't help being impressed by scores of large billboards announcing the arrival of fancy residential apartment buildings. The two cities – and presumably others as well – are now going vertical with considerable private sector investments.

The second important feature of Pakistan's economic landscape is that the country has found it difficult to move away from the past and create a new framework based on its natural endowments. The agriculture sector offers a good illustration of how the country has failed to realize its full potential. It is instructive to go a bit into the history of the development of Pakistan's agricultural endowment, in particular the reasons for the creation of a large system of surface irrigation on which it continues to rely despite the depletion of the total availability of water because of the agreed diversion to India.

The system of canal irrigation that draws water from the country's large rivers was developed by the British in the early years of the 20th century to save the eastern part of their Indian colony from facing repeated famines. The British Indian administration feared that the 1857 type of mutiny – called the Great Indian Mutiny by British historians but the War of Independence by those who write from the Indian perspective – could take place if the food shortages in the eastern parts of their domain were not addressed and created resentment against the central authority – the British administration operating out

of New Delhi was persuaded to find a lasting solution to the recurring problem. London initially relied on importing large quantities of food grains from the world's surplus areas but was reluctant to spend a great deal to follow this way of solving the problem. A series of Famine Commissions based in London were tasked to find a solution to the problem. The Commission suggested developing the domestic capacity to produce the needed amounts of food grains. This could be done by converting the virgin lands in the northwestern parts of the colony into major food grain growing areas.

Irrigated virgin land in the provinces of Punjab and Sindh was brought under cultivation by constructing a system of canals and hydel works that drew water from the Indus River system. This was one of the world's largest systems of surface irrigation. The road system used the Grand Trunk Road constructed by Emperor Sher Shah Suri in the early 16th century. The building of the North Western Railway system, the NWR was another part of this endeavor. The railway system connected Sindh and Punjab with the eastern provinces of British India. The irrigated virgin land was colonized by bringing in members of the farming community from east Punjab which resulted in a significant demographic change in the province. This program was meant to provide grains for the food deficit provinces of Bengal, Bihar, and Orissa. The roads and railways carried the grain surpluses from the food grain-surplus to food-deficit areas. The state also got involved in procuring surplus food from the farming community. “Mandi towns” were established with traders (arthis) given the monopoly to buy and sell food grains. The port of Karachi was also improved to handle bulk commodities. This was the agricultural sector Pakistan inherited at the time of independence in 1947.

Once the country gained independence, it should have moved away from this total dependence on grain production that in other parts of the grain-producing world rely mainly on rain. The world's

three largest producers of food grain – Russia, United States and Ukraine – grow the crops on rain-fed rather than irrigated land. The use of irrigated land for grain production cannot be justified on economic grounds. Water depending on the surface irrigation systems is expensive. Pakistan should have moved away from grain production to producing high value-added products. Interestingly, that the only time the state got involved in promoting technological development was when the government headed by President Ayub Khan (1958-1969) worked hard to bring high-yielding crops (wheat and rice) to Pakistan. The government's involvement brought what came to be known as the “green revolution” to Pakistan. I will go into this development in a greater detail in a later section.

Strong governance is the third pillar on which I believe Pakistan should rest its economic and social structures. Of late, academia has begun to recognize that there is a close relationship between economic and social development on the one hand and political modernization on the other. In their well-received book, *Why Nations Fail*, Daron Acemoglu, an Massachusetts Institute of Technology (MIT) economist and James Robinson, a Harvard University political scientist, have shown why what they call “inclusive political development” is a critical contributor to economic progress.<sup>4</sup> The institutions on which they believe sound economic advance can be achieved must have the capacity to reach all segments of society. This was the approach followed by India until the arrival of Narendra Modi as the dominant political figure in the country wielding extensive power which was deployed to make India a Hindu state. What the Indian historian Sunil Khilnani called the “idea of India” in a book that carried that title no longer defines the country.<sup>5</sup> The “idea of India” was based on the assumption that the extreme diversity that marked the Indian society could become politically viable only if the country adopted inclusive political and economic systems. India with dozens of languages, several religions

and a caste system that assigned a low social status to those who worked the land or provided labor in the homes of the well-to-do was one of the world's most diverse nations. By abandoning the “idea of India” as the governing philosophy, Prime Minister Modi has weakened the foundations on which India has rested its political system for decades.

The only time Pakistan attempted to move in the direction of developing an inclusive structure of politics was during the period of President Ayub Khan when, what came to be described as the system of “Basic Democracies,” brought about a significant broadening the of the reach of the political system. At the base of the system were ten-member Union Councils made up of directly elected people. The hierarchical system brought local officials in close contact with the members of local communities. The system was criticized by those who had wielded political power based on patron-client relationships that gave them influence and authority. That is another subject that I will save for later discussion.

### **Is the Country Headed Towards an Economic Disaster?**

Political problems have economic consequences. There are many instances of how that has happened in Pakistan's long and often-troubled history. There are analysts in Pakistan who, watching the developing situation in Sri Lanka, worry that Pakistan may also be headed that way – toward bankruptcy. In order to see whether that could happen let us first examine what is occurring in that distant island economy before applying its lessons to Pakistan.

The Sri Lankan crisis dates back to the time when the government fought and ultimately won a long civil war in which the Hindu Tamil population in the country's northeast was trying to detach itself from the majority Buddhist population in the rest of the country. The Buddhists make up 75 percent of the country's population. The war cost the country some

100,000 lives and also took a heavy economic toll. However, the immediate reason for the current economy was the presidential poll of 2019 in which the challenger Gotabaya Rajapaksa proposed sweeping tax cuts that were so reckless that the incumbent government thought that it must be a campaign gimmick. Then finance minister Mangala Samaraweera assailed the move as dangerous since it would produce a huge burden on the already stressed public finance. A steep cut in value added tax from 80 percent to 15 percent was promised and it was also indicated that other levies would be scrapped.

With the elections over and with Rajapaksa having won the contest, the promised tax cuts were implemented. The new president also restored the presidential powers accumulated by his office during the 10-year rule of his strongman brother, Mahinda Rajapaksa. The family's brand of populist authoritarianism was restored with appeals to Sri Lankan Buddhist nationalists. The effects of these moves were quickly felt with ordinary citizens having run out of money to buy basic needs. They surrounded the presidency and ransacked the offices of the Health Ministry to obtain essential medicines. Soon after these developments, the Sri Lankan administration declared bankruptcy, the first time that happened since the country gained independence in 1948 from British rule.

It would take a real pessimist to equate the Sri Lankan situation with what Pakistan faces today. The political elite in Colombo has brought the crisis upon themselves. The sharp cuts in government revenues were entirely unnecessary but took the country towards bankruptcy. The Rajapaksa family also seemed not to have been bothered about the decline in food availability around the world. Even at the best of times, Sri Lankans were not able to grow enough rice – their staple food – to feed themselves. However, global food shortages made their situation even more difficult. Sri Lanka is not

the only country where food riots have occurred. They have taken place in Peru and some parts of Africa. “This is a lot worse than what we saw in 2008 or 2011,” warned Arif Hussain, chief economist at the United Nations World Food Program. His organization says 44 million people in 36 countries are “teetering on the edge of famine,” and 276 million are food insecure, double the number of people from the year before the pandemic began. The country worst affected is not Sri Lanka but Afghanistan, Pakistan's neighbor to the northwest. Their millions may perish from disease and hunger. Children are likely to be affected the most.

While we don't see a Sri Lanka in Pakistan, the latter faces many problems most man-made – or more accurately politician-made. Once again, the country faces a serious balance of payments crisis, but it is not as severe as was the case when President Farooq Leghari, after having dismissed Prime Minister Benazir Bhutto, persuaded me to take up the position of finance minister in the interim cabinet. Within a day of having arrived in Islamabad, Muhammad Yaqub, then the Governor of the State Bank of Pakistan, informed me that Pakistan was within two days of going bankrupt. I flew to Beijing and met with Prime Minister Zhu Rongji I had come to know very well during my seven and half years working as the Director of World Bank's China operations. When I was leaving that position for another job in the Bank, Zhu called me to his office and said that if there was anything ever the Chinese could do for me, I should not hesitate to call. I took upon that offer and spent a day in Beijing and had dinner with him at the State Guest House. I told him of our financial situation. “Before the dinner is over, a deposit of \$500 million would have been made in Pakistan's account at the Federal Reserve Bank in New York,” he said to me. The deposit was made and we were able to pay our bills.

The reason why Pakistan runs into these kinds of problems with some frequency is that its political



leaders don't have the will to make people pay the taxes they owe the government. There is also corruption at the highest levels of government. As the former Prime Minister Imran Khan pointed out while he was campaigning in the elections held in 2018 and also when he held the office of prime minister, those in power had amassed an enormous amounts of wealth charging large amounts of money for the favors done to government clients. That is bad enough; what is even worse is that the money thus garnered was shoveled out into foreign bank accounts or spent on buying expensive real estate. In other words, peoples' savings were being moved abroad and not kept at home for investment in the domestic economy.

There is consensus among international financial institutions that provide assistance to Pakistan – the IMF and development banks such as the World Bank Group and the Asian Development Bank – that in the financial years 2021 and 2022, Pakistan's GDP is likely to increase by about 4.5 percent a year. The country could do much better if it was governed better. I will use a few numbers to make this point. The country's low tax-to-GDP has inhibited development spending. It is around 17 percent of the country's national income. Publicly guaranteed external debt is estimated at \$91 billion. According to the IMF – the agency to which the country has turned repeatedly, “achieving the fiscal objectives will require a multi-year revenue mobilization strategy to broaden the tax base and raise tax revenue in a well-balanced and equitable manner. It will also require a strong commitment by provinces to support the consolidation effort and effective public finance management to improve the quality of and efficiency of public spending.” While public finance area is in need of reform, Pakistan has to produce more for exports and have its rich agriculture sector produce high-value crops rather than concentrate on grain production. With well thought development plan, Pakistan could see its GDP expand by 6 to 8 percent a year.

## A Journey towards Political Maturation

A political system can be said to have matured when it has a found way of transferring power from one set of contestants to another. Using that as the definition, we can say with some confidence that India, Pakistan's neighbor to the south, has matured politically. That is the case even though in recent years it has become more of an exclusive system than one that is inclusive. With the consolidation of power by Prime Minister Narendra Modi, India has moved towards using Hindutva as a philosophy of governance. It has increasingly marginalized its large Muslim minority estimated to be more than 200 million, reducing its presence in the structure of government. That journey may prove to be fatal for the Indian state since it departs in many significant ways from what the historian Sunil Khilnani called “the idea of India.” That idea was built around the belief that for a country as diverse as was the case for India, it had to have a system of governance in place that gave space to all the segments of an extremely diverse society. Under Modi who has won two successive elections with an increasing share of the national vote, one in 2014 and the other five years later in 2019, that is no longer the case. Hindutva meant governing as a Hindu, not as an Indian.

However, my concern today is not how India is journeying but how Pakistan is moving. It is heading towards political maturity but with hiccups. To understand where Pakistan is today, I should note where the country stands in the Muslim world. When shortly being voted out of power, Imran Khan, then the country's prime minister, convened a meeting in Islamabad of the ministers belonging to the Organization of Islamic Countries (the OIC), more than fifty nations sent in their representatives, mostly ministers. In this group of countries, Pakistan was one of the three countries that could be described as democratic. The other two were Indonesia, and Malaysia even though these two, like Pakistan, had faced problems in developing their

political systems. I don't include Bangladesh and Turkey in this small group of nations since both in recent times have moved away from being democratic to becoming single-party authoritarian states. Both Prime Minister Sheikh Hasina Wajid in Bangladesh and President Recep Tayyip Erdogan in Turkey have used non-democratic ways to consolidate their rule. I will later get to where Pakistan is today and where it could go in the future and how it would take the journey.

National elections have been held in Pakistan at the intervals defined in the Constitution of 1973 since the last person in uniform left the presidency in 2008. This could be seen as possibly a sign that the country has found a way to keep the military where it should stay – in their barracks. President Pervez Musharraf was the last man in uniform to govern the country, using force to take the reins of power in his hands in October 1999. He governed for a bit more than eight years, from 1999 to 2008. In a conversation with him in his Islamabad office in early 2008, I said that I was one of those economists who had begun to appreciate that the political context must be brought into consideration to understand economic development. I said that it was interesting that the two long-lasting military governments before the one he headed had lasted for eleven years each: Ayub Khan from 1958 to 1969 and Ziaul Haq from 1977 to 1988. He had an interesting response to my comment. “If I may describe this as the 'Burki law of Pakistan's political development,' I may have three more years to go,” he said with a smile. I didn't say that at the time, but I should have perhaps replied that I believed otherwise. But I did point out to him that in the case of the three military regimes that had preceded his, only one was succeeded by a military man. In 1969, Field Marshal Ayub Khan was succeeded by General Yahaya Khan but the latter handed power to a civilian, Zulfikar Ali Bhutto, and Zia ul Haq also to a civilian, Muhammad Khan Junejo. Although Zia had stepped aside but remained in the presidency as a constitutional

president, he seemed was not planning to leave but was killed in an air accident that also took the lives of General Akhtar Abdur Rehman, his powerful head of the Inner-Services Intelligence, the ISI, and Ronald Raphael, the American Ambassador in Pakistan.

One reason why General Musharraf was forced out of office was a widespread rebellion by the legal community who came out in the streets, protesting the unceremonial dismissal of the Chief Justice of the Supreme Court. He attempted to deal with the “black coats” as the lawyers were referred to by the media, by placing the country under a state of emergency and by the wholesale dismissal of the entire judiciary. That was a step too far even for the President's military colleague. They told him to step down and hold an election in 2008.

Pakistan has held three elections since the last military ruler left the seat of power: in 2008, 2013, and 2018. The fourth has to be held in 2023 but could take place earlier if the campaign launched by the deposed Prime Minister Imran Khan succeeded in advancing the date to sometime in 2022. Two things stand out about the three elections. In all of them, the party in power was voted out and the reins of authority were passed on to the party in opposition. In 2008, Pakistan Muslim League (Quaid), the party crafted by Musharraf to give his regime a civilian face, was beaten at the polls by the Pakistan People's Party since the assassination of its leader Benazir Bhutto was led by her husband, Asif Ali Zardari. Bhutto was killed in August 2007 after she had addressed a political rally in Rawalpindi and was succeeded by Zardari who claimed that his wife had said in a political will that he should succeed him if she died of natural causes or was killed. There was cynicism in that claim, but it was the beginning of dynastic politics in the country. Zardari took other liberties with the developing political system. He made the president the chief executive of the country with the appointed prime minister reporting to him

rather than to parliament.

The Zardari rule ended in 2013 when that year's election had his party, the PPP, defeated by Pakistan Muslim League (Nawaz). This was one further step in the evolution of dynastic politics. Those who succeeded in leadership positions in the Pakistan People Party (PPP) or in Pakistan Muslim League Nawaz (PML-N) had to be either a Bhutto or a Sharif. It was not a sign of political maturation. That sign appeared in 2018 when a new political figure at the head of a new kind of political party emerged on the scene. That Imran Khan, a new kind of politician at the head of the Pakistan Tehreek e Insaf (PTI), a non-traditional political party was signs of political progress.

Imran Khan's own constituency was in the district of Mianwali, his father's ancestral home. His mother belonged to the Burki clan that had migrated centuries ago from Logar province in Afghanistan and settled around twelve “bastis” they founded outside the town of Jullundur in Punjab. The Burkis seldom married outside their clan. Imran launched the PTI in 1996, four years after winning the coveted cricket gold cup for his country. By the time he won the cup for Pakistan, he was by far the most powerful sportsman in the country. He was convinced that his popularity would be transferred into politics, an expectation he took the part into the 2008 elections. That did not happen; the PTI won only one seat, that of Khan in Mianwali. But by 2013, with his party well established, he expected to do well; certainly, better than Sharif's PML(N). That did not happen, and he cried foul; claiming that since the PML(N) had been in power at the federal level and in Punjab, the country's most populous province, it had control over the election machinery which had rigged the poll in the League's favor. Not accepting the result of the elections, he invited his followers to stage a “dharna,” a new term to enter Pakistani vocabulary. He had set a tradition of not accepting any kind of negative result in politics. His victory in the election

of 2018 and his election in the national assembly as prime minister led to the opposition calling him the “selected” leader. The claim was that he had been selected by the military leadership to lead the country. When in April 2022, Khan lost a vote of no-confidence in the national assembly and a new government was formed under the leadership of Mian Shahbaz Sharif, Imran and his associates called the new leadership constituting an “imported government.” This was based on the claim that some Western capitals – especially Washington and London – wanted to punish Imran Khan for following an independent foreign policy. He met President Putin of Russia on February 24, 2022, when Moscow sent its troops into Ukraine.

### **Corruption and its Corrosive Influence on Development**

When I think of corruption and how its prevalence affects the economy and society, several key-words and expressions come to my mind. These include greed, selfishness, lack of respect for law, and lack of concern how the self is viewed by the outside world. No society is free of corruption – not those that are rich or are middle income or are poor. In different national environments, corruption takes different forms. In poor nations those at the bottom of the income distribution pyramid there is a heavy reliance on the state for all kinds of services. These should come for free but don't. Those who are supposed to provide them expect to be compensated in terms of small bribes. That this would be the case was recognized by the British when they ruled India.

I got a glimpse of this when in 1965; I served briefly as the Deputy Commissioner of the district of Sheikhpura. I was then not married and had a lot of time on my hands after the office was closed and the day's official work was done. I used that time to read some of the notes previous holders of the office I now occupied left for their successors. It was a tradition then – and I don't know whether it is being

followed now – for the departing official to leave a detailed note for his successor about the district he had managed, the people he had met and socialized with, some of the customs and traditions that governed the lives of the people in the district, and what was done when the “natives” observed religious holidays. The district was important for the followers of the Sikh religion since it had Nankana Sahib, the birthplace of Guru Nankana Sahib, the founder of the Sikh religion. By opening this shrine as well as the one Kartarpur near the border with India, Pakistan made it attractive for the members of the Sikh community to visit Pakistan.

Since in the late nineteenth and early twentieth century, the Deputy Commissioners were mostly British, these notes served an important function to introduce the newcomer to the area for which he was going to be totally responsible. One of the notes I read with great interest was written by the first Deputy Commissioner of the district. He had written that since the area that was under his charge was small relative to other districts in the province of Punjab, he was often called upon by the people in Lahore, the provincial capital, to carry out odd jobs. One of the assignments he was given was to become a member of the Commission set up to determine the precise responsibilities and compensation of the officials occupying the lowest rung of land administration. There were hundreds of patwaris, naib-tehsildars, and tehsildars working in these positions. Their main task was to maintain detailed land records about the ownership of land and its use. It would have been proper to pay these people since these records provided basic information about the structure of local economies. However, the colonial administration did not have the means to pay what these jobs demanded. It was determined that they should get only a little amount from the state. It was expected that the people who wanted what these officials had to do, would be compensated by those who were to be served. The British administration in other words was building corruption into the system.

The same decision was taken for those who managed local police stations. The patwari and the thanadar were the most important functionaries of the state at the local level.

When we refer to corruption in developed countries, we talk big not small money. As discussed above, a great deal that happens in less-developed countries is small. A good description of the former is a novel, *Under-money*, written by Jay Newman, a semi-retired sovereign debt investor who made his money buying defaulted bonds issued by near-bankrupt countries and then suing the governments to repay the bond in full.<sup>6</sup> He is best known for a fifteen-year legal fight with the government of Argentina. During that time Carlos Menem, the Argentinian president, called Newman and investors like him “vultures” engaging in “economic and financial terrorism.” The novel *Under-money*, explains Newman, means “money that’s unknown to the public that influences people and events,” such as corrupt or ill-gotten gains used to manipulate politicians. He sees that kind of money flowing everywhere. It shows up as the payments made by lobbyists to influence the writing of legislation by Congressmen in the United States. It is the kind of money that has stalled the ambitious program of social and economic reform that was part of the legislation President Joe Biden sent to Congress upon taking office but couldn’t get approved.

There is of course big money in countries such as Pakistan and India. It is the kind of money against which Imran Khan, the former prime minister of Pakistan spoke about and made an important item in his campaign for the elections 2018. It is generally believed that large sums of money were asked for and paid to politicians in high places in Pakistan. It is that kind of money which, when received by the policymakers, was not kept at home but illegally transferred abroad for safe-keeping in foreign bank accounts or for the purchase of expensive real estate in places such as London and Dubai. Even if this ill-

gotten money stayed home and was invested in the country, it would do a great deal of good; the fact that it is sitting outside the country rewards only those who manage it. That was the underlying theme of the revelations made by the leaked documents that came to be called the Panama Papers.

While campaigning for himself and his party in the elections held in 2018, Imran Khan said that if elected he would get rid of all corruption within a period of six months. Requested to do a short policy brief for Khan when he moved into the office of the country's prime minister, I began by lauding his commitment to work against corruption, but I said that he should not say that he would achieve that

worthy goal in six months. Corruption was deeply embedded in society's culture, and it would take a long time to reduce its presence. He did not accept my view that he should drop that suggestion from his political rhetoric and work on institutional and legal reform to address the problem. That would take time and a great deal of effort. I have no doubt that the intensity of the campaign against him was prompted by the fact that some of those who succeeded him and his associates in high state offices after his removal by the country's legislature had been accused of large-scale corruption and money-laundering. The cases against them were nearing conclusion when Khan was voted out of office.





**Chapter**

**4**

**Women's and Technology's Role  
in Economic Development**



# Women's and Technology's Role in Economic Development

**Shahid Javed Burki**

This chapter attempts to highlight the role that the state and the private sector have to play in managing and contributing to the growth and economic development. It also underscores the importance of mainstreaming development efforts of women as well as making use of technology to harness the full potential of sustainable development.

## **The Role of the State**

The subject of the role of state has attracted a great deal of economists' attention. It has a prominent place in what is called institutional economics. Some in the academia trace this interest in the subject to what is called the Glorious Revolution in England in 1688 when the power of the monarch was seriously curtailed and that of the representative parliament increased. Until that time, the monarch was the state. What he or she decided had to be followed by the subjects without questioning the monarch's intentions. If the monarch consulted anybody before making decisions it was not the people but, at best, a bunch of courtiers. It was this way of governing that led to the rebellion of the 13 American states that did not want to be governed by the king who sat on a throne thousands of miles across the deep ocean. The rebels founded in 1776 the independent nation of the United States of

America. Since that time the literature on the role of the state has grown and now covers a lot of ground. At this point, I will take a brief detour in history.

The Cold War (1945-1991) was fought to demonstrate which of the two systems of governance that were being tried at that time would serve the world well. Western-style liberalism narrowed the role of the state to create space for individuals and private enterprises. The latter two had the freedom to choose where and how they worked, produced, priced and sold their products. The state kept a light regulatory hand to ensure that the consumers were not hurt by the way private enterprises worked. A number of regulatory agencies such as the Food and Drug Agency (FDA) and the Federal Aviation Administration (FAA) looked after consumer interests.

In the Soviet system, the state has total control over all aspects of production and consumption. For some time, the Soviet officialdom created the impression that their system had succeeded in pushing the rate of economic growth well beyond that achieved by the West. It also maintained that it eliminated the worst forms of poverty and reduced significantly income inequality. The claims impressed a number of leaders in the developing world who were looking for ways to quickly develop

their countries and cut down on the time needed to close somewhat the gap between themselves and the more developed world. India's Prime Minister Jawaharlal Nehru was one of those men in a hurry. Impressed by the Soviet Union's stated achievements, he brought the Indian state into the middle of his country's economy. The Indian state made large investments in public sector companionless, while the private sector had to face a number of obstacles to develop and grow. What Nehru put in place came to be called the "license raj." This was described at some length and with humor by Prakash Tandon in his book *Punjab Century*. Tandon was the head of Hindustan Lever for several years.<sup>1</sup> Similarly, Zulifqar Ali Bhutto was another leader who was impressed by the Soviet claims. He decided to expand the public sector through expropriation rather than through using public funds to increase its presence in the economy.

The state's strength is defined in the literature to serve two somewhat overlapping components. The two components are political centralization and capacity to commit. A centralized state internalizes policy actions of different local authorities. An important consequence of centralization is the creation of fiscal and legal capacity. These two capacities can be best served by a central authority although some space is kept for local authorities to serve local interests.

There is consensus among scholars that for the purpose of development, the state has to be strong. A strong state had to have the ability to defend the borders of the country over which it rules. Standing armies came to be created once the European states found themselves constantly waging wars. The manpower for these efforts was based on the state's ability to tap local leaders to provide personnel for the wars that were being fought. This dependence on conscription created uncertainty as to the amount of power the state could put into the battle-field. The solution was to have permanent armies that were

recruited on the basis of well-defined criteria. The military organization was hierarchical, with the top leadership reporting to the leaders of the state. Often, those in command of the armies became rulers by staging coup d'etats, a process with which we in Pakistan are familiar.

The state needed to have the strength not only to protect its borders but also to maintain domestic law and order. This need led to the formation of police forces that responded to local needs and therefore were under the control of local authorities. The United States has gone the furthest in the process of localization of police. Almost all local jurisdictions – states, counties, towns, even universities – have their own police forces responsible to local leaders. However, while localities have their own forces, they function within the national law and order framework.

The strength of the state goes way beyond the ability to use force. A strong state helps to develop the economy, a point emphasized by the economist Gunnar Myrdal in his Noble Prize-winning work, *Asian Drama*.<sup>2</sup> He labeled the states in South Asia to be soft, hobbled by their inability to internalize local interests. This called for a strong centralized authority that was not subject to local interests. What brought strength to the centralized state was its role in defining and protecting property rights. To do this, the state needed to put in place the framework of law and order and have the means for enforcing contracts among different economic actors. These rights had to be universal; they must not differ from place to place. At the same time, the state had to be constrained not to interfere with security of property rights.

But what is a strong state and how can it cater to the needs of a society which has considerable diversity? For economic development, the state has to be strong enough to protect property rights and other institutions that underpin markets and contracts but

not too strong to be confiscatory. There is a need for democratic checks and balances. Strong states were needed in the post-colonization period when scores of countries gained independence. The appropriate role of the state became the subject of serious inquiry by academia as well as development institutions such as the World Bank.

While the literature on the role of the state puts emphasis on the need for central authority it recognized that the effectiveness of the state varies a great deal across localities and administrative levels within the same country and within, at times, the same local division. In Pakistan, for instance, the Province of Baluchistan is considerably less developed than average Pakistan. The southern part of the province of Punjab has fallen behind the rest of the province.

The state got involved in making policies in major sectors of the economies of the new countries. There was a greater focus on industrialization than on other sectors. States spent considerable energy in formulating industrial policies, evaluating their performance and making corrections when they were needed. In East Asia, the state moved away from protectionist policies to protect what came to be called “Infant industries” to improve the productivity of export-oriented manufacturing industries. This focus resulted in the emergence of what the World Bank in its 1993 report called the “miracle economies.”<sup>3</sup> What distinguished these economies from most of the rest of the world was the identification by the state of those private enterprises that could with some help penetrate the markets of the developed world. The state provided incentives such as soft credit and at times also technical assistance to the selected enterprises. But this support was gradually withdrawn as the targeted goals matured and could stand on their feet. What is worth noting is that while this approach was followed by the successful EAR Asian states, the industrial structures that emerged were not the same. While South

Korea developed large firms such as Daewoo and KIA, Taiwan's industrial sector was dominated by small firms. I will now turn to a brief discussion of the role of the state in Pakistan's economic history. Since this work focuses a fair amount of attention on how technology influences economic development and social progress, it would be appropriate to give a little bit of space about the role of the state – more accurately some states – are playing in using the information technology (IT) for developing new instruments that can aid firms as well as governments in their work.

Pakistan was born without developed instruments of governance. The country did not have capital, a working government, a central bank, and established financial systems. Unlike its sister country, India, it did not move into a functioning capital. New Delhi had well-staffed civil and military secretariats, a central bank and a functioning financial system. All these had to be created from scratch in Pakistan. In fact, Muhammad Ali Jinnah, the country's founder, had to borrow money from a group of businessmen to pay government staff salaries after they had completed the first month in office. While establishing a new government located in Karachi, the city chosen to be the country's capital, Pakistan had to deal with the situation created by the arrival of eight million Muslim refugees from India. With the departure of six million Hindus and Sikhs who left for India, the new government was saddled with the problem of loss of significant human capital. That was an indirect burden on the state. The direct burden was that the state had to find houses the refugees could live in and jobs that would provide them with incomes they could use to sustain themselves. With this poor beginning, Pakistan continued to struggle to define an appropriate role for state.

During Ayub's era from 1958 -1969 could be described economically as “Golden Age of Pakistan”. The country established the Planning Commission at the Federal level and provincial Planning

and Development Departments in East and West Pakistan with the assistance of the Harvard University Development Advisory Service (DAS). The Planning Commission vetted all the economic decisions and financing of large projects.

If the state played an important role in developing the economy during the period of Ayub Khan, its importance was reduced by Prime Minister Bhutto whose approach was to reverse most of what the military ruler had done. Among the most negative moves by the Bhutto administration was the destruction of a large private enterprises working in industry, finance, and commerce. This was done by nationalizing scores of privately owned firms that had played important roles in developing the country's economy. Bhutto was also impressed with the Soviet model of economic management and development as was Jawaharlal Nehru, India's first prime minister who served in that position for 17 years. Whereas Nehru used the state's financial resources to set up large public sector enterprises, Bhutto went the expropriation route, nationalizing several large private sector enterprises. Bhutto left several negative legacies among them downgrading the Planning Commission (unlike Ayub Khan who relied on experts' advice, Bhutto had great confidence in his own thinking) and measurably reducing the role private enterprises were to play in the Pakistani economy.

### **The Role of Private Enterprise**

Pakistan's economic history is an interesting case study of the appropriate role of private enterprise in developing the economy and modernizing of society. This was the theme already referred above, by then Harvard economist Gustav Papanek who had looked at the development paradigm followed by the government of Ayub Khan in the 1960s. This paradigm made Pakistan for a decade the model of development across the world. It had achieved a rate of economic growth that had few equals in the

developing world. The Ayub Khan state was actively involved in promoting development but so was private enterprise. One of the main components of the Ayub Khan strategy was the incentives provided to private entrepreneurs to invest in the economy. If the government got directly involved in the economy, it was to fill in the gaps left by private enterprise. The Ayub Khan government established a number of public sector enterprises to prepare the ground on which the private sector could play. Each of the established entities had a different role; some of these were to become role models for the rest of the developing world. The Pakistan Industrial Development Corporation (PIDC) was to invest in the areas where more capital was needed than could be mobilized by the private sector. The assumption was that once these industries were working, they would be off-loaded to the private sector. One of the contributions made by the state was to import rice processing technology from abroad, reverse engineer it and invite the private sector to set up the plants. Several privately owned and operated plants can be seen even now on the GT Road between Lahore and Gujrat. Agriculture Development Corporation (ADC) was to provide capital and technology to the farming sector, and the Water and Power Development Authority (WAPDA) was assigned the task of building and managing large projects that could not be handled by government departments. The WAPDA was studied with great interest when the Chinese were getting prepared to invest in the gigantic three Gorges Dam Project. They viewed the Pakistani organization as a model they could and would like to follow.

Special purpose organizations were also set up to provide finance for investment to the private sector. Most notable among these were the National Development Finance Corporation (NDFC) and the Pakistan Industrial Credit and Investment Corporation (PICIC) for financing large products. Pakistan's breakup in 1971 eventually resulted in the demise of the PIDC while the PICIC was bought in 2007 by a



Singapore bank which transformed it into bank named NIB.

Partition of the Indian subcontinent in 1947 brought some Muslim owned enterprises into Pakistan from India. Among those was the machine-manufacturing enterprise known by its acronym BECO which stood for Batala Engineering Company. The company pulled up its operations and relocated them near Lahore. It employed several European engineers – they came from German and Japan – to improve the company's technological base. It gained world recognition; in 1956 Zhou En Lai, the Chinese prime minister at that time, visited the plant and showed interest in sending engineers from his country to learn from the country's operations. However, Prime Minister Zulfikar Ali Bhutto's nationalization of industrial, financial and commercial enterprises destroyed BECO and Ittefaq Foundries, another capital goods industry that was modeled after BECO and was set up by Muhammad Sharif who had a small metal working shop in Amritsar, a town near the new India-Pakistan border. He moved his family and his business to Pakistan after the Indian partition. His sons were encouraged to enter politics by Pakistan's military rulers. One of them – Nawaz Sharif – served as the country's prime minister on several occasions while Shahbaz Sharif, his younger brother was twice the chief minister of Punjab and on April 19, took over as the country's prime minister after Imran Khan was deposed by the national assembly.

A number of other prominent Muslim businesses and industrial houses also move into Pakistan from India. Among them was the Saigol family. The family was originally farmers from a small town called Khotian in Punjab's Chakwal district. Chakwal was also the hometown of Manmohan Singh who was to serve as India's prime minister. Saeed Saigol moved to Calcutta in India and first opened a shoe store and then established a rubber shoe factory. Most of his work was with leather

which on religious grounds Hindus stayed away from. He became a major supplier of goods to the British armed forces during the Second World War. Anticipating the partition of India on religious grounds, Saigol moved his assets to Lahore in the 1940s which at that time was the largest city of what was then to become Pakistan. Relocating to Lahore, the Saigols left the leather business and moved into textiles, setting up yarn-spinning mills in Lahore, Faisalabad, and Rawalpindi. The family also went into the manufacture of cement, but its businesses were badly hurt by the nationalization moves by Bhutto.

Bhutto's economic policies set back Pakistan's progress – from having been identified in the 1960s as the model of growth and economic transformation to the one that is sometimes labelled a failed or a failing state.

### Using Technology for Development

Poor technological development is one reason why Pakistan's economy is performing well below its potential. When technological development as a serious subject is internalized by those responsible for making public policy, it affects all aspects of a government's involvement. Science, technology and innovation (STI) play important roles in economic development and modernizing society. These also bring about greater integration in the global system. The state needs to be deeply involved in achieving these objectives. These include, first, the development of several public sector institutions that, in the case of Pakistan, were set up at various times to undertake STI work. Second, there is also the need to rationalize the institutional structure that oversees technological development in the private sector. Third, there is the need to invest in improving both the reach of education and its quality. At the moment, there are several institutions that are involved in the government's efforts in this area. Several of these have overlapping responsibilities

creating considerable confusion among the members of the community of investors. As I will discuss in this section, Pakistan's approach improving the state of technology in its economy has been inconsistent and confusing. The focus of technological change has to be on individuals, firms, and government departments.

Development economics literature identifies several sources of growth and modernization. Among them, three are given particular importance. They are the roles of the state and private enterprise and the application of technology. Having discussed the first two in the previous chapters, I will now discuss the contribution technological improvements can and should play in accelerating growth and modernizing society. Technological progress would also help to bring about Pakistan's integration with the world outside its borders. The country at this time is one of the world's most isolated countries. Let me first discuss the Chinese experience in developing the technological base of its economy since it has relevance for Pakistan.

Pakistan's need for improving the technological underpinning of its economy comes at a time when the foreign sources it could tap to move forward have diversified. For a long time, the United States and Western Europe were the main sources of advanced technology. Alexander Gerschenkron, the economic historian of great repute, studied how technology had gone from country to country in the western part of Europe within a few decades. The industrial revolution began in Britain and was based on using the steam engine as the main source of power. France and a bit later Germany borrowed from the British experience and began to apply new technologies to develop their economies. After the Second World War, the United States took the lead. During the war, it used the country's firms to produce the equipment the fighting forces needed to fight the wars in Europe and Asia. The firms were involved in changing the lines of products they were manufac-

turing by developing new technologies. One interesting case of how technology was used to produce new products the military needed was the Jeep. The vehicle provided mobility to the forces involved in the war. It was designed to operate over rough terrains. After the war, the Jeep became a popular mode of transport for civilians. Since then it has gone through several iterations and retains popularity among the youth.

The point I am underscoring here is that technological development has come from transfers from the more developed to relatively less developed countries. That involved both the state and the private sector. The state created institutions that facilitated these transfers and also invested in improving the human capital new technologies would need. At this time in world history, China has become a major source of both technological development as well as technological transfers. How has China worked to develop its own technological base?.

I had personal experience of how the Chinese worked to access foreign technologies and then developed them to suit their purpose. When in 1987, I took charge as Director of the World Bank's rapidly growing China lending program, Beijing requested our help to construct four coal-fired power plants near Shanghai, the country's largest city and also the one that was most developed in terms of industrial output. The coal for the power plants was to be brought in by rail that used a dedicated track the Chinese had constructed, linking the coal-rich Shanxi province in the North-West with Shanghai. We agreed to finance the project, applying the standard World Bank condition that the supplier would be identified through the use of a process termed International Competitive Bidding, the ICB. The Chinese added a condition of their own which was to have the first four plants be brought in by the winner in the ICD process while the remaining three would be made in China by a joint venture between

the supplier and a Chinese enterprise. The firm selected for the project would be required to transfer the technology it was using to manufacture the plants. I put some pressure on the Bank's procurement department to accept this arrangement since it meant some departure from the intuition's established practices. A good part of Chinese technological development took these types of arrangements.

The 1980 opening of the Chinese economy brought about by then Chairman Deng Xiaoping brought in large amounts of Foreign Direct Investment (FDI). Most of the FDI came in with the promise of transfer of technology. Much of the advances the Chinese have made over the last half century in areas such as the manufacture of automobiles and aircrafts and in producing telecom equipment including mobile telephones flowed in from the United States. While following this approach, the Chinese invested great amounts of resources in educating and training its own people. Once again, the United States was the preferred destination. According to the Open Doors Report, 2021 on International Exchange released on November 15, more than 317,000 Chinese students were enrolled in American institutions in 2020-2021. Most of them were studying in institutions with established reputations for having specialized in the teaching of STEM—Science, Technology, Engineering and Mathematics.

During the presidency of Donald Trump (2017-2021), the United States lost its nerve. It feared that China was well on the way to overtaking it in the area of technological development. Beijing had made impressive advances in developing technologies such as Artificial Intelligence (AI) and payment systems. To deal with this developing situation, the Trump administration targeted several Chinese entities to check their development. Among those that invited Washington's attention was Huawei, the Chinese mega-technology privately owned firm that was leading in introducing 5G cellular networks.

There are lessons to be drawn for Pakistan from the way China made technological progress. Beijing's China-Pakistan Economic Corridor investment program offers an opportunity where transfer of technology could become an important component of the projects China is developing and financing. This should be the focus of attention in the nine Special Economic Zones, SEZs, China is committed to developing across Pakistan. Pakistan had begun to work in this area well before the Chinese included SEZ's in the China Pakistan Economic Corridor (CPEC) investment program. Industrial Estates were set up in the 1960s followed by the establishment of Export Processing Zones in the 1980s. This program has picked up with the arrival of the Chinese. Islamabad signed the industrial cooperation agreement for the second phase of CPEC. But even before that some institutional progress had been made. The SEZ act was passed in 2012, a year before the Chinese government announced its plans to invest in what it called the Belt and Road Initiative. This was followed by the setting up of the Special Economic Zone Management Information System (SEZ-MIS) and the passage of Special Technology Zones Act (STEZA) in 2021.

The country's development experience points to the fact that with three exceptions technology has been a failure in developing the economy and modernizing society. The first exception was when the government got actively involved in ushering in the “green revolution” in Pakistan. This was during the period of President Ayub Khan. The state took steps to import high-yielding wheat and rice varieties, the former from Mexico and the latter from the Philippines. Both were developed by international research institutions. The high yielding wheat was developed by an institution headed by Norman Borlaug, who went on to win the Nobel Prize for his efforts. He was invited by Ayub Khan to visit the country and guide Pakistan in determining the ways to get the farming community to adopt the new seed. Both high yielding wheat and rice required the

development of robust plants that could carry the weight of the larger amount of grain the plant produced. This involved smaller plant size with stronger stems. The adoption of the new varieties was facilitated by the introduction of the Basic Democracies System of local governance which brought government functionaries into close contact with the farming community. In the research, I did with the help of two Government College, Lahore students who were writing their theses for masters in economics degree and used patwari records to show that the lead for the adoption of new technologies was provided by middle sized farmers holding between 25 and 50 acres. The students used patwari records that are rich in details about farm sizes, the ownership of farms, the number of tenants the farms employ, the crops they produce, the materials they use, and the quantity of output produced. They can also provide information on how the farm surplus is marketed. The records can be used to do more research on rural development and agricultural progress. The arrival of the green revolution significantly increased grain output giving further advantage to those who used irrigated land to grow grains. The result was continuing with past practices. It would have been much more productive for the economy if the land had been used for producing high valued crops. This delayed the needed transformation of the sector of agriculture.

The second area of the state's involvement in bringing in foreign technologies was in defense production. Pakistan turned to China to develop indigenous capacity to manufacture heavy defense equipment such as battlefield tanks and fighter aircraft. After decades of close collaboration with the United States for military preparedness, Pakistan turned to China which was more willing to transfer technologies for local manufacture. The Americans supplied equipment but were not willing to transfer production technologies.

The third area for the successful involvement of the

state in technological development occurred when the government headed by General Pervez Musharraf turned to Dr. Ata ur Rehman, an internationally recognized scientist in the field of applied chemistry, to bring cellular technology to the country by attracting foreign direct investment into the sector. He has first appointed IT and Telecom Minister and then placed incharge of the Higher Education Commission, the HEC. Consequently, foreign companies invested in IT and broadband services. He reduced internet and call charges making mobile phones a very widely used product. In several ways, the arrival of this technology brought significant changes to the country's economy, affecting both demand and supply.

The HEC also increased the supply of trained manpower to the country. These interventions also brought Pakistan into the world market-place. IT exports increased to \$5 billion in 2000. An Information and Communication Technology Research and Development (ICT R&D Fund Ignite was established to support technology development and entrepreneurship in IT and telecom sectors. Ignite also launched incubation centers to help IT and Telecom graduates to become entrepreneurs.

Several individuals had been important in technological development in the country long before Dr. At ur Rehamn arrived on the scene. Thanks to the arrival of a couple of trained scientists from India to Pakistan when eight million Muslims moved to Pakistan from India, Pakistan established science and technology institutions in the country. Among those who came to Pakistan was Dr. Saleem uz-Zaman Siddiqui. Once in Pakistan, he became an adviser to the new government which was still not quite settled in the business of governance. His focus was the supply side of innovation. He set up the Pakistan Council for Scientific and Industrial Research, the PCSIR. The organization played a leading role in the early industrial development of the country. Led by the PCSIR, Pakistan went on to



establish several other institutions. Five of these were important contributors to the country's initial industrial development. They were: Pakistan Council for Science and Technology to contribute to the development of the innovation system in the country; Pakistan Medical Research Council to oversee the healthcare systems in the public sector; Pakistan Council for Research in Water Resources to contribute to the development of the country's abundant water resources; Pakistan Atomic Energy Council; and Food and Agricultural Research Council. In addition, the private sector set up what were essentially lobbying organizations to influence the making of public policy. Among them were Pakistan Academy of Sciences, and Pakistan Association of Advancement in Sciences. Some help was also provided by foreign governments to enrich the institutional landscape. For instance, the Swiss government set up PASTIC, a vocational training institute. But for these institutions to affect technological development needed what in scholarship are called build National Information Systems, NIS. Their growth and development needed the government's active involvement.

One example of the range of policies the government needs to cover is the structure of tariffs and regulation of imports and exports. For instance, Bangladesh's remarkable performance in world trade was due in large part to the significant reduction of tariffs on the import of machinery for textiles and garments. I will start with focus on individuals.

To make individuals important players in technological advance, the state and the private sector must invest in education. This needs to be done at all levels, starting with pre school to primary school and going all the way to colleges and universities. Among developed nations, Germany is a good example that has developed a system that separates students early on in basically two streams, one that moves towards general education and the other

towards vocational training. This does not happen in most parts of the underdeveloped world. In Pakistan, the private sector has played an important role in education at all levels. In a study I did while I was a Senior Visiting Fellow at Singapore's Institute of South Asian Studies, I used the data available at Harvard University to show that in terms of the proportions of girls attending primary schools and completing four-to-five years of schooling, Pakistan was better than Bangladesh and India. This was due to the role played by the private sector, particularly in the countryside. In Pakistani villages, women with some education had set up schools in their houses in which girls got enrolled.

Moving on to the role of firms in the economy. Pakistani firms have not invested the needed amounts to improve their technological base. This was the conclusion reached by a 2013 World Bank study according to which only 28.9 percent of the surveyed firms introduced new or significantly improved products or services over the preceding three years. Only 16.2 percent of firms were spending on R&D activities. According to the World Bank, pushing the innovation agenda can be a game changer for Pakistan. This conclusion was reached by the Lahore-based Burki Institute of Public Policy in its annual report for the year 2019. According to its analysis, the CPEC could become a catalyst for change. It is aiming to establish nine Special Economic Zones (SEZs) in various areas of Pakistan. The first of these was inaugurated by then Prime Minister Imran Khan in 2011 near Faisalabad. Properly organized and managed, these SEZs could help Pakistan modernize its economy and begin to reach its potential. For that to happen government's involvement is essential.

### **The Role of Women in Pakistan's Development**

Since the birth of the discipline of development economics, those who written extensively on the

subject paid little attention to the role of women in the development of the countries in which they lived in. This almost total neglect of the role of women in development is hard to explain. The reason perhaps was that much of the writing were authored by men who worked in the area of development. Those who came from abroad to lend a helping hand focused on the subjects such as education and health—areas in which women were encouraged to work if they were interested in development. This report is an attempt to understand the role women can and should play in developing the societies in which they live. We will also make the case that without women's involvement development would not achieve its full potential.

Recently Pakistan spent March 8, 2022, observing women's day as was done by most countries around the globe. It is only four years ago when some Pakistani women took to the street to demand better treatment in their homes, in educational institutions as well as in the workplace. Women in Karachi took the initiative to bring out their friends and relatives to come and start demanding better rights for women. Although the reaction to the first Women's March (2018) was relatively low key, there was some condemnation from Islamic extremists who labeled the participants as “anti-religion” and even “vulgar.”

“What started as a single demonstration to observe International Women's Day has become an annual lightning rod for religious conservatives across Pakistan, who have been adopting harsher attitudes toward women female activists,” wrote Zia ur Rehman, a Karachi-based journalist who covers Pakistan for his newspaper, The New York Times. “As women were preparing to march on Tuesday in Karachi and other cities, powerful figures in Pakistan called for the event to be banned altogether. Women who planned to join the Aurat Marches – as the women marchers are known in Pakistan – faced countless threats of murder and rape, along with

accusations that they receive Western funding as part of a plot to promote obscenity in Pakistan.” Many Pakistani opinion-makers are always prepared to blame the West if things are not going in what they believe is the right direction.

Pakistani women, not unlike women in other parts of the world, have woken up to the important fact that they will need to get actively involved in improving their status in society. In the process, they will need to educate the males in society who must begin to recognize that keeping women backward will keep the country backward. This is even more urgent now than in the past as a result of developments in neighboring Afghanistan. The Taliban government in Kabul which is still struggling to establish itself and save the country from an unprecedented humanitarian crisis has focused considerable attention, as expected, towards defining its approach toward the country's women. In spite of international pressure, it has made little effort to convince the skeptical world that it will bring women closer to men in terms of social and economic development. Its record when it governed last – in the period 1996 to 2001 – is not encouraging.

No country has made economic and social progress without empowering its women. China and Bangladesh offer good examples of how women have developed their societies. China started on this route in the early 1950s and Bangladesh in the 1970s and 1980s. Chairman Mao Zedong's Communist Party took control of China in October 1949. One of his first reform acts was to ban the binding of women's feet, something upper class Chinese had done before the Communists took power. By keeping feet small, women's mobility was highly restricted. When I first visited China in the summer of 1965, I saw many old women barely able to move on their small but deformed feet. Mao's other reforms also affected women. He brought universal primary education and health care to the country's population. When Deng Xiaoping became the supreme leader in 1976

following the death of Mao, he opened China to the world outside. China then had a work-force that had more women than men to launch the country on the route to rapid economic progress that, in terms of the rate of growth of the economy transformed itself. Its economic growth rate and social change have no historical precedence.

Bangladesh became independent in 1971, breaking away from Pakistan of which it had been the eastern part – or “wing” – for a quarter century. In doing so, it inherited one-half of the quota under the Multi-Fiber Agreement, the MFA, which regulated the export of cotton products to the developed world. But the new country did not grow cotton or manufacture cotton yarn. Foreign investment from mostly East Asian countries rushed in to take advantage of the access Bangladesh had suddenly gained to the markets in the United States and Western Europe. Those who invested in developing Bangladesh's garment industry had to experience of operating such enterprises in their own countries and knew that women were better workers than men in producing garments. This opened opportunities for women which they rushed in to exploit. More than 80 percent of the work-force was made up of women which allowed them to become largely independent of their spouses. One immediate consequence of this was a sharp decline in the country's birth rate. At the time of independence, Bangladesh had a larger population than Pakistan. Now it has 165 million people, 45 million people fewer than Pakistan.

The table 4.1 provides some basic data for the status of women in four South Asian countries – Bangladesh, India, Nepal and Pakistan

Comparing the situation of women in Pakistan to that in Bangladesh, India and Sri Lanka, there are some measures that show that women in Pakistan are doing as well – if not better – than those in other South Asian nations. To use a couple of measures to compare the situation in Pakistan with other South

Asian nations: 65 percent of girls get married before they reach the age of 18 in Bangladesh, 31 percent in India but only 24 percent in Pakistan. Weight at birth is the lowest in Bangladesh but highest in Pakistan. In a study I did while I was spending summers as a Senior Visiting Fellow at the National University of Singapore's Institute of South Asian Studies, I was surprised to discover that the proportion of girls entering primary schools and completing the full term was higher in Pakistan than in India and Bangladesh. This was the case because of the involvement of the private sector in education. It did not happen because of public policy or public sector endeavors. A large proportion of thousands of schools and colleges in the private sector are the result of initiatives by women. This is the case not only in urban areas but also in villages.

However, I don't want to leave the impression that Pakistan doesn't need to do much more to have women contribute to the country's economic and social development as they did in what has come to be known as the miracle economies of East Asia. There are several areas that need attention from both the government and the private sector. They include violence against women in the country – a subject that is receiving a fair amount of media coverage these days – providing women education, health care and employment in the modern sectors of the economy. I notice that women have an active presence in privately run commercial banks.

## Conclusion

### A Government Strategy for Sustaining Economic Growth and Social Change in the Country

One approach would be for the policymakers in the government to prescribe targets for expenditure for the various government departments and agencies. This would be done at all levels of government. Targets can also be prescribed for the number of

**TABLE 4.1****Status of Women in Four South Asian Countries**

Indicators	Countries			
	Pakistan	Bangladesh	India	Nepal
Life Expectancy (years)	63.8	74	71	71
Literacy Rate (%)	67.5	94.9	90.2	91
Mean Years of Schooling	3.8	5.7	5.4	
Gender Development Index	0.74	0.9	0.82	0.58
Gender Inequality Index	0.5	0.53	0.48	0.69
Maternal Mortality Ratio/ 100,000 births	140	173	133	186
Women with account at financial institution or with mobile money-service	7	43.46	78	49
Proportion of seats held by women in national parliaments (%)	20	21	14	33

**Source:** World Bank Data indicators

people out of the total employed who would be working to bring about technological progress. This is a top-down approach where the government functioning at the senior level prescribes what is expected from those who work at the lower levels. There is an expectation that these targets would be followed and there will be a system of accountability to determine what is happening. This is the approach taken by a recent in a report commissioned by the Burki Institute of Public Policy (BIPP) from a group of consultants. My approach would be to place on the qualitative rather than the quantitative aspects of inducing change.

Communicating clearly and repeatedly by senior leadership should reduce better results. This communication should be based on making citizens understand what they need to do to begin to catch up

with the more advanced parts of the world. Once this is clearly communicated and understood, people who are in the business of good and commodities would make their own moves.

Before finishing this chapter I will return to the main theme of the report: the contribution women can play to developing the economy and modernizing society. Both the government and the private sector have roles to play in these areas. To begin with, the government's development program should create opportunities for women to develop. As discussed in several chapters of this report, women's relative backwardness in the country is not the result of the choices they have made. It has resulted from a combination of several factors, among them is the way religion is interpreted by some conservative elements of society. Although, Pakistan has not

pushed women to the back of society it does follow the patriarchal system that is common in South Asia and much of the Muslim world.

Educating women is the most effective way of improving their own situation and also of the country in which they live. This has been done in Bangladesh where women employed in the country's large garment industry came to be educated. They also became relatively independent of men, making their own decisions about matters such as the size of the family they wished to have.

It is not fully realized in Pakistan the important role women have played in educating the youth in the Pakistani population. During one of my stays at Singapore's Institute of South Asian Studies, I asked my Bangladeshi Research Assistant to access the rich data base maintained at Harvard University's Economics Department pertaining to education in South Asia. I asked him to develop tables for me on the proportion of girls in primary-school age who were attending classes. Also, what was the proportion of enrolled students who were staying on in the schools and completing the needed years of education. He brought in the results that surprised me. Pakistani girls were doing better than the girls in Bangladesh or India. He explored further why that was the case and came back with the finding that women working in the private sector had set up schools all over the country for which they charged low fees to encourage parents to send their girls to schools often housed in one or two rooms where the woman who had set up the school lived. This was certainly the case in the country's rural areas.

I have included a chapter on the situation of women in Afghanistan for the simple reason that there are several features of the Afghan society that have elements that are also present on the Pakistani side of the border. Pakistan's population has close to 40 million people belonging to the Pashtun ethnic group. There are about 15 million of this ethnic group in Afghanistan. However, in Afghanistan, the

government is now in the hands of the Taliban whose membership is totally from the Pashtun ethnic group. Some of the ways Taliban is treating women could impact the tribal people on the Pakistani side of the border.

I will conclude this chapter by quoting from a spirited article written by Shaban Basij-Rasikh who has taken refuge in Rwanda, after the Taliban took over the control of Afghanistan. The article was written for *The Washington Post* after the killing of scores of girls from the Hazara community who were gathered inside a tutoring center to take a practice college entrance exam. "They were separated by sex per Taliban's imposed restrictions, the girls in one area, and the boys in another. The girls outnumbered the boys, as the Taliban closure of girls' schools had made privately run centers such as this one the only places where girls could hope to continue their education. It was Friday, Islam's holy day. The students were quietly taking their tests when a man walked into the girls' section and denoted the explosives strapped to his body." More than 50 people died, most of them girls. Barsij-Rasikh had a strong reaction. "Hearts may break, but spirits do not. So, listen murderers of Afghan women, there is steel in us, forged in fires that have burned across generations. You underestimate the strength of the steel."<sup>5</sup> If there is a lesson to be learned by the women in Pakistan in order to free themselves and work for their development and that of the country in which they live, it is the one Shaban Basij-Rasikh writes about in her newspaper article.





**Chapter**

**5**

**Socio-Economic Implications of  
Gender Deficit in Pakistan:  
A Comparative Analysis**



# Socio-Economic Implications of Gender Deficit in Pakistan: A Comparative Analysis

Shahid Najam and Atr-un-Nisa

## Introduction

Gender deficit is a major challenge and development constraint throughout the world. It refers to discrimination on the basis of sex/gender causing one sex or gender to be routinely privileged or prioritized over another.<sup>1</sup> It manifests itself as the gap between men and women in political, economic and socio-cultural participation at local and household as well as national levels and has long-lasting consequences both for women and the country especially the developing ones in realizing the sustainable development goals<sup>2</sup>. The deficit or inequalities start at very early stages and disproportionately leave a lifelong impact on girls and women<sup>3</sup> who fail to realize their potential as economic, social and development change agents.<sup>4</sup>

Gender equality is a fundamental human right. The United Nations Charter (1945) embodies a specific gender anti-discrimination clause to promote and support equal rights among men and women. The UN Commission on the Status of Women was established in 1946 to bridge the gender gap and ensure rapid empowerment and accelerated enhancement of social, cultural and economic status of the women. The Universal Declaration of Human Rights (1948) also laid down in unequivocal terms: *"all human beings are born free and equal in dignity and rights... without distinction of any kind, such as race, color, sex, language, religion ...birth or another status"*. This Declaration, inter alia, obligated

the signatory member countries to make gender an integral part of their development effort. The Convention on the Elimination of All Forms of Discrimination against Women of 1979 (CEDAW) further advanced the commitment to ensure fair and free exercise and expansion of political, economic, social, cultural and civic rights by women.

Gender sensitivity constituted the kernel of the Millennium Development Goals (2000-2015). Goal 3 that stated "Promote gender equality and empower women" was devoted to addressing the entire range of development deficits faced by women. 'UN Women' was established in 2012. Its objective was to address all issues that hampered the socio-economic development of women. It merged various, "UN related fragmented institutions" under one banner. This was done to 'eradicate discrimination and to facilitate women to maximize their potential and, to contribute to achieving sustainable human development.

Similarly, the Sustainable Development Goals (2015-2030) were adopted universally as a "shared blueprint for peace and prosperity for people and the planet, now and into the future". While all the Goals were intrinsically gender responsive, Goal 5: Gender Equality primarily and Goal 10: Reduced Inequality acknowledged gender equality as a fundamental human right and foundational principle

for a sustainable world. At the national level also, concerted efforts were made to mainstream gender in the policy, planning and national development goals. There is indeed a universal consensus that “empowered women and girls contribute to the health and productivity of their families, communities, and countries, creating a ripple effect that benefits everyone”.<sup>5</sup>

However, the gender deficit continues to pose a formidable challenge globally. Out of the 759 million illiterate adults across the world, around 70 percent are women. Girls still make up a higher percentage (72 percent) of out-of-school children than boys. Amongst other things, this could be due to the fact that limited household resources require them to prioritize the education of boys as they are deemed to be potential bread earners. Families may also rely on girls' labor for household chores thus leaving limited time for schooling

Critical status of maternal health, the disproportionate impact of pandemics, under-aged girls' marriage and domestic violence continue to be a serious cause of concern- around 350,000 women die in pregnancy or during childbirth each year of which 99 percent occur in developing countries

While around 66 percent of the world's total work is carried out by women who also produce 50 percent of the food, their earnings constitute only 10 percent of the total income. Women are generally assigned vulnerable forms of employment and poor working conditions. The situation in most of the developing countries is worse as the women's share of paid non-agricultural employment is as low as 20 percent. Even in developed countries like the UK despite the Equal Pay Act, women working full-time on average receive 15.5 percent less per hour as compared to men. In many developing countries, women still lack rights to own land (less than 1 percent) or to inherit property, obtain access to credit and move up in their workplace, free from job discrimination.<sup>6</sup> They are at all levels, domestically or in the public arena, widely under represented as decision-makers. Women occupy just 16 percent of the ministerial posts.

Unfortunately, domestic violence is widespread. Around 33 percent women are subjected to beating,

coercive sex, or other forms of abuse during their lifetime. The situation in war torn and conflict stricken countries like the Democratic Republic of the Congo is worse. According to estimate an average of 40 women and girls are raped every day in some parts of the country (Margot Wallström). Thousands of women in Rwanda (250000 to 500,000), Sierra Leon and Bosnia (around 50,000 each) faced the same plight. Yet sexual violence cases are rarely brought before the court with very low conviction rates. Around 130 million girls and women alive today have been subjected to *female* circumcision that is in reality needless genital mutilation while each year some 5,000 women are victims of '*honour killings*' (UNFPA).

The World Bank estimates that due to gender inequality, the loss in human capital wealth is US \$160.2 trillion assuming that women would earn as much as men. This inequality could lead to a wealth deficit of \$23,620 per person globally on a per capita basis. The cumulative impact of this socio-economic deprivation perpetually keeps many women in a low-productivity trap and relegate them to unpaid care and informal work.<sup>8</sup>

## Global, Regional and National contexts

### (a) Global Context

The global gender gap has been abridged over the years and is estimated at 68.1 percent in 2022 yet it will take 132 years to reach full parity. This represents a slight four-year improvement compare to the 2021 estimate (136 years parity) (‘The Cost of Gender Inequality’ World Bank Report).

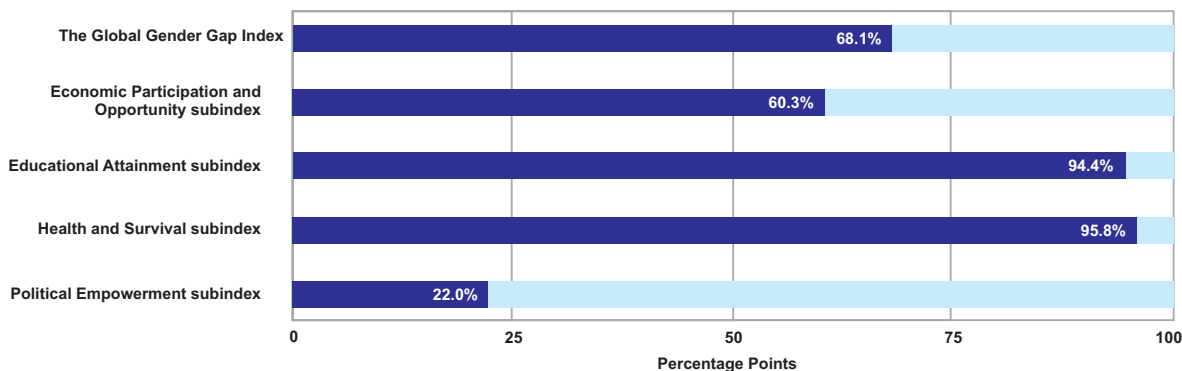
Across the 146 countries covered by the 2022 Global Gender Gap Index, the top 10 economies have closed at least 80 percent of their gender gaps, with Iceland (90.8 percent) leading the global ranking.<sup>9</sup> Nicaragua and Germany are the new entrants in the top 10 in 2022 while Lithuania (79.9 percent, 11<sup>th</sup>) and Switzerland (79.5 percent, 13<sup>th</sup>) dropped out this year. Based on the global average scores over the past 16 editions, it will take 155 years to close the political empowerment gender gap, 151 years for the economic participation and opportunity

gender gap, and 22 years for the educational attainment gender gap. The time to close the health and survival gender gap remains undefined as its progress to parity has stalled. Figure 5.1 captures the global gender gap by Sub-index.

economic participation and opportunity Sub-index whereas Afghanistan occupies the lowest rank of 146 worldwide with Pakistan at 145. This is evident from the Figure 5.2.

**FIGURE 5.1**

**Global Gender Gaps, by Sub index percentage close by 2022**



Note: Population-weighted averages based on the sample of 146 economies included in the index in 2022.

Source: World Economic Forum, Global Gender Gap Index, 2022

**b) Regional - South Asian Context**

**I- Economic Participation and Opportunity<sup>10</sup> and Labor Force Participation Rate, Female**

In 2022, Nepal tops the rank at 98 out of 146 countries among the selected countries<sup>11</sup> in Gender Gap

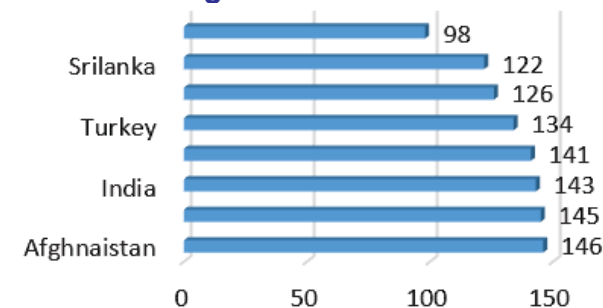
Sri Lank is at top with 34.4 percent female labor force participation rate followed by Turkey with 34.3 percent whereas in Afghanistan the female labor participation is lowest with 16.5 percent female labor force participation and Pakistan at 23.5 percent as is evident from Figure 5.3.

**Women’s Unemployment and Female Employment Vulnerability**

Afghanistan is at top in the women’s unemployment

**FIGURE 5.2**

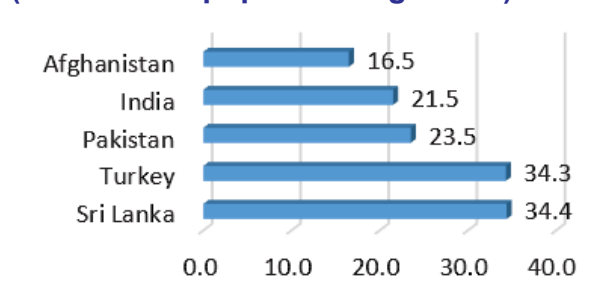
**Economic Participation and Opportunity Index Rankings**



Source: Global Gender Gap Report 2022

**FIGURE 5.3**

**Labor Force Participation Rate, Female (% of female population ages 15+)**

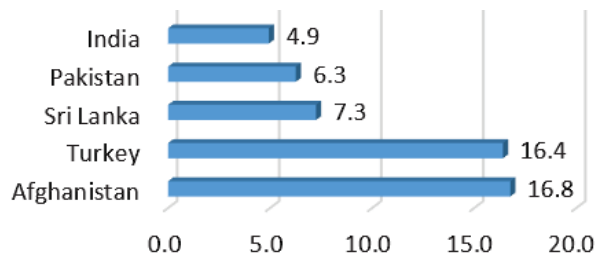


Source: World Bank Gender Gap Data Portal

with 16.8 percent whereas in India it is the lowest with 4.9 percent. Pakistan reports 6.3 percent on this account. As regards vulnerable jobs, the incidence in Afghanistan is 89.5 percent- highest among selected countries whereas in Pakistan it is 70.2 percent and Turkey at only 31.8. Figures 5.4 and 5.5 depict the situation.

**FIGURE 5.4**

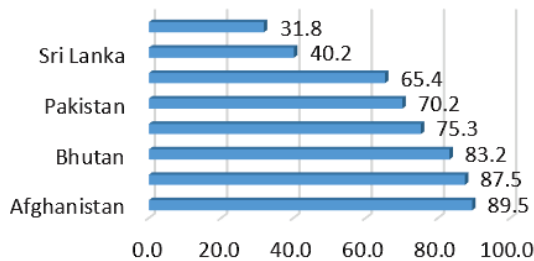
**Unemployment, Female  
(% of female labor force) (national estimate)**



Source: World Bank Gender Gap Data Portal

**FIGURE 5.5**

**Vulnerable Employment, Female  
(% of female employment)**



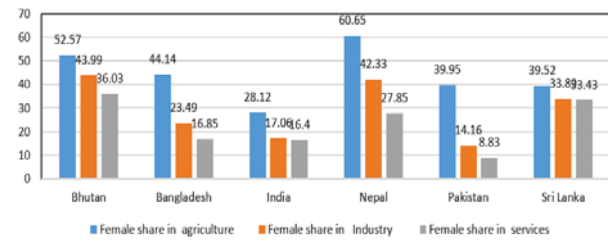
Source: World Bank Gender Gap Data Portal

**Proportion of Female Employees by Economic Sector**

In all selected countries women’s share in agriculture is higher as compared to industry and services. In Nepal, it is 60.65 percent, Bhutan 52.57 percent, Bangladesh 44.14 percent and Pakistan 39.95 percent as shown in Figure 5.6.

**FIGURE 5.6**

**Proportion of Female Employees by Economic Sector**



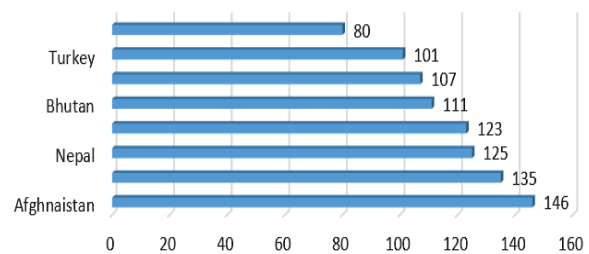
Source: World Bank Gender Gap Data Portal

**ii)- Educational Attainment<sup>12</sup>**

In 2022, Sri Lanka ranked 80 out of 146 countries in “Global Gender Gap Educational Attainment” among the South Asian countries while Pakistan performed very poorly with ranking at 135. Afghanistan occupied the lowest rank both worldwide out of 146 countries and in South Asia as is evident from Figure 5.7.

**FIGURE 5.7**

**Global Gender Gap Educational Attainment**



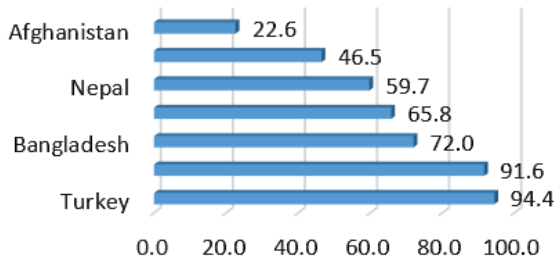
Source: World Bank Gender Gap Data Portal

**Literacy Rate and Expected Years of Schooling (Adult Female)**

Turkey is at the top in adult female literacy rate with 94.4 percent as well as years of schooling (17.9 years) while Afghanistan and Pakistan with 22.6 percent and 46.5 percent score on adult female literacy rate and years of schooling 7.7 and 8.1 years are among the lowest in the selected countries. Figures 5.8 and 5.9 present the situation.

**FIGURE 5.8**

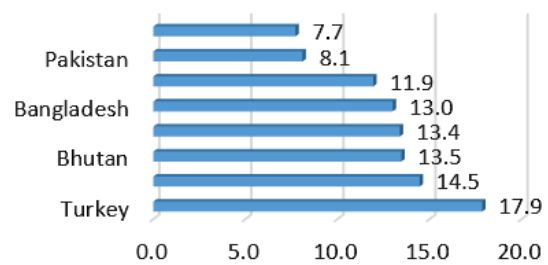
**Literacy Rate, Adult Female  
(% of females ages 15 and above)**



Source: World Bank Gender Gap Data Portal

**FIGURE 5.9**

**Expected Years of Schooling, Female**



Source: World Bank Gender Gap Data Portal

**iii)- Health and Survival Ranking<sup>13</sup>**

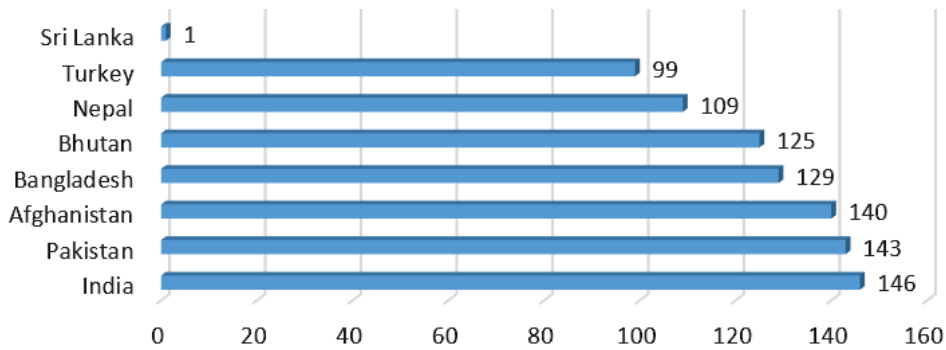
Sri Lanka has reached the parity in Global Gender Gap Health and Survival ranking whereas Afghanistan, Pakistan and India are worst performing countries among the selected countries and globally as well as shown in Figure 5.10.

**Life Expectancy at Birth and Female Mortality**

The female life expectancy at birth in Turkey is 80.8 percent whereas it is 66.7 percent in Afghanistan and 68.5 percent in Pakistan. Bhutan has the highest adult female mortality rate with 187.7 among the

**FIGURE 5.10**

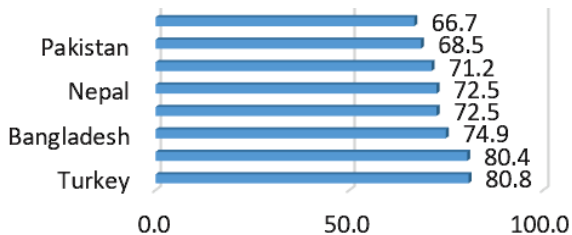
**Global Gender Gap Health and Survival Ranking**



Source: Global Gender Gap Report 2022

**FIGURE 5.11**

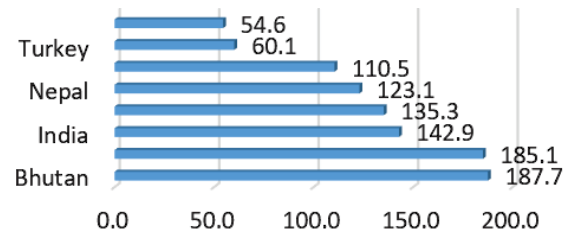
**Life Expectancy at Birth, Female (years)**



Source: World Bank Gender Gap Data Portal

**FIGURE 5.12**

**Mortality Rate, Adult, (per 1,000 adults)**



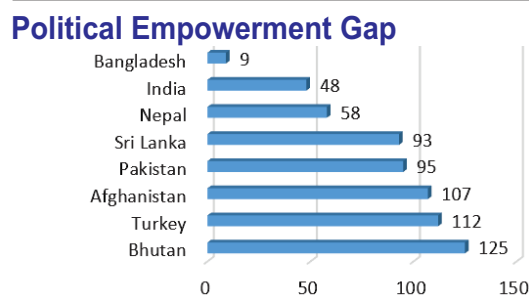
Source: World Bank Gender Gap Data Portal

selected countries whereas Sri Lanka has the lowest with 54.6 per thousand as is evident from Figures 5.11 and 5.12.

#### iv)- Political Empowerment<sup>14</sup> and Seats held in Parliament

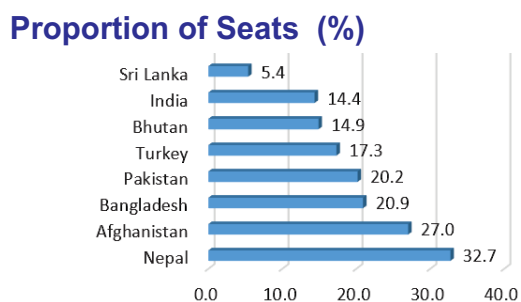
Bangladesh, in 2022, is at top among the selected countries in Gender Gap Political Empowerment Sub-index with ranking at 9 out of 146 countries while Pakistan occupies 95th position whereas Bhutan has the lowest rank of 125. Nepal has the highest proportion of seats held by women in national parliament with 32.7 percent whereas Sri Lanka has the lowest proportion of 5.4 percent among these countries as shown in Figures 5.13 and 5.14.

**FIGURE 5.13**



Source: Global Gender Gap Report 2022

**FIGURE 5.14**



Source: World Bank Gender Gap Data Portal

#### c): Pakistan's Context

The performance of Pakistan on Gender Gap Index<sup>15</sup> has been pathetically poor as ranks it ranks only ahead of Afghanistan in the world according to GGG Report 2022. The score on gender parity in the last

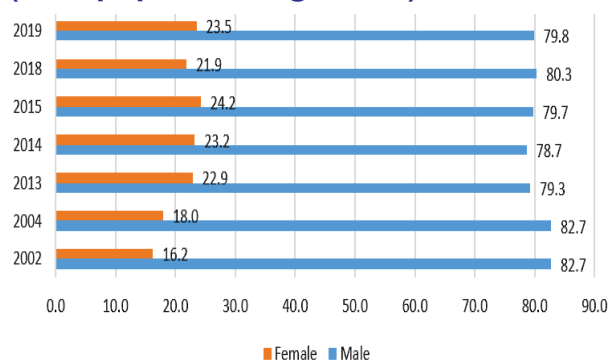
seventeen years has remained stagnant around 0.55 in 2006, 0.55 in 2021 and 0.56 in 2022. Following is the brief analysis of performance of Pakistan on various gender gap dimensions.

#### i)- Economic Participation and Opportunity

In Economic Participation, Pakistan has scored 0.331 and taken 145th position, a notch above Afghanistan (0.176) as per the GGGR 2022. The participation of women in Pakistan labor markets was estimated 16.2 percent in 2002 as compared to 23.5 percent in 2019 which peaked at 24.2 percent in

**FIGURE 5.15**

#### Labor Force Participation Rate (% of population ages 15+)

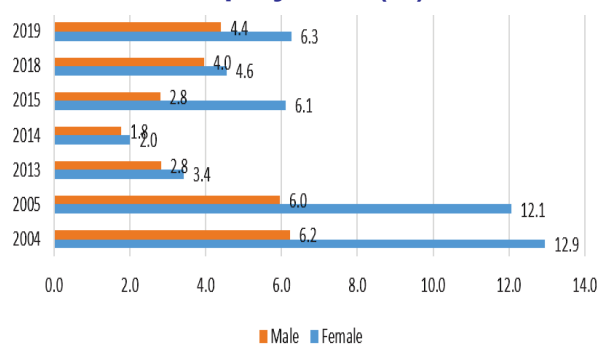


Source: World Bank Gender Data Portal

2015.

**FIGURE 5.16**

#### Women Unemployment (%)



Source: World Bank Gender Gap Data Portal



## Women Unemployment:

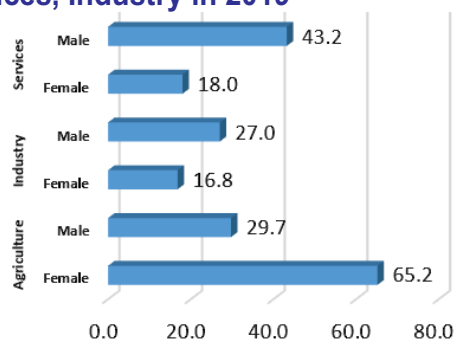
Women unemployment rate is higher than men all along as depicted in Figure 5.16 below based on the statistics for the period 2004-2019 though there is a significant improvement in women's employment during the period.

## Gender Wise Employment in Economic Sectors and Vulnerable Employment:

The proportion of female employees in agriculture (65.2 percent) is larger as compared to industry (16.8 percent) and services (18 percent) which is depicted in Figure 5.17. Women are more likely to be in vulnerable employment,<sup>16</sup> lower-paying jobs and informal economy which in Pakistan represents around 73 percent of all employment with lack of legal frameworks to ensure provision of social

FIGURE 5.17

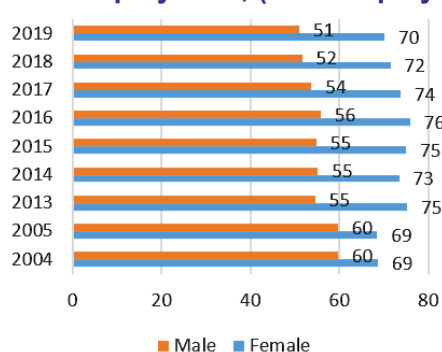
### Gender Wise Employment in Agriculture, Services, Industry in 2019



Source: Our World in Data Female Labor Supply

FIGURE 5.18

### Vulnerable Employment, (% of employment)



Source: World Bank Gender Gap Data Portal

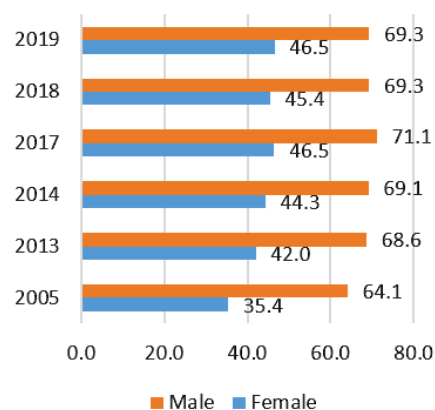
security, job contracts and collective action of trade unions. Figure 5.18 shows the proportionate share of women in vulnerable employment. Women are accordingly often caught up in poverty and severe deprivations trap.<sup>17</sup>

## ii)- Educational Attainment

In Education Attainment, though the gender gaps have decreased significantly, Pakistan still stands at the 135th position out of 146 countries in the world with a score of 0.825. Figures 5.19, 5.20 and 5.21 show the extent of gender gaps on adult literacy and

FIGURE 5.19

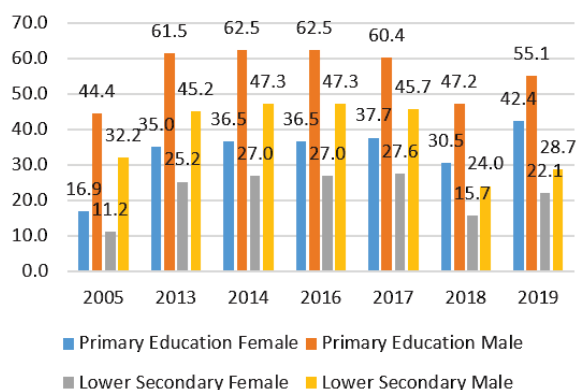
### Adult Literacy Rate, (% ages 15 and above)



Source: World Bank Gender Gap Data Portal

FIGURE 5.20

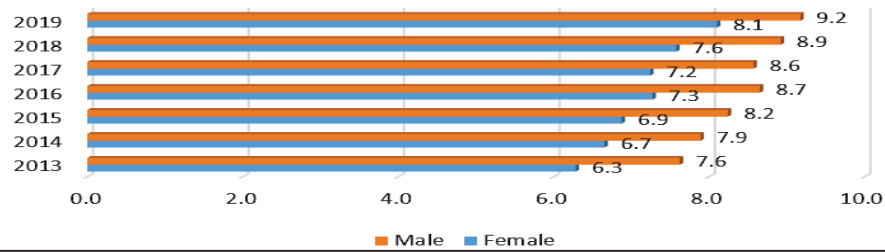
### Completed Primary, and Lower Secondary Education (% of population 25+ years)



Source: World Bank Gender Gap Data Portal

**FIGURE 5.21**

**Expected Years of Schooling**



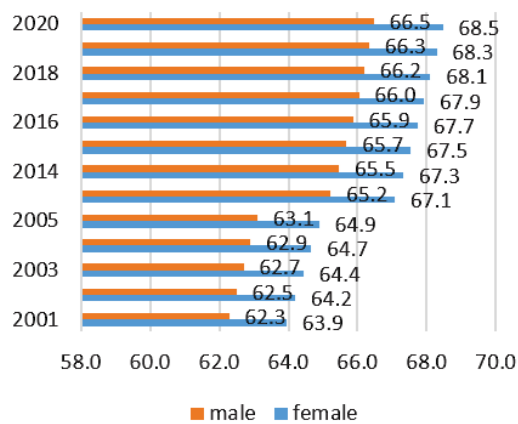
primary and lower secondary education and gender wise expected years of schooling for the period 2005-2019.

**Health and Survival**

In Health and Survival, Pakistan with a score of 0.944 stands at the 143rd position in the world as per 2022 report. The life expectancy at birth of female is higher than male which in 2001 was 63.9 years for females and 62.3 years for male and rose to 68.5 years and 66.5 years respectively in 2020 (Figure 5.22). Similarly, the adult female mortality rate per thousand is lower than male during the same period as is evident from Figure 5.23.

**FIGURE 5.22**

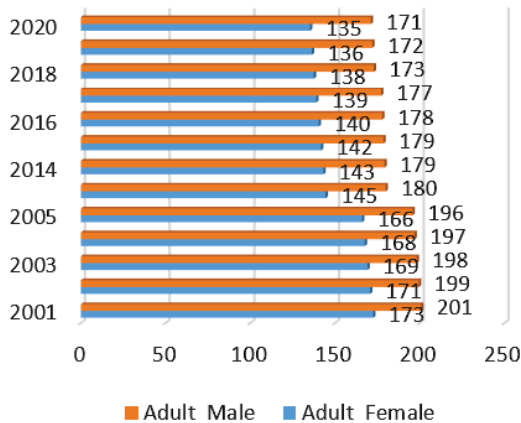
**Life Expectancy at Birth (Years)**



Source: World Bank Gender Gap Data Portal

**FIGURE 5.23**

**Mortality Rate, Adult, (per 1,000 adults)**



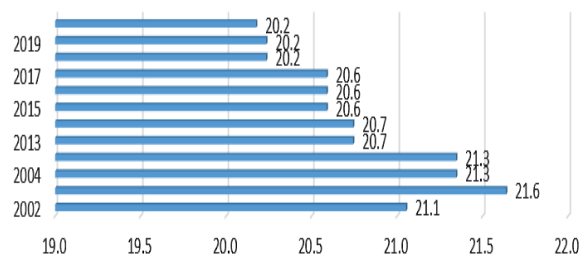
Source: World Bank Gender Gap Data Portal

**Political Participation and Engagement**

In Pakistan, women participation in the national governance structures and in corporate management continues to be low all along. As is evident from Figure 5.24 which captures the situation from 2002 to 2020, their participation remained almost stagnant and indeed dropped from 21.6 percent in 2003 to 20.2 in 2020. This in itself speak of the extent to which the voice and collective preferences

**FIGURE 5.24**

**Proportion of Seats held by Women in National Parliaments (%)**



Source: World Bank Gender Gap Data Portal

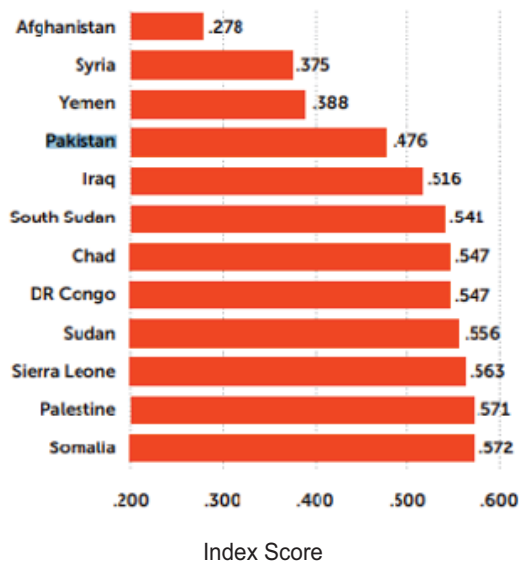


are articulated and integrated into the national policy, planning and decision processes.

## Peace and Security

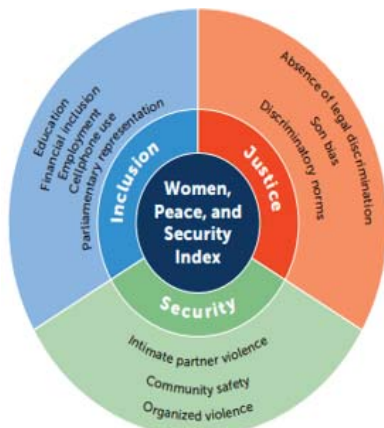
Pakistan is among the five worst countries in the world on the women peace and security dimension

**FIGURE 5.25**  
**Worst Performance on WPSI 2021**



Source: Women Peace and Security Index Report 2021/22

**FIGURE 5.26**  
**Dimension of Women's Status on WPSI 2021**



Source: Women Peace and Security Index Report 2021/22

and ranks 167 out of 170 countries on Women Peace and Security Index (WPSI 2021) as is evident from the list of worst performers in Figure 5.25. Only Yemen, Syria and Afghanistan rank below Pakistan. WPSI comprises three dimensions of women status: justice, security and inclusion. (see figure 5.26)

## III)- Socio-Economic Implications of Gender Deficit

Gender inequality has widely pervasive implications in terms of lack of ability and opportunities for the women to make full use of their socio-economic and political potential at the household level but also enormous economic, social and psychological costs for the whole country. More specifically, the following section briefly highlights the major implications of gender inequality on various dimensions.

### a)- Peace and Security

**Mobility:** The use of public transport and even walking as pedestrians within their own neighborhoods pose women ominous challenges e.g., harassment, verbal abuse, groping, catcalls and various forms of pestering and even molestation. A pilot survey conducted by Center for Economic Research in Pakistan in Lahore revealed that almost 30 percent of respondents found it “unsafe” for women to walk in their neighborhood. An Asian Development Bank study published in 2014 reported that 70 percent of Pakistani women who use public transport faced harassment. Another study by the Women Development Department reflected that 90 percent of the women using public transport witnessed unnecessary remarks or attempts to make physical contact by the male conductors or ticket-checkers. This causes psychological distress and fear from free mobility which infringes on their fundamental rights of peace and security, engaging in economic activity and exercising their socio-cultural and political choices.

**Violence:**<sup>18</sup> Pakistan is considered one of the worst countries for women regarding domestic violence

(The News, 2022). The quantification of its magnitude is difficult since gender-based violence is not always reported. The Economic Times (2020) reported that “60 to 70 percent of women suffer some form of abuse in Pakistan and about 5,000 women are killed annually from domestic violence with thousands of other women made disabled”. The incidence of honor killing without guilt is a frequent phenomenon with the conviction rates as pathetically low as two percent<sup>19</sup> (Dawn, 2020). Between 1994 and 2018, some 9,340 people fell victim to acid attacks in Pakistan of which 80 percent victims were women (Pakistan Today, 2021). Almost one thousand minor girls are abducted each year for forced marriages (BBC News, 2021). This besides inflicting physical and mental distress to the people, portrays bad image of the country with regard to gross human rights violations.

**Sexual Subjugation:** In Pakistan, as many as 14,456 women were assaulted in the country in last four years. 4,326 cases of rape were reported in the year 2018 followed by 4,377 rape cases in 2019, 3,887 cases in 2020 and 1,866 cases in 2021. This is reported by Human Rights Ministry report that was published in 2021. However, only 4 percent of total rape cases result in the conviction.<sup>20</sup> (Mustafa, 2022) There are serious societal implications including denial of human rights, unsuccessful marriages and the psycho-physical agony which the women constantly suffer from.

**Female Infanticide:**<sup>21</sup> A study shows that girls under the age of five are 30-50 percent more likely to die because of neglect.<sup>22</sup> (Fikree and Pasha, 2004). The Edhi Foundation reported that 90 percent of the victims of infanticide were female and the majority of infants abandoned at the doorsteps of the foundation were girls (Sathar et al., 2015). It also reported that in 2019, 375 newborn bodies were buried in various parts of Karachi, most of whom were girls. Female infanticide is indicative of the callousness of society and its acquiescence to crimes against female children thus denying the girls the right to live.

## b)- Development and Progression

**Access to Education:** According to UNICEF, girls account for over sixty percent of the 22.8 million children aged five to sixteen out of school. There is already a 13 percent gender disparity in enrollment. Only 46.5 percent of women are literate, 61.6 percent attended primary school, 34.2 percent attained high school, and 8.3 percent attended tertiary education. This was reported by Pakistan Today, 2022.

The social and economic costs of this neglect are massive. Uneducated girls, unaware of their fundamental rights, cannot become financially independent and/or raise their children especially girls properly to become enlightened citizens and work towards greater gender parity. Similarly, lack of access to education and consequent low-paid jobs is reflected in the low social status and inequities to access basic social services.

**Health:** About 48 percent of women do not have a voice in their own health matters especially in the rural areas (UN Report 2018). The lack of access to health leads to a high incidence of disease particularly anemia, maternal death or morbidity, pregnancy problems, unsafe abortion treatment; various unofficial surveys and unconfirmed reports estimate that almost a million abortions take place in Pakistan, on an annual basis. Medical problems associated with menopause, breast and uterine cancer, mental health and numerous other psychological problems are rarely addressed. Women have limited access to necessary information on pandemics which put their families at a higher risk of contagion and as a consequences, occurrence and transmission of otherwise preventable disease becomes high. Limited household budget prevent them from sending on proper sanitation and hygiene. A study in the tertiary level hospitals in Lahore in 2020 revealed that the female healthcare professionals (HCPs) treating COVID-19 patients in Pakistan faced immense psychosocial pressures such as unsupportive family norms, unwelcoming working environment, insensitive hospital administration,

anxiety, and various forms of professional challenges.<sup>24</sup> (*Sumbal Shahbaz Muhammad Zeshan Ashraf, 2021*)

### **Economic Resources and lack of Physical Assets:**

Inequality in opportunity and in working is one of the major barriers to prevent women access to economic resources and empowerment. The lack of gender-sensitive infrastructure at workplaces, gender pay gaps, mobility constraints, scarcity of gender sensitive public services and limited opportunities for professional development into leadership positions further aggravate the situation. Out of the only 13.5 million (20 percent) women in Pakistan's labour force, seven million women working in agriculture are considered as family workers and remain unrecognized and unpaid. Women earned just 18 percent of what men earned in 2018-2019. Added to it is the 'time poverty' as women in Pakistan devote almost 10 times the hours compared to men in unpaid care work.<sup>25</sup> Only 2.9 percent are in managerial positions; 4.2 percent in senior and middle managerial position; less than 12 percent of firms have female participation in ownership compared to global average of 34 percent (World Bank); and only eight percent of micro, small and medium enterprises (MSMEs) are owned by women. This state of affairs denies the country to fully harness the economic potential of almost half of its population.

Then denial of secure land rights deprives the women of solid foundation for financial stability. Even if they have physical assets, around fifty percent have no control of their land (World Bank). The Figure 5.27 depicts the land ownership status of women in Pakistan in the global context.

In Pakistan, 13.4 percent men (age 15-49) have legally registered land as compared to 2 percent of women (ages 15-49). This exclusion contributes to the marginalization of women and their dependence on males for sustenance. It also foments other discriminatory practices such as 'haq bakhshwana', where women are either never married or married to the Quran to retain property within the family.

Similarly, cousin and 'watta satta' marriages are also used to prevent break up of property.<sup>26</sup> (Wasif)

As for access to financial institutions or a bank, according to World Bank, 94 percent of adult Pakistani women do not have a formal bank account and even if they have an account and granted loan, 50 to 70 percent of the loans are used by their male relatives. A number of initiatives including adult women targeted bank accounts, their financial literacy under the State Bank of Pakistan's National Financial Literacy Program; and loaning facility of up to PKR five million for women entrepreneurs under the Refinance and Credit Guarantee Scheme have failed to yield the desired results.

The implications for women for lack of equitable access to economic resources is self-evident from their rate of unemployment; over-representation in informal and vulnerable employment, high gender wage gap (estimated around 23 percent) and exclusion from social protection for example pensions, unemployment benefits or maternity leave.

### **c)- Legal and Regulatory Frameworks**

Pakistan has enacted a number of laws ever since independence to empower women to guarantee their fundamental rights. They were granted suffrage in 1947 which was affirmed by the interim Constitution for 1956 elections. Special seats were reserved for women in the Parliament from 1956 through to 1973. The laws enacted from time to time also protected and empowered women politically, socially and economically with regards to safety, security, family, inheritance, revenue, and civil and criminal laws.<sup>27</sup> The major challenge, however, is the implementation and enforcement of these laws which in practice fail to eliminate discrimination against women. For example, though women are entitled to obtain a divorce, a large number fails to exercise the right because of socio-cultural taboos and stigmas or are not aware of this right due to lack of knowledge and proper education. The Muslim Personal Law (Shariat) Application Act

(1937/1961) though provides Muslim women with inheritance rights but this right is customarily denied despite the introduction of strong provisions in sections 498 A and 498 C of the Prevention of Anti-Women Practices (Criminal Law Amendment) Act (2011) to protect women's inheritance.

The Evidence Act of 1984/1987, constrains women's evidentiary value in cases of Hadd. In cases involving financial or other future obligations, it stipulates written instructions and documents to be

national, provincial and local- and across all sectors to accelerate the pace of achieving much needed gender parity. The following measures, in this regard, are inter alia, recommended:

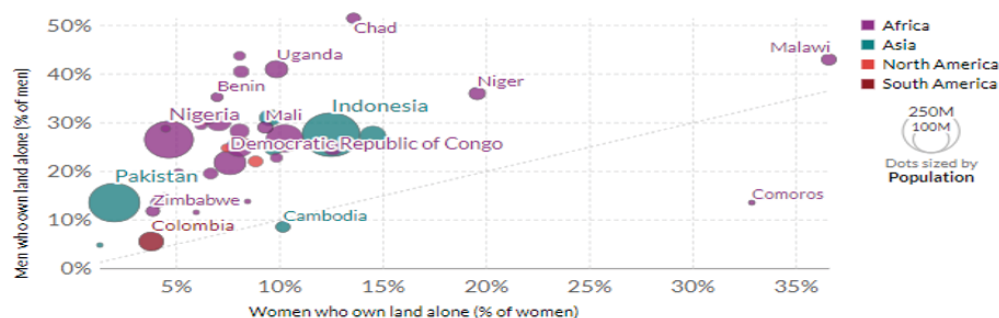
### a. Peace and Security

Women-friendly culture for law enforcement: In addition to increasing the number of Women Police Stations, police need to be trained especially at the station-house level to respect the dignity and ensure

**FIGURE 5.27**

#### Land ownership, men vs women, 2016

Percentage of men and women (age 15-49) who solely own a land which is legally registered with their name or cannot be sold without their signature. Colors represent world regions. Bubble sizes are proportional to the population of the country.



Source: Our World in Data

attested by either two men or one man and two women. In all other legal proceedings, the judges have to exercise discretion whether to admit a woman's testimony as equal to man.

The women are thus relegated to significant disadvantage and potentially subjected to a counter suit for defamation by the accused. The fact that their own testimony is not considered enough deters them to come forward and defend their claims.

### Recommendations for Reducing Gender Deficit

A collective effort and commitment involving, government, private sector and non-government and community based organizations and indeed the households is required at all levels and tiers-

safety of women. Integrated ICT solutions should be installed in the police stations to ensure monitoring on 24/7 basis.

**Mobility:** A code of conduct should be strictly enforced by the Transporters Associations and the Provincial Governments to ensure safety and security of the female travelers. The training of the staff based on this code including the bus conductors, drivers etc., should be made compulsory pre-condition for grant of transport license and plying of public transport.

**Gender-based Violence (GBV):** The country has plethora of laws and institutions to curb the GBV problem and acts of brutality against women.<sup>28</sup> The strict enforcement of these laws is a big challenge for which prosecution branch should be held account-



able for low rates of conviction. For the purpose, Provincial Home and Women Departments and the Ministry of Human Rights should play their mandated role pro-actively. Likewise, the National Commission on Status of Women (NCSW) need to be reinvigorated to monitor and advocate the promulgation and enforcement of relevant laws and regulations e.g., gender-based violence, sexual harassment free environment in the public and private workspaces as per ILO standards, child and forced marriages etc. It should also actively support the litigation process to ensure conviction and punishment of the perpetrators.

Moreover, women especially those living in the rural areas, should be sensitized about various Helplines e.g., PCSW Helpline, AGHS Legal Aid Cell, SLACC Helpline, DRF Helpline, Rozan Helpline that offer free legal assistance and advice to women in case of abuse and violence.

## **b. Political and Decision Voice**

The “Gender Parity” should be adopted as a consensus slogan and goal to figures as the most priority political agenda item. The National Commission on the Status of Women (NCSW), the statutory body established in 2000, should work in close conjunction with the Parliament especially the Speaker of the National Assembly to implement this goal and inter alia, ensure that all policies and legal frameworks and development programs are gender sensitive and pro-women's empowerment.<sup>29</sup> NCSW should also ensure increasing women's participation in politics including the proportion of seats in national and provincial assemblies. It should also encourage legal and incentive frameworks to promote leadership and gender equality in the private sector.

An effective accountability and monitoring mechanism should be developed and institutionalized by the Parliament, NCSW and Women Ombudsperson and Federal Ombudsman Secretariat for Protection Against Harassment (FOSPAH) should be developed in terms of (i) peace and

security, including domestic violence and harassment; (ii) inclusive development in terms of the overall impact on women of development interventions particularly with regards to health, education and social security; and (iii) respect, protection of and conducive environment for women to exercise and expand their choices.

## **c. Economic Empowerment<sup>30</sup>**

***Policy interventions:*** Women's participation and representation in both public (5.6 percent) and private sector (10 percent) continue to be very low. NCSW and the Parliament should scrutinize all policy and legal instruments to identify gaps and amend or enact new ones to ensure gender sensitivity at micro as well as macro-economic levels. Special attention should be paid to areas like: gender-responsive recruitment, deployment, development and career progression both in public and private sector including scale parity, equitable working hours, decent work environment. These measures are important for mainstreaming women in development. These policies must recognize and quantify unpaid household and care work and formalize the informal and vulnerable economic sectors especially agriculture, livestock, textiles and homebased worker which employ women. Simultaneously, incentives should be instituted for training and leadership positions of women.

***Gender-Based Planning and Budgeting (GBPB):*** The Federal Ministry of Planning, Development and Special Initiatives and the Provincial Planning and Development Departments, based on gender-segregated data, should institutionalize GBPB obligating every government department and ministry to earmark adequate budgets for gender-based programs and reforms. This will ensure equitable allocation of resources for advancing gender equality and women's empowerment.

***Financial Inclusion:*** Increased access to women-targeted financial services, including credit, loans, savings accounts and insurance are imperative to

mainstream women in economic development and encourage their investment in small and medium businesses. Similarly, integrated technology solutions such as mobile banking, smart phone, special financial and advisory applications etc., need to be developed for digital inclusion of women especially in the rural areas.

**Safety Nets:** Sound policy frameworks should be established to create an enabling environment for women to enter and thrive in the formal and informal labor markets, such as family leave, daycare, flexible work hours, social security, pension, maternity leave etc. At the same time the existing social safety nets and social security programs such as Benazir Income Support Program, Ehsaas program and emergency cash relief should be geared towards ensuring women easy access.

**Capability Development:** It is also important to pay due heed to women's asset development, including human capital; and enforce laws and regulations that protect their land and inheritance rights. TEVTA should develop and implement skill-building programs, including agri-preneurship, financial literacy, management skills, sales and business development competence, marketing etc. Livelihood, soft and communication skills, IT and computing skills, stitching and fashion design also have huge potential to gainfully develop women's capabilities.

#### d. Education Empowerment

The closure of the gender gaps in the education system invariably leads to women's employment, reduction in child mortality, prevention of child marriage, food security and reduction of poverty which would ultimately contribute to growth of Pakistan's economy and human development. This would entail development and implementation of gender-responsive national education sector plans with full participation of women representatives. The sector plan should include policy and funding support to ensure girls' equal access to primary and secondary education; reform in the gender-sensitive

national education curriculum; introduction of learning material from an early age for awareness of the children of women's rights (right to education, healthcare and self-determination) and breaking down gender stereotypes. The plan should also ensure women access to a minimum of 12 years of free, safe and quality education throughout the lifecycle from early years through adolescence and into adulthood.

#### e. Health Empowerment

“Health for all and Universal Health Coverage” should be enshrined as a fundamental Constitutional right. This will ensure through policy, institutional and programmatic interventions improvement in women's health outcomes leading to their economic growth and prosperity. Adequate and sustained budgetary allocation as a percentage of GDP (at least 4.5 to 5 percent) on healthcare should be annually earmarked and utilized on the programs designed to meet the health needs of women and remove the disparities in maternal and newborn health results. Proper nutrition support programs, community-based family planning services, training and supporting female health providers, especially in rural areas and expansion of private sector services etc., should be incentivized to address the gender deficit. *Insaf cards and Benazir Income Support Program* should be made more targeted to lead to visible improvement in women health outcomes.

#### f. Awareness and Advocacy

In order to change the socio-cultural barriers inhibiting women, mass media campaigns and extensive community outreach programs should be launched to sensitize the women about their rights and create gender sensitive socio-cultural ethos. Major issues like: respect and dignity of women, provision of safe environment for their mobility; gainful employment; greater access to information to build skills-set; GBV and foeticide as a crime etc., should particularly be highlighted.

## The Gender Parity District Intervention Model (GPDIM)

In order to achieve tangible and accelerated gender parity outcomes, a well-coordinated action plan (GPDIM) involving all stakeholders should be formulated at the district level with the Deputy Commissioner serving as a pivot. The following components for the plan are proposed:

- *Gender-sensitive Planning Units (GSPUs)*. The existing District Development Committees (DDC) should be restructured as gender-sensitive planning units to ensure that all the development projects at district level are pro-women and responsive to women's needs.
- *Localizing the Gender-related Sustainable Development Goals*: A comprehensive mapping exercise covering all the districts in Pakistan should be carried out by the Ministry of Planning in collaboration with Provincial P & D Departments to assess the status of implementation of Gender-related SDGs<sup>31</sup> especially Goal 3: ensure healthy lives, Goal 4: ensure inclusive and equitable quality education; Goal 5: achieve gender equality; Goal 8: sustained, inclusive and sustainable economic growth; Goal 13: combat climate change; and Goal 16: peaceful and inclusive societies for sustainable development. Based on this exercise, the GSPUs should formulate and implement specific projects to accelerate the implementation of these Goals.
- *Women Friendly Cities - Local Equality Action Plans*: In each Division, one city<sup>32</sup> should be selected for transformation as "Women Friendly City (WFC)" to formulate and implement through an inclusive process: "Local Equality Action Plans" (LEAPs). These should be based on the local production system and socio-economic needs of women. Pro-women local service delivery should be an integral part of LEAP. The WFC/LEAP overall objective should be to accelerate the implementation of gender equality. It should entrust specific task/responsi-

bility and accountability to various departments especially education, health, utilities and services etc. at the Divisional and Municipalities level, the non-governmental associations and private sector to achieve gender equality based on set targets and benchmarks. LEAP, should comprise, inter alia, the following:

- o "Women's centers" to facilitate their access to local services;
- o "Dormitories for girls" and "Temporary shelters" for the women victims of violence;
- o "Free stands" for women in market places to display and sell their handicrafts;
- o "Women education and training unit" and "lifelong education center for women" within the Municipality;
- o "Mobile health unit" by the Municipality and health department to provide health services especially for slums dwellers and/or seasonal workers around the city;
- o Micro credit programs by the Municipality and the Divisional Administration to allow women access to finance;
- o A special "Social Solidarity and Support Fund" to provide rental support for needy women and the victims of violence,
- o "Facilitation unit for the handicapped women" to provide them counseling, employment and skills development.

*Role of the Provincial Government*: The Local Government and Women Developments should provide the necessary technical and capacity building support to their field formations and especially the municipalities and local NGOs to enable them develop and implement LEAPs. A digital platform at the provincial/national level as a repository of necessary tools, guidelines, model templates needs to be instituted to serve as networking and lobbying arrangement and share success stories and experiences. Simultaneously, funds for small grant programs to encourage and enable local organizations should be earmarked to implement LEAP related activities.



## Conclusion

Equality of women and men is a fundamental imperative for every democracy which needs not only to be legally recognized but also effectively applied to all aspects of life. Women can play a key role in driving national and global development agenda and implementation of sustainable development goals. According to IMF, closing the gender gap in countries where it is most significant could increase the GDP growth rate by an average of 35 percent. Women in Pakistan, however, remain the most underutilized economic asset and it continues to figure among the bottom four countries on gender development indices for many years.

It is thus critically important to address the structural and traditional barriers that prevent women's rightful place as equal citizens and to ensure that gender-parity becomes the foremost goal on the political agenda for their social and economic development. Equally important is the need for strategic investment and allocation of adequate resources to implement well targeted gender-sensitive women empowerment programs across all sectors with special focus on safety and security, health, education, employment and decent work. Gender inclusion and equality indeed is a win-win situation to achieve inclusive, rights-based and sustainable economic growth and bequeath a just, tolerant and prosperous Pakistan to posterity.



**Chapter**

**06**

**Taliban and the Afghan Women**

# Taliban and the Afghan Women

**Shahid Javed Burki**

**T**he Taliban promised to govern the country differently compared to the practices they had followed in the five years of their first governance, (1996-2001). Then, among the many changes they had made, was the treatment of women. They imposed on the country what they considered Islamic. Women were not to be educated in anything but the Koran and the Sunnah; the sayings attributed to the Prophet Muhammad. They could not go outside their homes without being accompanied by male relatives. They could work outside but had to cover their bodies head to toe. These policies drew a lot of attention outside the country but foreigners – even the more liberal Afghans – felt they were helpless. Millions of Afghans left their homes and migrated to Pakistan on the Soviet invasion of their country. A number of Afghans troubled by the Taliban takeover of their country are once again choosing migration, including heading towards Pakistan. They are attempting to move to Pakistan to protect their female relatives – mothers, sisters, cousins, and daughters. Pakistan is attempting to prevent a new refugee wave from materializing after the Taliban came back to power on August 15, 2021, but it did not fully succeed. There were many leaks in the country's border system which allow new refugees to enter. Having taken control of Kabul, the Taliban's hold

remained weak because of their unwillingness to work with those groups in the country who believed differently. One of these issues was the role and status of women in society. The quick and unexpected moves in Afghanistan on August 15, 2021, created serious concerns about the future of women in the country. Would history repeat itself? Was some of what happened to women the last time the Taliban ruled from Kabul likely to occur again? The Taliban's final days of their first government ended in late 2001 when the Americans, helped by a non-Pashtun ethnic militia that went under the name of the Northern Alliance, entered Kabul and sent the Taliban government packing. Most of the Taliban leaders escaped and went to the tribal areas of neighboring Pakistan, keeping alive both the Taliban movement and its Islamic ways. However, those Afghans who cooperated with the United States pursued pro-modernization, pro-women policies and programs. Several initiatives were launched in the 20 years when the Taliban were out of power that appreciably improved the status of women but there was still a great deal of catching up to be done. Of the 4 million children who were out of school in 2021, 2.2 million were girls. When the Taliban came back to power on August 15, 2021, many women who had gained prominence in Afghanistan and other parts of the Muslim world spoke about the possibility of the

country slipping back into darkness. One of them was Malala Yousafzai, originally from Pakistan's Pashtun belt, who was attacked by an extremist when she was traveling in a van with other girls going to her father's school.

"I fear for my Afghans sisters," was the title of the short essay written by her for the Sunday Review section of The New York Times issue of August 22, 2021. Originally from the Swat region of Pakistan which was briefly ruled by the Taliban before they were driven out by the Pakistani military, Yousafzai was attacked for going to school. She was injured but survived. She was taken outside the country for treatment and after recovering from her injuries she began working for women's causes in the developing world. As a reward for her efforts, she became the youngest person to win the Nobel Peace Prize in 2009. She went to Oxford University after finishing high school in Britain. After graduating from Oxford, she devoted herself to helping women and their causes around the globe. Her Nobel Prize endowment went into the creation of the Malala Fund. She told her story in her book, *I Am Malala*. "My world has changed so much," she wrote in the concluding pages of her book. Looking at the prizes and awards she had received since she began her work on education, "I am grateful for them, but they only remind me of how much work still needs to be done to achieve the goal of education for every boy and girl. I don't want to be thought of as the 'girl who was shot by the Taliban' but the 'girl who fought for education.'<sup>1</sup> This is the cause to which I want to devote my life. Afghan girls and young women are once again where I have been – in despair over the thought that they might never be allowed to see a classroom or hold a book again," she wrote in her New York Times essay.<sup>2</sup>

She was skeptical about the Taliban's claim that once they had emerged victorious in Afghanistan, they would follow a different path from the one they took in 1996-2001 when they last governed the country.

"Some members of the Taliban say they will not deny females education or the right to work. But given the Taliban's history of violently suppressing women's rights, Afghan women's fears are real. Already we are hearing reports of female students being turned away from their universities, female workers from their offices," she continued. Although the religious groups in Pakistan have turned against Yousafzai and have declared her to be an agent of the Christian West, she appealed to her country of origin as well as other Muslim neighbors of Afghanistan – Iran, Tajikistan and Turkmenistan – to open their doors to fleeing citizens. "That will save lives and help stabilize the region. They must also allow enrollment of refugee children in local schools and humanitarian organizations to set up temporary learning centers in camps and settlements."<sup>3</sup>

Another prominent female voice joined Malala Yousafzai in urging Afghan women to adjust their ways to deal with the return of the Taliban. Her approach was different from that of Yousafzai. While the former urged action, Popal counseled silence. Speaking from her parent's home in Copenhagen, Denmark to which they had escaped, Khalida Popal, 34, founder of the Afghan women's soccer team, urged Afghan girls to stay silent to be safe. "It is very painful," Popal said in her message, "because for all these years, I have been fighting to empower women and girls, to earn the right to wear the soccer jersey. I am now saying: Take them off. Destroy them."

From the start, Popal explained, Afghanistan's women's national soccer team was intended as a platform for opposing the barbarism of the Taliban whose influence was felt long after its leaders were driven from power in 2001. Forming the team was itself an act of protest. "The mere fact that Afghan girls dared fill their lungs with fresh air – that they ran, kicked a ball, fell down, cheered their teammates and learned to be brave, constituted defiance,"

wrote Liz Clarke for The Washington Posts' coverage of the Popal statement. Popal was calling on everyone with a voice to raise theirs. "My message to every single human being who is watching, witnessing what is happening in Afghanistan is: Raise your voice and ask the question, 'What about the women of Afghanistan? What about the generation of young people who had so many big dreams? What about them? What you hear from all the politicians, in particular those from the West, is: 'Our mission has been very successful. We are taking our people out. We are done with Afghanistan.' There is no talking about 'democracy' and 'human rights' and 'women's rights' – all these words that they entered our country with as promises to the people and the women of Afghanistan. They feel abandoned by the world. They feel betrayed by the world. And that is painful."<sup>4</sup> Her reference was obviously to the statements made by the American leadership when they sent their forces into Afghanistan and when they expanded their mission for counterterrorism to nation-building. The Americans were in Afghanistan for 20 years. In the end, they created the situation which they had gone into to change, the rise of the Taliban.

On September 15, a month after the Taliban entered Kabul and took over the reins of government, 22 female Afghan soccer players entered Pakistan at Torkham, the main gateway between the two countries and were welcomed by Chaudhry Fawad Hussain, then Pakistan's information minister. Popal, speaking in a telephone interview from Denmark, said she led the efforts to help the players escape. They brought their families with them. From Torkham, on the Pakistan-Afghanistan border, they were taken to Lahore, 200 miles from the border. In the western Afghan province of Herat where the players lived, their homes had been burned and families had been taken in the middle of the night by the Taliban. In late August 2021, 75 Afghan female soccer players, officials and relatives traveled from Kabul to Australia, the first country to offer to take in

the athletes in response to entreaties from a multinational network of athlete advocates and human rights lawyers.

There were several other stories carried by the Western press of what The New York Times called "harrowing escape from Kabul." There was one about Nadima Shar, a 38-year old senior government official in Kabul, who had resisted her families' entreaties to leave her job and her country into safety. She had agreed to let her sister take out her 9-year-old daughter and 7-year-old son to Britain. She resisted leaving, remembering her experience as a refugee in Pakistan at the time of the first advance of Taliban in the 1990s. "I think it was that crippling fear of becoming a refugee again, not knowing what future holds for you and starting your life from scratch" that made her wait until the very last day. She managed to get on a plane without knowing where it was headed. It landed in Ukraine and was detained for a few hours. When she was free, she managed to get some friends and relatives to buy her a seat for Washington DC. which is where she finally took refuge and which is from where she spoke with Madeleine NGO who wrote a story about her for The New York Times. "Staying in America permanently despite its security is not an option," she told NGO. "That's like giving upon everything you believe in and have been saying, 'You know what, do whatever you want to with that country. I would like to go there to contribute in whatever capacity that I can, even if that means being there as a voice of dissent.'"<sup>5</sup>

Three weeks after President Ashraf Ghani took flight and the Taliban entered the palace he had occupied, the former insurgents promised that women would be treated gently and not as harshly as they were when they last ruled the country. Even though women were not allowed to go to work, Zabiullah Mujahid, the Taliban spokesman called the decision temporary, "promising they would be allowed to work, to go to schools" He did not promise that they would be allowed to work outside their homes. As

days passed, the Taliban's handling of the women who took to the streets to protest against the new regime became rougher. But women didn't seem to be deterred. The Washington Post carried some stories about women who participated in protests against the Taliban and were not reluctant to give their full names when they talked to foreign journalists.

Women protested in Herat, the largest city in western part of Afghanistan against the coming to power of the Taliban. In Taliban's first news conference after taking power in Kabul, they asked women to stay home for a while as the new rulers figured out how they were to govern the country they had taken over. Governance meant defining the place of women in society. "For two weeks, I was home and weeping," said Sabira Taheri, 31, and organizer of the Herat protest. "It was enough. We had to break our silence." She and five friends circulated calls for the protest. They did not expect many people to attend. Still, she was so beset by fear that she did not sleep that night, she told Ezzatullah Mehrdad who wrote a story about her and the Herat protest for The Washington Post.<sup>6</sup>

Susannah George and Ezzatullah Mehrdad spoke with several young women who had protested about the way they were being treated by the new rulers and were on their way to demonstrate. Razia Abedkheil was one of the young women who figured in these stories. While she was talking with the foreign correspondents, "her back was throbbing from the beating she had received days before. Her face tensed as she and her sister compared reports from across Kabul on Wednesday [September 8, 2021]. They had planned to join a group gathering at a central roundabout and march against the Taliban's announcement of an all-male cabinet. But the Taliban authorities had declared protests illegal the night before and deployed additional fighters to the city's streets with orders to arrest violators. The protesters plans were quickly unravelling. 'Go

home? Now it's even more important we speak out,' she said without looking up, texting similar messages of encouragement to the other women in her group. "Our voices are a threat to them. That's why they said protesting is illegal. But all we want is our rights," she told Mehrdad. Another woman in the group said that the United States should have just dropped a nuclear bomb when it left thus killing the entire population. What they had done by withdrawing is to let the Afghan people die slowly. Abdelkheil's views about the United States role in her country and the way it had pulled out were less extreme than those of some of her colleagues. "She is thankful for her education at schools that didn't exist before the Taliban was overthrown after the September 11, 2001 attacks and for what she learned from the seminars on women's and civil activism funded by international aid. But after the U.S. withdrawal, she said she can't help feeling abandoned, almost set up to fail after being promised so much."<sup>7</sup>

On September 12, 2021 less than a month after having taken control of the country, the Taliban announced that women will be allowed to study in universities and postgraduate programs but only in gender-segregated classrooms and wearing Islamic dress. The Taliban intends to "start building on what existed today," the acting minister of higher education, Abdul Baqi Haqqani, told the press. In most circumstances he said, women should be taught by women but in the event of a shortage of female teachers, males could teach but from behind a curtain or using video. The new rulers dismissed women from government ministries saying the work they were doing was not appropriate for them. Several press people who spoke with both male and female students agreed that such restrictive policies would hurt the quality of education.

This time around, compared to what had happened after the Taliban first took power in 1996, Afghan women were finding different ways of protesting



what the Taliban wished to impose on them – head-to-toe covering in black with holes near the eyes through which they could see if they ventured out at all. These were called burqas and were common in South Asia. As Miriam Berger wrote in a newspaper article, Kahkasan Koofi, a media adviser who lost her job when the Taliban took over government agencies, prompted women to join an online campaign by sharing pictures of colorful and intricate outfits traditional to their regions, tribes, and ethnic groups. Koofi joined the campaign started by Bahar Jalali, a former history professor at the American University in Afghanistan. Women, she told British Broadcast Corporation (BBC), could wear the burqas if they wished but should not be forced into a dress they don't want to wear. After decades of war and repression, Ruhi Khan, a researcher at the London School of Economics who studied feminism in South Asia, said clothing in Afghanistan is often connected to how safe women feel. “Styles have shifted in conservative directions in times of violence and displacement. It all depends on where you are going, who you are meeting. While Afghan culture is all joy and color that is not the image usually seen by outsiders. The online campaign is not just protest against the Taliban's imposed dress, which they think is Islamic, but also against the West's notion of what Afghan women are supposed to wear.”<sup>8</sup> Women had formed groups to raise their voice against the decrees issued by the Taliban regime. In Kabul the protesters called themselves the Afghanistan Powerful Women's Movement. They vowed to continue to protest and to use social media to urge women to defy the decree.

Several people wrote about Afghan women from different perspectives. Several themes emerged from all these accounts: how difficult the situation of Afghan women was; how much they were suffering to look after their families often with many children when men were not at home but fighting against various enemies; how much difference the last 20 years had made to the women in cities who were able

to go to school, get education and find jobs in the urban economy, in the government, in the media, in stores, etc. how different women were in different parts of the country. Michelle Bachelet the United Nation's human rights chief spoke at the emergency meeting called by the United Nation Secretary General Antonio Guterres to deal with the rapidly worsening situation in Afghanistan. The meeting was held in Geneva on September 13, 2021. “In contradiction to assurances that the Taliban would uphold women's rights, over the past three weeks, women have instead been progressively excluded from the public sphere,” she said in a warning that the Taliban would need to use more than words to show their commitment to improving women's situation including their safety. Imposing sanctions was one weapon that could be used to bring in line what the Taliban was expected to do. But sanctions hurt women more than they hurt men.

Some of the writings on Afghanistan's recent history, especially those that focus on the skirmishers between the United States and the Taliban in the twenty-year period between the removal by the Americans of the Taliban from Kabul in 2001 and the return of the insurgents as victors to Kabul on August 15, 2021, used women as case studies of the primitive ways in which the Taliban were governing the country after the August 15, 2021 takeover. A number of those who wrote during this period focused on the enormous price women in rural Afghanistan paid for this long and bloody conflict. One notable contribution to this literature was the long essay titled “The Other Afghan Women” by Anand Gopal in the September 13, 2021 issue of *The New Yorker*. The focus of the essay is Shakria, a mother of eight children, who lived in the lower and poorer part of the Sangin Valley in Helmand Province. Her husband was a poppy cultivator who had succumbed to the temptations of his product and spent most of the time in bed intoxicated by the drugs he was taking while the wife attended to the chores of the house.

She was only seven years old when the Soviet Union troops invaded her country and attempted to modernize the backward nation. Their concentration was on improving the situation of women in both the country's towns and the countryside. "In the cities, the Soviet-backed government banned child marriage and granted women right to choose their partners," wrote Gopal. "Girls enrolled in schools and universities in record numbers, and by the early eighties held parliamentary seats and even the office of the Vice-President." In 1989, the Soviet Union withdrew in defeat and "competing mujahideen factions were now trying to carve up the country for themselves," continued Gopal with his story. The fighting among the competing mujahideen groups stopped when Sangin Valley fell to the Taliban and the new group established the Islamic Emirate of Afghanistan in 1996. "When I asked Shakira and other women from the valley to reflect on Taliban rule, they were unwilling to judge the movement against some universal standard – only against what had come before. 'They were softer,' said Pazaro, a woman who lived in the neighboring village. "They were dealing with us respectfully. Shakira recounted to me a new-found security: quiet mornings, with steaming green tea and naan bread, summer evenings on the rooftop." But that serenity was lost when the Americans from the Special Forces arrived and began dealing with local warlords such as Amir Dado. "Nearly every person Shakira knew had a story about Dado. Once his fighters demanded that two young men either pay a tax or join his private militia, which he maintained despite holding his official post. When they refused, his fighters beat them to death, stringing their bodies up from a tree." The United States determined to pick up as many Taliban as they could and paid handsome rewards for the information that would lead to their arrest. Most of those picked up landed at Guantanamo Bay. For the locals, "their most profitable endeavors were collecting bounties offered by the U.S.; according to Mike Martin a former British officer who wrote a history of Helmand, they earned up to two thousand

dollars per Taliban captured."

Gopal in his detailed account also investigated the reasons why the Taliban won the sympathies of the local people which made their advance to Kabul in August 2021 relatively easy. "Messaging by the U.S.-led coalition tended to portray the growing rebellion as a matter of extremists battling freedom, but North Atlantic Treaty Organization (NATO) documents I obtained conceded that Isaqzais [the poor tribe in the south of Helmand] had 'no good reason to trust the coalition forces, having suffered 'oppression at the hands of Dad Mohammad Khan,' or Amir Dado. In Pan Killay, elders encouraged their sons to protect the village, and some reached out to former Taliban...so when a Taliban convoy rolled into Pan Killay with black-turbaned men hoisting tall white flags, she, Shakira, considered the visitors with interest, even forgiveness. This time, she thought, things might be different," wrote Gopal.<sup>9</sup> The journalist has covered Afghanistan extensively in his book, *No Good Men among the Living: the Taliban and the War through Afghan Eyes*. The book was a finalist for the 2015 Pulitzer Prize; it described the travails of three Afghans caught in the war on terror.<sup>10</sup> He conducted a rare interview with Gulbuddin Hekmatyar, the reclusive leader of one of Taliban's most important allies.<sup>11</sup> Hekmatyar was a favorite of Pakistan's Interservice Intelligence, or ISI, when, as once the mujahideen, he was fighting against the forces sent in by the Soviet Union to bring Afghanistan under its control.

Another case of an Afghan woman who had gained considerably important status during the Ashraf Ghani presidency but was now waiting for what the future would bring was the last ambassador of Afghanistan in the United States, Adela Raz, before the advent of the Taliban era. She was the subject of several articles including one by David Ignatius of *The Washington Post* who talked to her while she was still holding on to the ambassadorship.<sup>12</sup> A detailed account of her achievements was provided

in a story by Jennifer Steinhauer who attended a lunch given by the Ambassador in her official house. She “began to serve as the Afghan government's ambassador to Washington before the Taliban took over [and is now] trying her best to use what is left of her power (unknown), resources (virtually nonexistent) and devotion to the homeland (vast) to help displaced Afghans and thank others who have supported their cause. At the top of her list: American veterans who served in Afghanistan during 20 years of war.”

Ambassador Raz was 16 years old when American forces invaded Afghanistan and heralded a new future for her and other Afghan women. After doing well in the Afghan school she attended, she won scholarships that took her to Both Simmons University and Fletcher School at Tufts University in Boston. On returning to her homeland, she was given senior government appointments. In 2018, she was appointed Ambassador to the United Nations, the first Afghan woman to hold that job. Three years later, she was given the ambassadorial position in Washington by President Ashraf Ghani. “Ms. Riaz spent her short official tenure pressing the Biden administration to intervene more forcefully to help women left behind. Her future is unclear – will she somehow remain ambassador, or more likely, find a way to change her immigration status to work here?”<sup>13</sup> It was reported in the American press in March 2022 that she had closed the embassy and most of her staff had applied to the United States to grant them permission to stay in the country until their situation became clear. They were still waiting at the time of this writing, November 2022.

But things were not different once the Taliban were formally in control of the country. “The emerging government has made clear that it intends to severely restrict the educational freedom enjoyed by many women and girls in the past 20 years,” wrote Victor Blue and David Zucchino in *The New York Times*. “The only question is just how draconian the

new system will be imposed on both boys and girls. Just as they did when they ruled most of Afghanistan in the 1990s, the Taliban seem intent on ruling not strictly by decree, but by inference and intimidation?<sup>14</sup> How far the Taliban would go this time to discourage female education depended on how much influence the world could exercise on them. In a statement given by Zabiullah Mujahid, the long-serving Taliban spokesman and now the deputy minister of information, “there are countries in the region that have committed to help us in our education sector.” His reference was probably to Pakistan. After all the Taliban as a political movement grew out of the madrasas set up by the Pakistan military's intelligence service working with Saudi Arabia.

On September 17, the Taliban interim government issued a statement saying “all male students must be present at their schools. The statement was silent on the issue of female education. The reaction from women activists was strong and immediate. Qudisia Qanbary, a female high school teacher said in a Facebook post, those boys and her male colleagues should boycott schools. “If I was a boy, I would not go to school unless my sister can also go to school,” she wrote. “Banning girls from attending school is like burying them alive. Don't let this nightmare turn into reality,” said Aryan Aroon, an activist and writer from Afghanistan who left the country before the Taliban took over, in a conversation with two journalists working for *The Washington Post*. It appeared that the Taliban authorities were still working on the details of their education policy in the fall of 2021. Bilal Karimi, a Taliban spokesman told the American newspaper that “we are committed to the education of boys and girls and to have an educated generation.”<sup>15</sup>

The Taliban in power focused on some women who had occupied senior positions in Afghanistan's legal system. Before the Taliban takeover, more than 270 female judges served in Afghanistan's male-dominated justice system. Special courts with

female judges along with special police units and prosecution offices were set up in many places to handle cases of violence against women. A little more than 90 percent of women experienced some form of domestic abuse in their lifetime according to a 2008 study by the Washington-based United States Institute of Peace. Getting women involved in the legal system was one way of dealing with this situation. Some former female judges were able to leave Afghanistan after the Taliban came to power but according to the International Association of Women Judges, more than 200 female judges remained in Afghanistan, many of them under threat and in hiding. Even before the Taliban takeover of the country, female judges were targeted by conservative men. In January 2021, two female judges on the country's Supreme Court were shot and killed on their way to work in Kabul. A report released in August 2021 by Human Rights Watch said that the landmark legislation passed in 2009, the Elimination of Violence against Women, was often sabotaged by male officials. According to the World Bank, more than one-half of the country's female population doesn't have identification cards compared with only 6 percent of men. Kimberley Motley, an American lawyer who has worked in Afghanistan for several years and is representing 13 women lawyers and judges, suggested reviving Nansen Passports first issued in 1922 to refugees and stateless people after the First World War and the Russian Revolution.

Taliban officials, having gained access to offices, recovered their personal information from court records. “They are women who had the effrontery to sit on judgement on men,” said Susan Glazebrook president of the Association and a justice of the Supreme Court in New Zealand. “They are under threat because they have made rulings in favor of women according to law on family violence, custody and divorce areas. Their offense: applying the law. Women judging a man is an anathema to the Taliban.” According to one assessment, “the plight

of female judges and lawyers is one more example of the Taliban's systematic unravelling of gains made by women over the past two decades. Female judges and lawyers have left the courts under pressure, abruptly erasing one of the signal achievements of the United States and allied nations since 2001. The women have not only lost their jobs but also live in a state of perpetual fear that they or their loved ones could be tracked down and killed.”<sup>16</sup>

The Taliban know that one way of dominating women is to deny them education. Shabana Basij-Rasikh writing in *The Washington Post* under the title, “Uplifting girls will help fix broken Afghanistan,” mentioned how mothers unable to feed themselves and their families were selling their girls. She quoted the United Nations Secretary-General who warned that if the international community did not “help Afghans whether this storm and do it soon, not only they but all the world will pay a heavy price,” adding that he was “particularly alarmed to see promises made to Afghan women and girls by the Taliban not being honored.” Basij-Rasikh pleaded that the world leaders, meeting in Rome in late October 2021 as members of Group 20 and having pledged humanitarian assistance to Afghanistan to the tune of more than \$1 billion, must not forget Afghan women and girls. She would like to see the education of girls receive donors' attention. “When we educate a girl, we create economic and environmental benefits that go far beyond the boundaries of her family. They go beyond the boundaries of her nation. They are benefits that all of us, every woman and man, every citizen of Earth can share. Millions of girls were out of school in Afghanistan. At least 130 million girls are out of school worldwide. This cannot continue.”<sup>17</sup>

Taliban's aversion to music also affected young women – mostly girls in their late teens – who had become serious musicians. Some of them had performed in concerts in America and Europe. This



aspect of the change in women's lives under Taliban was covered in some detail by Sudarasan Raghavan who has written about Afghanistan for The Washington Post and published a book about the country. “The girls came from homes broken by war and poverty to chase an unimaginable future as musicians. And with grit and determination, they succeeded: Some played at Carnegie Hall while the others did at the Kennedy Center. Many traveled the world as members of Afghanistan's only all-female orchestra, the renowned Zohra Orchestra.” After a great deal of effort joined in by Speaker of the United States House of Representatives Nancy Pelosi, Senator Chuck Schumer, and General Mark Miley, the United States was able to get some girls out of the country and to Portugal that had offered them asylum.<sup>18</sup>

As the Taliban settled in, their promise to usher in a more liberal order did not materialize. In late December 2021, the powerful ministry of Islamic guidance issued rules requiring women to fully cover their heads if they ride in a public taxi and to be accompanied by a male relative if they travel more than 45 miles from their homes. The instructions also require cab drivers to refuse to carry female passengers who do not comply with these restrictions and stop playing music while driving because it is un-Islamic. Those in leadership positions in the Taliban government that was taking shape as 2021 ended, there was no indication that the new rulers were deeply concerned about the way the world perceived them or that the sanctions placed on them would bring extreme difficulties to their people. In an interview with a western correspondent, Bilal Karimi, the deputy spokesman, said that his government “appreciates” international assistance but is working to “manage” the current humanitarian crisis through its own resources and charities. “We want to solve problems through negotiations, and we want to have good relations with the world, but the world must also want good relations with us,” he said. Asked by Pamela Constable of The Washington Post

about the new restrictions on women, he said that his government is “even more committed to women's rights than others” and that there are “no obstacles” to women working or studying as long as they can be physically separated from men. “We fought for 20 years for an Islamic system. We are still working on putting the mechanism in place, but we need more time.” According to Constable, “analysts described a state of competing priorities among Taliban officials – including senior religious leaders who insist on applying sharia law to every issue, younger administrators who are more educated but wield little power, and moderate figures who have traveled abroad to negotiations and conferences and are the most open to modernization and reform.”<sup>19</sup>

Having come under pressure to grant women their rights, the Taliban made some essentially marginal moves. On February 2, 2022, they announced that they had reopened public universities for female students in six of Afghanistan's 34 provinces. That was seen as a major concession to international demands. However, according to The Washington Post's Sudarsan Raghavan who interviewed several women at the forefront of the fight for their rights, the Taliban did not noticeably alter their behavior towards women after meeting with special envoys from the United States and the European Union at Oslo, Norway in January 2022. The Western envoys in a statement urged the Taliban to “stop the alarming increase in human rights violations, including arbitrary detentions (to include recent detentions of women's rights activists), forced disappearances” and other abuses. On February 3, the U.N. Assistance Mission in Afghanistan announced in a tweet that two more women activists had been detained by the Taliban in previous 24 hours. At least eight women linked to activism are believed to have vanished in recent weeks, according to protesters.<sup>20</sup>

Reports in the press in late March 2022, suggested that the Taliban may have once again changed their approach to women's rights when several universi-

ties were closed to attendance by women. It was also ordered that men with shaved faces would not be allowed to attend educational institutions. Male students had to grow beards.

The Taliban went back to their old ways once they had settled down in their government positions. The stated aim was to bring back Islam to the county. Once again, as was the case in 1996-2001, the focus was on women and what they could and couldn't do. As Susannah George wrote in her coverage of the situation in the country published by her newspaper, on May 27, 2022, more than nine months into the Taliban rule, the Ministry of Virtue and Vice was expanding into all aspects of Afghan society; women were the targets of the ministry's laws. The ministry's employees patrolled to enforce gender segregation, address allegations of bribery and demand that men pray regularly. When the Taliban controlled Afghanistan in the 1990s, the Ministry of Virtue and Vice was one of its most feared institutions.” That the world was not looking favorably at what the Taliban was doing didn't seem to worry them. Mohammad Sadiq Akif, the spokesman for the ministry, insisted that the restrictions on the rights and public lives are for the common good. “Enforcing hijab is an important part of cleansing a society. When women wear their proper hijab it prevents bad behavior in others,” he said, claiming that the way Afghan dressed in cities such as Kabul before the Taliban took over, encouraged sexual harassment from men. “This is not a violation of women's rights; it gives women more freedom.” Akif dismissed the international outrage over the Taliban's treatment of women. “No other country should intervene in our domestic affairs,” he said. “The world must respect Afghanistan's decision.”<sup>21</sup>

The Taliban attitude towards women became apparent on May 7, 2022, when the government they now headed issued an order pertaining to women. Muslim women must cover from head to toe in public. “This is not a restriction on women but an

order of the Quran,” said Akif Muhajir, a spokesman for the Ministry of Virtue and Prevention of Vice. Women who appear in public in violation of the guidelines will first be issued warnings. Those who continue to defy the rules will have their male relatives appear before the ministry. It was not specified what kind of punishment would be awarded the male relatives who defied government orders.

Violence against women – in particular against those who were attending educational institutions – continued months after the Taliban had established their rule over the country. On September 30, 2022 it appeared that the Islamic State affiliate in Afghanistan and Pakistan known as Islamic State Khorasan, or ISIS-K, struck an educational center attended by girls. Early reports indicated that 19 people mostly young women, were killed and 27 were injured. The toll was much higher. The ISIS-K struck the center that was popular with the members of the Shiite community. No group claimed responsibility for the attack carried by two suicide bombers who shot their way into the center. Targeted was Kaaj Educational Center, a private organization that offered to tutor to 600 girls. In a new protocol issued by the Taliban government, the classroom had been divided into separate sections for girls and boys. The blast targeted the girl's section and occurred early in the morning. In recent months, some Taliban officials called girls to return to the school indicating a rift the leadership has sought to play down between ideologues and pragmatists among the Taliban. For some girls, the move to close schools and the recent string of attacks on educational centers such as Kaaj emboldened them to continue their studies however they can – whether applying for visas to study abroad, forming informal study groups among their peers, or taking courses at education centers such as Kaaj. In a report filed for publication in his newspaper, The Washington Post, Sudarasan Raghavan interviewed a number of people who were relatives or friends of

the murdered girls who were devastated by the ambitions destroyed. According to Mahgul Rafi, 26, who watched the body of her friend Hosniya, 19, who had left her village in Ghani province where most of the population was Shiite to seek an education in Kabul, “We are not alive, said Rafi, about living as a woman under the Taliban. “It's like being in prison.”<sup>22</sup>

With the passage of time, the Taliban government in Kabul began to realize that their gender segregation policies were creating serious problems in some areas. Health care was one of them. Taliban publicly and loudly began to promote women's education in the area of health. According to the International Committee of the Red Cross which supports several

health teaching institutions for nursing, radiology, and other health fields the proportion of women admitted – at least 46 percent in 2022 – represented a slight increase compared with 2020 figures. Even as the Taliban says it is looking to expand medical training for women, other policies are limiting the ability of women to provide health care or access it. The pipeline for future female doctors is also narrowing. According to Human Rights Council, schools in 24 out of Afghanistan's 34 provinces remain closed to girls above sixth grade.







**Chapter**

**7**

**Women in The Shadow of  
Climate Change**

# Women in the Shadow of Climate Change

Tariq Husain and Atr Un Nisa

Climate Change is the greatest challenge of the 21st century and its impact vary across regions. It is evident from the work of the Inter-governmental Panel on Climate Change (IPCC) that the people who are already most marginalized, and thus more vulnerable, will experience its most severe impacts. Poor people as a group are expected to be disproportionately affected and thus have the greatest need for adaptation strategies in the face of climate change.

Women are more vulnerable to the effects of climate change than men—primarily as they constitute the majority of the world's poor. It is estimated that 70 percent of the 1.5 billion people; living in conditions of poverty are women. In urban areas, 40 percent of the poorest households are headed by women and they dominate (50 to 80 percent depending on the country) in food production, but they own less than 10 percent of the land. Women are an estimated 43 percent of the workforce in agriculture. In Asia and Africa, this proportion is higher, often above 50 percent, especially in mountain regions.

Worldwide, women are 14 times more likely to die in climate events and four times more likely to be displaced because of climate change (Aon and Women+ in Climate Tech). Women in developing

countries are particularly vulnerable as they are highly dependent on local natural resources for their livelihood. Those charged with the responsibility to secure water, food and fuel for cooking and heating face the greatest challenges. Women are disproportionately affected by climate change as they have unequal access to resources, negligible participation in decision making; and are not recipients of the distribution of environmental and management benefits.

Furthermore, in many developing (and also some developed) countries women suffer gender inequalities concerning human rights, political, social, and economic status, and property ownership, availability of education and health services that limit their coping capacity.

The marginal status of women must change significantly if humanity is to successfully manage the adaptation to the challenges of climate change. This chapter has two objectives. The first is to present the emerging challenges from climate change, and the second is to focus the policy content on women's role as agents for successful adaptation.

## Climate Change and Global Challenges

The recent United Nations IPCC Report 2022 gives an unambiguous message to the world: -

“The earth is on track to warm by an average of 3.2 degrees Celsius (C) above pre-industrial levels by the end of the century. Altering that course to limit global warming to under 2 degrees C would require that greenhouse gas (GHG) emissions should peak no later than 2025”.

National and corporate pledges to reduce GHG emissions to date add up to a “litany of broken promises”, (Secretary-General Antonio Guterres) But the grim warning by IPCC should wake us up. The tools and strategies that governments, corporations and individuals can use to cut GHG emissions are “known Science”. Planned and coordinated actions in critical sectors—transportation, energy, urban development, agriculture and forestry can halve emissions by 2030.

For example, in the transportation sector—which contributed 15 percentage to global GHG emissions in 2019—the accelerated introduction of electric vehicles can reduce GHG emissions significantly provided the electricity is produced by low or zero-emission carbon electricity sources. Hydrogen and biofuels can help aviation and sea shipping.

In urban areas –which contributed 70 percent of global emissions in 2020—buildings in established areas can be retrofitted with systems to capture carbon and repurpose it to produce cleaner (from carbon) urban areas. New areas could use energy-efficient infrastructure that is produced by low or zero carbon emission methods.

Agriculture, forestry and other land use sectors—which contributed 22 percent of GHG emissions in 2020—can expand the use of agroforestry in cropping, increasing forestation, and decreasing deforestation. The use of agroforestry can also, in addition, improve both land and water productivity.

Energy production can utilize solar, wind, ocean, and safe-nuclear sources to produce electricity for all sector.

Conservation of energy and energy-efficient technology (lighting, cooling and heating) can reduce GHG emissions.

Improved carbon capture technology, low emission materials and methods and lower-cost renewable energy would require research and its conversion to technology.

Some of this has begun in earnest in the USA and Organization for Economic Corporation and Development (OECD). But the rest of the world needs to follow suit for the impact to be global.

### **Climate Change-Explaining Recent Floods**

The summers of 2021 and 2022 were exceptional. In mid –July 2021 rain storms in Germany and Belgium dropped eight inches of rain in two days producing flood waters that ripped roads and buildings across European countries in the path of the flood waters. A week later two feet of rain were dumped in the Henan province of China in three days. In mid-August, seventeen inches of rain fell in Tennessee in twenty-four hours. None of these events was a hurricane or a tropical depression. In 2022, the same –this time historic floods in Pakistan and parts of the US took places. The common element in these destructive events was water vapor—lots of it.

Water vapor is playing the main role in these destructive events and accelerating climate change. As the oceans and the atmosphere warm, additional water evaporates into the air. Warmer air can hold more of that water vapor before it condenses into cloud droplets that can create flooding rains. The amount of water vapor in the atmosphere has increased about four percent globally in the past few

decades. This does not sound big but it is a big deal to the climate system. Physics predicts that warmer air

**TABLE 7.1**

**Temperature vs Water Vapor Content**

Temperature-Fahrenheit (F)	Grams of water per cubic meter (Grams)
32	4.8
50	9.3
61	13.5
68	17.2
86	30.1

Source: IPCC 2018 " Special Report

would create more airborne vapor fueling vapor storms. Table 7.1 illustrates the relationship between air temperature and absolute vapor content of the air. At 32 degrees F, the water content is 4.8 grams per Cubic Centimeter(CM). At 86 degrees F it is six times more at 30.1 grams per CM. So, when it rains it pours and human-built structures are swept away with attendant human distress

In addition, water vapor is making global warming worse. Even though carbon dioxide is getting the

most attention, water vapor is by far the most important GHG in the atmosphere. It absorbs much more of the infrared energy radiated upward by the Earth's surface than do other GHGs, thereby trapping more heat. Unfortunately, we cannot directly control its amount in the atmosphere. But it is contributing more to the warming of the earth. We can only control it indirectly by reining in the warming caused by our emissions of carbon dioxide and methane. We can also control it through the actions mentioned above. However, since the water vapor loop is both vicious and is being felt by all it could be potentially a more potent policy lever.

**Climate Change –Can Humanity Avoid a Warmer Future?**

The answer to the above question is an unequivocal “No”. However, we can still avoid a planetary meltdown. The recent IPCC report also highlighted other effects besides floods. It stipulated that all regions of the world are being affected. Each of the preceding four decades has been the warmest on record. It notes that even if the world gets down to net zero-GHG by 2050 temperature growth may slow down, but temperatures will not decline. Sea levels will continue to rise for the next two hundred

**TABLE 7.2**

**Climate Impact under Four Different Scenarios above Pre-Industrial Levels**

Temperature	Scenario I	Scenario II	Scenario III	Scenario IV
Temperature	+1.2 degrees C	+1.9 degrees C	+2.6 degrees C	+5.1 degrees C
Drought-times per decade	2 times	2.4 times	3.1 times	5.1 times
Precipitation-Wettest day per decade	1.3 times	1.5 times	1.8 times	2.8 times
Snow-percent change in snow cover	-1%	-5.10%	-9%	-25%
Tropical storms—Increase in intensity	0	10%	13%	30%

Source: IPCC 2018 " Special Report

years driven by the melting of Greenland and Antarctica ice sheets. The Himalayan Glaciers will melt causing all the rivers of Asia (China, India, Pakistan and East Asia) to lose water volume. For Pakistan, the Indus River is expected to lose about 40 percent of its inflows volume by the mid-century. Low-lying areas will disappear and beaches will move inland in low-lying areas of the world. The Paris Agreement in 2015 initially set a goal to keep the temperature below 2.0 Celsius. But most small island nations and developing countries argued for a target of 1.5 C. The IPCC Special Report of 2018 studied what that half a degree difference could mean. Table 7.2 shows what a few degrees more would mean in terms of impact on human habitation.

Scientists understand climate change much better than in 1990 when IPCC reports were initiated. In the past three decades new findings and more sophisticated computing capacity with more observing stations, including satellites to observe glaciers' mass balances, have dramatically improved the accuracy of climate change simulations. The science is unequivocal—humans have launched planet earth on a self-destructive path. Corrective international efforts are required on a war footing to prevent a planetary meltdown.

### **Climate Change—Off the Chart Recent Events**

We can move beyond the simulations of IPCC-2018 and report recent events in 2022.

Heat waves in the US; wildfires in Europe; floods in Asia have shown how Climate change has made extreme events part of everyday life. Some of the worst damage has happened in Pakistan. A third of the country was recently underwater. The economic cost of lost agricultural production; lost lives and destroyed infrastructure remain to wreak havoc in the lives of the common person. It was not just flooded; the temperature reached up to 120 degrees

Fahrenheit. On the west coast of the US 100 million Americans experienced record temperatures of 110 degrees F. A heat wave in China dried up rivers; disabled hydroelectric power systems; stopped internal shipping by rivers and had devastating economic and personal effects. A heat wave in Europe sent temperatures in London to 104 degrees F –never experienced before. Drought across Europe dried rivers and derailed river shipping and cruise travel. The above concentration of events has no historical comparisons.

### **Climate Change – Challenges for Pakistan**

A recent National Atmospheric Science Agency (NASA) study forecast that the ice in one of the world's highest concentrations of glaciers in the Himalayan Mountain could see significant melting before the end of the century, potentially affecting sea levels rise across the globe. The Region known as High Mountain Asia could see ice loss run from 29 to 67 percent depending on the level of greenhouse gas emissions over the modeled period. According to the study, water flow in monsoon-fed river basins, driven largely by melting glaciers could hit its peak by 2025 potentially reducing runoff beyond that time and requiring changes in how water is utilized and forcing communities to find other water sources (if possible). Understanding the coming changes in such flows is critical to planning for hydropower, especially in the Sphere of irrigation and water use in Pakistan. Similar adjustments will be required in India and China because Himalayan glaciers feed all rivers in South and East Asia.

In Pakistan, much of the present understanding of the climate, hydrology, and glacier behavior of these mountains is based on spotty analysis of a limited database. In an area of 160,00 sq km above the Tarbela reservoir, there are only five hydrometric stations on the main stem of the river Indus and fewer than twenty manual climate stations. This



density is considerably less than the World Metrological Organization's recommendation of one Gauge per 250 sq km. A credible mass balance date is available only for a few glaciers in the Karakorum Range. The hydrometeorology and the glaciers of the Upper Indus Basin (UIB) are not understood due to the organic complexity of the three-dimensional mosaic of topo climate within the extreme terrain of the UIB—some glaciers are retreating and others are advancing.

By sheer number, the Himalayan Mountain Range

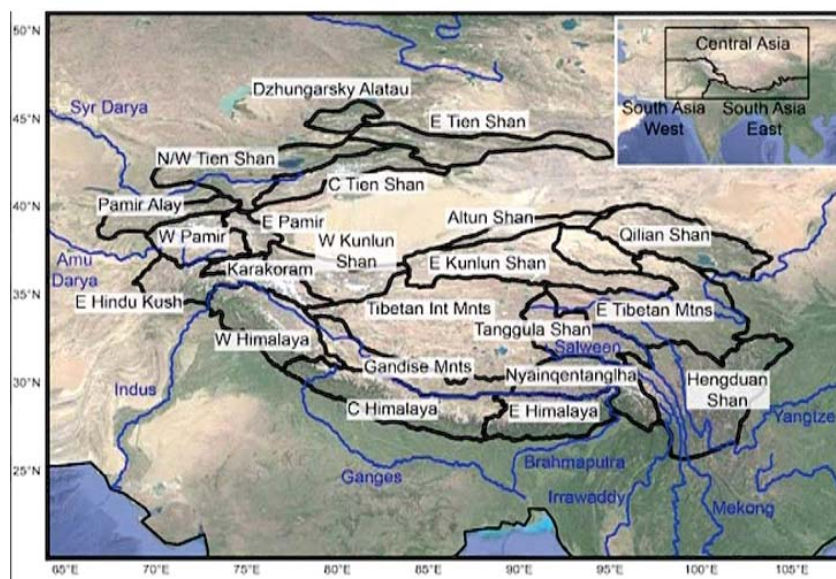
showing the High Mountain Asia region (See Map 7.1). All the rivers which flow into South and East Asia -The Indus, Ganges, Brahmaputra, Yangtze, Mekong, Salween, and Yellow originate in the glacier-rich region and support more than 3 billion people in the Asia region.

### Climate Change –Pakistan Adaptation Policies

While Pakistan is not a significant contributor to greenhouse gases, it has no choice but to prepare to

Map 7.1

### The Himalayan Mountain Asia Region



Source: NASA and University of Grenoble Alpes

contains about 44 percent of all the glaciers in the world excluding the Antarctica and Greenland Ice fields which contain most of the global ice mass. The melting of these glaciers contributes significantly to observed sea level rise. However, on the way to the sea, the glacial melt provides sustenance to billions of people in South and East Asia. The Indus River supplies water to the largest contiguous irrigation system in the world and contributes to the food supply for 200 million plus citizens of Pakistan

adapt to the radically changing environment. Optimizing the utilization of water resources in the Indus Basin should be among our higher priorities. To meet the challenge of this priority requires evaluation of options with a fifty-year perspective. Pakistan's population is increasing while its stock of freshwater resources is fixed, or likely to decrease due to climate change. The Indus Basin is already facing water scarcity. A recent estimate puts water at below 1000 cubic meters per capita. The United

Nation's medium population projection puts Pakistan's population at 246 million and 335 million for 2025 and 2050. It puts its population at 400 million at the end of the century. This translates to water availability of 711 and 522 Cubic meters per capita for 2025 and 2050 respectively. This means that Pakistan will have to produce adequate food, fuel supply and exports against the backdrop of declining freshwater availability.

Recent World Bank studies have concluded that “there are no feasible interventions which would enable Pakistan to mobilize more water than it currently utilizes”. On the other hand, there are significant possibilities for lower water availability due to reduced supply or runoff”. Pakistan's relationship with India, Its upper riparian, is also not such that a more positive future could be assumed for water availability. Pakistan's water productivity

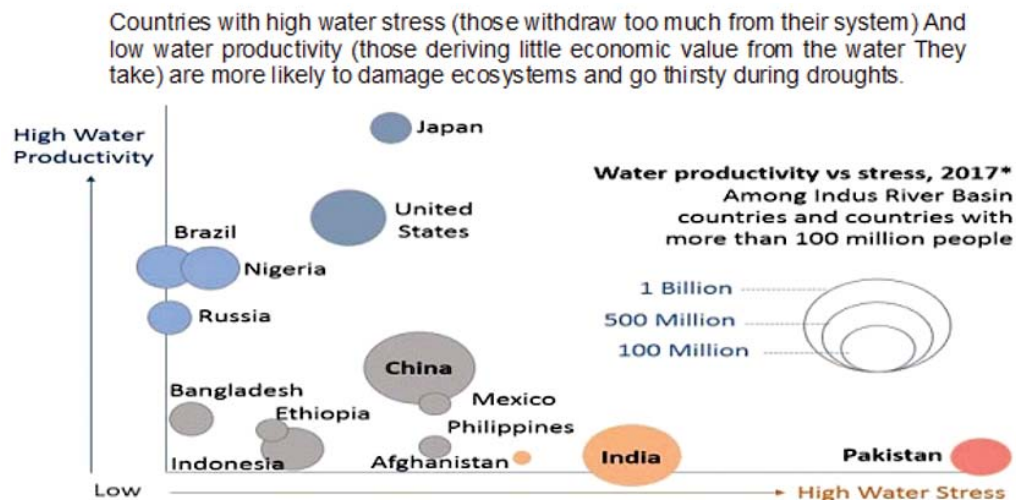
further. Increasing water productivity via pricing policy, water conservation investments in agriculture, industrial and urban water needs, and cropping pattern changes are needed on a high priority basis for Pakistan to meet its needs for sustainable development as a water-stressed country with an increasing population.

### Climate Change – Conservation as an Adaptation Policy

Pakistan's Indus Basin is a unique irrigation system that stretches from the foothold of the Himalayas to the Arabian seas. It is a large contiguous area connected by an extensive canal system. However, so far, the Indus irrigation system does not have an irrigation effluent disposal system. In the early period, the Indus and its tributaries created an underground reservoir of fresh water. This

**Figure 7.1**

#### Water Productivity and Water Stress



Source: National Geographic Magazine, July 2020, Page 75

in agriculture is at the low end of the world country league. (Figure 7.1). Water productivity must be seen in an intersectoral context as Pakistan urbanizes, and non-agricultural claims on water increase. With the inevitable increase in urbanization, water availability to the agricultural sector will decrease

underground water has been used as a supplement to the river runoff water available from the canal system. Since the partition of Indian Sub-Continent, this underground water has been used by an extensive network of privately owned tube wells. In the absence of an external drainage system, the

irrigation effluent has been drained into the aquifer. Over time this drainage disposal method has been increasing the salinity and the chemical quality of the groundwater. Half-hearted efforts have been made by the government to invest in an effluent drainage system so as to manage wastewater more efficiently. As a consequence, after seventy years of receiving irrigation effluent, the quality of the groundwater is reaching a point where it may no longer be able to serve as a supplementary source of irrigation water. This process has been called the Salt-Balance issue of the Indus Basin.

The salt balance issue springs from the relatively straightforward arithmetic that unless the outflow of salts out of the Indus Basin equals or exceeds the salts flowing into the Basin, the salt accumulation would occur in the Basin. If such accumulations occur, then it is only a matter of time before salt accumulation in the soil and the underground aquifer becomes intolerable to plants or life as it is known today. In gross terms, about 35 million tons of dissolved salts enter the Basin annually. About seven million tons are presently discharged into the sea leaving a net annual addition of 28 million tons to the canal command area. This amounts to 1000 pounds per acre per year—an insignificant annual increment but adding up to significant proportions with time. This positive salt accumulation process has to be stopped or slowed down. If neither is done, these areas would eventually become saline groundwater areas.

Addressing this saltwater accumulation issue is the most important action that must be taken to preserve groundwater as a complementary source for agriculture or other human uses. This is a conservation action that should have very high priority. A parallel action should be to expand research to develop salt-resistant varieties.

### **Climate Change—Women in the Shadow**

In the introduction of this chapter, it was stipulated that as a group women are vulnerable and get impacted more adversely than men. The gender-based inequalities and inequities exist concerning human rights, political and economic status, property ownership, access to education and health services. So, if gender-based inequalities could be removed or attenuated women will be able to play a more participatory role in addressing the challenges of climate change. In developing countries, the inequalities have generally translated into a lack of opportunities to realize the potential of their genes. A general formula was presented in the 1990s in the early ventures of the World Bank to reduce the vulnerability of the poor. The framework provided by the World Bank was: -

- promote economic growth to foster and expand opportunities for productive endeavors; this should include policies that improve income distribution to the lower income groups; or, at least policies that prevent the worsening of the income distribution.
- invest in education, nutrition and health improvement to develop human capital, and
- create safety nets for the poor to offset unexpected reductions in income/consumption flows to that group.

Safety nets were envisioned primarily as protection for the poor in terms of unexpected consequences from macroeconomic downturns. This approach only partly recognized the vulnerability that afflicts the poor. The poor are more vulnerable than the relatively well-off. This framework fits the condition of gender-based inequality widely observed in Pakistan.

Vulnerability can be defined as consumption loss above a socially accepted norm caused by unexpected events and the non-availability of cost-

effective risk management instruments. The poor are the most vulnerable in any society. Poor households usually lack land, livestock, financial assets or other mechanisms to tide them over in the event of a shock. Another contributing factor is the less diversified sources of their income. In addition, to cope with a shock, the poor often have to disinvest whatever assets they do possess, often at the cost of long-term potential to climb out of poverty. In the absence of risk mitigating mechanisms available to the more fortunate, the poor are compelled to make choices that affect their long-term productivity. Thus, not only are the poor less resilient to shocks, the strategies they are compelled to adopt can further trap them in a cycle of low productivity and low income. Vulnerability thus must take into account the socioeconomic characteristics of households and sources of risk. Measuring vulnerability in terms of consumption loss is appealing, but vulnerability is also the result of other variables. Children's health status, family size, insecurity of old age, natural disasters, health risk, job loss risk, death of livestock, death of principal earner and business failure are some of the other dimensions where vulnerability can have devastating impacts.

The risks that affect the poor may be classified based on whether their impact occurs at the level of the household, the community, or the country. The distinction is blurred in a number of cases where shocks have both household-specific and regional components. Risks can also be distinguished based on the frequency and severity of occurrence. Consumption smoothing is more difficult with repeated calamities, because households having exhausted their assets in coping with the initial shock, are even more vulnerable to those that follow. Risks can differ in terms of severity ranging from catastrophes, to events that do temporary damage. Reducing vulnerability requires a package of necessary interventions which minimize risks and provide buffers.

## **Climate Change –How to put Women out of the Shadows?**

From the above discussion, it is obvious that like poverty reduction it is a long journey to bring women out of the shadows. After much thinking over thirty years, the single policy focus that can do the job faster is to try to bring significant change in women's status is to work on interventions that reduce maternal mortality to a respectable level. The principal task is to eliminate the nutritional inadequacy of the pregnant mother. Since food is a human right –that will be a high -value target—because it will have a direct reducing effect on infant mortality; under age five mortality; low birth weight babies; and stunting. More than half the world's low birth weight babies are born in South Asia. Malnutrition is both one of the consequences of social injustice, and one of the factors contributing to its maintenance. It bears the hardest on small children contributing to unacceptable levels of Infant mortality. See Table 7.3. It reduces their capacity to learn during childhood and earn during adulthood. The result is a downward spiral in which poor malnourished parents produce malnourished children and the cycle continues. So, if the policy could address maternal mortality—it would have continued benefits on many fronts. Table 7.3 illustrates that both maternal and infant mortality are respectable in developed countries. South Korea's performance stands out. That is a model worth considering because in 1960 South Korea was like Pakistan in 1960. The US also stands out in that its poorer states have developing country-level maternal mortalities. That also puts the country level USA level similar to China's.

Our reasoning is that if Pakistan were to make reducing maternal mortality a high priority goal –say equal to the current level of China -in one decade - it would also decrease stunting to the Chinese level of 5 percent. All the other contributing variables dealing with rights to education, nutrition,



health services, and education will have to fall in line. Poverty will also have to decrease significantly to provide adequate nutrition to pregnant mothers.

percent as Himalayan glaciers melt;

- Pakistani population will increase to 335 million

**TABLE 7.3**

**Maternal Mortality and Stunting**

Country	Infant Mortality Per 1000 live births* (2019)	Maternal mortality Per 100,000 live births** (2017)	Stunting: Height for age* (2016)
Pakistan	67.2	186	38
Canada	4.9	10	-
China	7.9	18	5
Denmark	3.8	4	-
Finland	2.4	3	
Germany	3.8	7	-
India	34.3	145	35
Indonesia	23.9	177	31
Malaysia	8.6	29	22
South Korea	3.2	11	2.5
UK	4.3	7	-
USA	6.5	19	-
Black Women		43	
California		4.5	
Georgia		48	
Louisiana		58	

**Source:** World Health Organization (WHO) , World Bank

Just this one variable tells us the story of development. We should focus on improving it on a war like footing.

**Policy Recommendations**

According to the indepth scrutiny carried out by experts, some of the predictions indicate that in the next 25 years: -

- surface water supply will decrease by about 40

- Urbanization and industrial activity will increase significantly

Therefore, increasing water productivity should be a high priority both for the state and the executive. Some of the measures that can be taken in this regard are listed below:

- expand agricultural research into salt water resistant varieties.

- the conservation of water through pricing and other instruments is another high priority.
- protecting the freshwater aquifer, where it is still possible, should be Pakistan's highest priority by implementing a drainage Program for the irrigation effluent.
- reduce maternal mortality from the current 186 per 100000 live births to 20 which is the current level in China. Having this one variable objective will have substantial collateral benefits in reducing stunting, infant and child mortalities and improving the nutritional status of women and children.





**Chapter**

**08**

**Role of Women in Agriculture  
and Livestock**

# Role of Women in Agriculture and Livestock

**Dr. Mahmood Ahmad**

## Introduction

In Pakistan, agriculture can be an important engine of growth and poverty reduction but there is ample data to support that the sector is performing far below its potential. Among many reasons, this poor growth is attributed to a lack of integration or recognition of the contribution women make. A close analysis of available data suggests that the livestock sector has outperformed the crop sector and the role of the women sector is quite embedded in this trend. The contribution of females stand out in Real-life Farming Chores such as being involved in milking, feeding, treating sick animals, herding animals, cutting and collecting fodder, poultry care, breeding, weaning, cleaning shelters, converting manure to fuel or fertilizers, processing milk, and processing animal fur for wool (Bhandara & Samee, 2015). Patriarchal societies often restrict women to confined roles of a homemaker thus various constraints limit them from gaining access to higher education and technical knowledge. Women's participation in rural labor markets varies considerably across regions, but invariably women are over represented in unpaid, seasonal and part-time work, and the available evidence suggests that women are often paid less than men, for the same work.

In the context of more recent problems, the floods of

2022, a large set of reports by donors on emergency relief and disaster damage assessment are coming out to address immediate responses, but they often overlook the gender dimension of vulnerability. Agriculture clusters in Pakistan, in the preliminary assessments, at least for the upper basin areas covered so far, do not seem to allow for differential analysis of the impact on gender (Pakistan Agriculture Cluster, Preliminary Damage Assessment August 2010). The author attended or was invited to Post-Disaster Needs Assessment (PDNA) following the severe flooding that occurred between July – September 2022. It was supported by the Asian Development Bank (ADB), the European Union (EU), the United Nations (UN), and the World Bank (WB), the highest policy level response discourse, was expected to set the stage for coming assistance, but long deliberations did not succeed in highlighting the gender dimensions.

The climate change phenomena that is embedded in oscillations between floods and drought impact women more directly than men but this is changing. Simi Kemal highlights the fact that while women's role as domestic water managers is admired and the hazards they face in the context of walking long distances to fetch water barely acknowledged, women have been quietly becoming water visionar-

ies, academics, scientists and researchers (see box 8.1). They are now recognized in this context. But the doors of decision-making bodies of water and the premier water institutions of the country remain largely closed to them. Those that have broken the glass ceiling face biases and challenges that discourage them and prevent their upward movement.

This chapter highlights that women make essential contributions to agriculture, livestock and rural enterprises through key value chains. But there is much diversity in women's roles and over-generalization undermines policy relevance and planning. The context is important and policies must be based on sound data and gender analysis.

### **Box 8.1:**

#### **Women are Contributing More Today than Yesterday, Especially in the Water Sector**

There are at least three women who carry a voice relating to water policy discourse and are making significant contributions to adapting an integrated approach to water management. Their achievements are remarkable since water planning and policy formulation continues to be part of the engineers' domain. I would like to mention (1) Ms. Simi Kamal as she excels in water governance, water policy, strategy and gender mainstreaming, (2) Dr. Erum Sitar as one of few experts on water law and (3) Dr. Fozia Perveen who is highlighting the growing role of circular economy with trust on water and other waste management issues. All three have rendered laudable services and made enormous contributions to the water-literature. These remarkable women are also lead authors in-selected chapters in the forthcoming Springer book on water policy issues and options for Pakistan.

However, the work of Simi Kamal stands out. As the founder of Hisaar Group Foundation and a dedicated advocate of women's empowerment, she has promoted and championed gender equity, especially in the water sector. Her writings rightly highlight that women remain largely invisible in the water institutions of the country, water-related ministries and departments, water NGOs and water businesses. They are seen mostly as 'affectees' of the water crises and climate change and therefore, are bracketed as being part of the problem. Now they have to be made part of the solution. She says that it is time to mainstream the strength and resilience of women to ward off further crisis, develop rational use of water, improve water management, institute water conservation and achieve water and food security.

She further professes that Pakistan's law does not directly address 'water rights, and land ownership is usually a proxy for access to or entitlement to water. Because women in Pakistan own land in a far smaller proportion than their numbers, their 'water right' is also limited. Very few women are encouraged to pursue education in water related fields and few who have become prominent in this area as visionaries, scientists, planners, managers, technicians, researchers and professionals. The few women engineers and professionals often face challenges at the workplace and social biases due to which their careers and professional advancement opportunities are limited.

She continues to speak and write on how Pakistan must invest in women as drivers of water management and conservation, agricultural growth and food security, and not just as beneficiaries. She has often pointed out that we have seen Pakistani girls and women flourish in the digital and economic sectors. They can thrive in the water sector too helping to transform both the agriculture and the water sector.

**Source:** Adopted from Hisaar Foundations Publications

## Role in Agriculture and Livestock

A brief review of literature tells some common roles in all provinces but also varies in certain aspects meaning that all kinds of constraints and challenges faced by women farmers in agriculture across the four provinces and three regions of Pakistan offer opportunities to be tapped in. Food and Agriculture Organization (FAO) report<sup>1</sup> provides a good analysis of the woman's role in each province and is summarized. According to the report, women spend around 12 to 15 hours daily on agricultural activities. The farm work of the women is usually ignored, unpaid, and not counted as economic activity. Both in Punjab and Sindh two factors are providing an increased role of women as men are migrating either to urban areas or abroad. Like Punjab, disparities in daily wage rates and working hours of women and men are high also high in Sindh.

Baluchistan provides a different take, the rural women have a high rate of participation in a more diversified farming system (horticulture) that exist in the province. Their role is well documented as weeding, seed cleaning, drying, and storage of crops. As the province growing cotton production is on the rise, it makes a woman more involved in agriculture through its picking. Women from Kalat and Khuzdar regions possess rich history and culture of using medicinal plants for treating many ailments<sup>1</sup>. On the other extreme the tribal areas carry well-defined socio-cultural boundaries beyond which women are not allowed to venture. Similarly, KP with a limited livestock sector offers fewer opportunities in comparison to Punjab and Sind. Gilgit Baltistan has an agro-pastoral economy and women play a significant role in production, livestock management, horticulture, post-harvest operations, agro and social forestry, etc. According to Rehman and Zia's (2013) study, primary role played in collecting fuel, especially wood is common to all provinces.

Women play a significant role in livestock production and development, but their labor power is considered inferior because of predetermined notions that a woman's primary role is that of a homemaker. As women in Pakistan own land in a far smaller proportion than their numbers, their "water right" is also limited' (Kamal 2018). Any holistic development strategy must consider the integration of a gender perspective, division of labor and division of benefits between men and women for facilitating equal access to resources and community decision-making processes.

The findings of most studies conducted to understand the role of women in agriculture as compared to men in Pakistan can be summarized as:

- Women play a more effective role in agriculture (they make more than 70 percent of the labor force in agriculture) than men but have a limited role in decision making,
- Most women lack access to finance and technology, see box 8.2 indicating the role of technology in Tanzania
- A vast majority are pressured by social and cultural fabrics to operate in a limited capacity.
- In many places, women are mostly just laborers and are hired on daily wages as per need rather than a long-term and steadier income.
- Women are expected to perform all their duties in addition to their household responsibilities.
- Most women and vulnerable groups don't own any land (landless) and so they don't have water rights.

## Gender Equality and Women's Development - The Trends

Despite gender inequality highlighted, investment in women in many developing countries including Pakistan is low. Even though studies show that investment in women entrepreneurs delivers higher returns. In Pakistan women's representation continues to remain low.

Aggregate data shows that women's participation at provincial levels comprise about 74.6 percent in Punjab, 75.9 in Baluchistan, 77 percent in Sindh and 65.9 in Khyber Paktunkhwa, indicating an average of more than at country levels (Labor force survey 2022). But this figure masks considerable variation across regions and within countries according to age and social class.

The data from World Bank indicates that the labour force participation rates for female population of age over 15 have declined from 24 percent in 2012 to 21 percent in 2020. Similar trends hold for most countries in South East Asia (Figure 8.1). It should also be noted that Pakistan in comparison to other countries, other than India women have much lower participation rates.<sup>4</sup>

## Box 8.2:

### Use of Technology to Empower Woman in Agriculture – Case of Tanzania

According to research from the World Bank, women form the majority of Tanzania's agriculture workforce – particularly in rural areas, where 98 percent of economically-active women are involved in agriculture. They prepare, plant, weed, harvest, transport, store, and process their farms' products. In addition to these time and labor-intensive activities, women also cook meals and perform other household management tasks. These are crucial in a country where 42 percent of children under 5 years suffer from stunted growth, due to malnutrition, and 16 percent are underweight. The situation in Pakistan is not any different, may be even worse.

The Innovations in Gender Equality (IGE) to Promote Household Food Security program, in close coordination with Feed the Future projects in southern Tanzania, is helping farmers address constraints they face when working in agriculture. The project is supported by Land O' Lakes International Development and the Massachusetts Institute of Technology's Development Lab (MIT D-Lab), and USAID. It is a community-centered technology design training for smallholder farmer groups in the Southern Agricultural Corridor of Tanzania. Trainees, the majority of whom are women, develop prototypes in group settings and receive in-depth coaching from MIT D-Lab trainers. The technologies promoted include: palm oil extracting machine; peanut sheller, rice thresher and rice winnower that resulted in (1) time and labor burdens being reduced (2) What's impossible becomes possible by developing the technology design prototypes (3) men and women are working together. Women's empowerment is a community-wide endeavor, with men's active involvement and support being a critical factor.

Every technology needs investors. Even in cases where inventors have designed functional prototypes, they still require:

- resources and skills to transform prototypes into successful commercial products
- media attention to accelerate the time it takes for locally popular products to become nationally and regionally renowned and adopted
- policy changes to address major constraints for women working in Tanzania's agriculture sector

IGE is working in Tanzania to ensure technology continues to help transform the lives of tillers and smallholder farmers with focus on woman, an initiative yet to be seen in Pakistan

Adopted from: Want to empower women in agriculture? Use technology.

**Source:** Posted by Giselle Aris, Senior Technical Advisor for Enterprise Development, Technology and Gender, Land O'Lakes International Development on Thursday, March 6th 2014 USAID Impact Blog

Approximately 75 percent of total female employment in the country depends on agriculture, and 84 percent of women employed in Pakistan are in rural areas (Table 8.1 ) (GoP 2021). Again data on employment distribution between men and women in rural and urban areas indicates that out of 33 percent population a good 14 percent are females

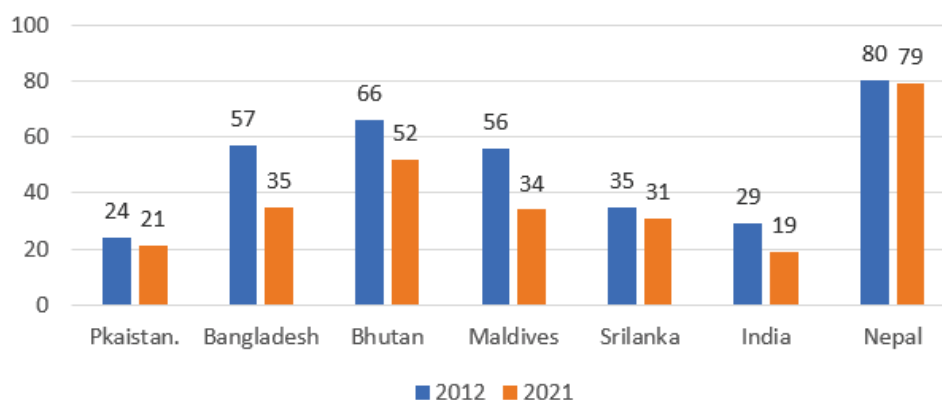
includes family workers and self-employed workers.

### Women's Role in Agriculture Value Chains

This section presents a brief summary of woman, small farmers and their access to technology, credit and market all along the value chains. Please note we

**FIGURE 8.1**

### Estimates of Female Participation Rate (%) ILO Estimates)2021



Source: World Bank

and in rural areas of 31 percent population and a good 18 percent are involved in agriculture. The figure shows the importance of agriculture in generating employment opportunities for females. Further evidence shows that 84 percent of female employment is considered to be "vulnerable employment," that is, unpaid employment. This

have included only those parts of the value chain that are more relevant to women participation Figure 8.2. The snap-shot of woman participation in agriculture and livestock value chains are highlighted in box 8.3 and 8.4. They provide the diversity with which women contribute; from apricots grown in Gilgit Baltistan (GB) to Mailsi, a community based bio-

**TABLE 8.1**

### Gender Employment Distribution in Agriculture

Occupation	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100	77.19	22.81	67.95	48.76	91.1	32.05	28.43	3.62
Agriculture, Forestry & Fishery	33.23	19.43	13.8	31.48	18.13	13.33	1.77	1.3	0.46
Others	66.77	57.76	9.01	36.47	30.63	77.77	30.28	27.13	3.16

Source: GOP 2021



gas plant run by female students to provide clean energy and bio-fertilizer in Southern Punjab to Sindh where women's role in date processing, production and marketing is evident and not to mention Rilli business run by women.

Global experience is equally revealing, the IFC report highlights that developing gender-smart solutions in agri-business represents a crucial strategy to address an increasingly volatile global context and to open new opportunities for small-holder value chains. Moreover, women traditionally participate in value chain nodes with lower economic return than men. This chain faces a large set of constraints as summarized below:

- limited access to hired labor, equipment, technology, training, finance, and markets.
- restrictions on land ownership and tenure that limits the expansion of opportunities and lead investors to deal primarily with men.
- sexual harassment and violence; and household, community, and care responsibilities, which are essential to rural wellbeing but have an important effect on women's time.

### **Climate Related Disaster and Impact on Women**

The provinces of Punjab, Sindh and now Baluchistan are identified as the most vulnerable hotspot for recurring disasters in Pakistan with climate change and more unpredictable weather patterns presenting a significant emerging challenge for each province. As a majority of the population in provinces resides in rural areas where poverty is more than urban area, a significant portion is living below the poverty line. These individuals directly or indirectly, rely on agriculture to support their livelihood. Tharparker in Sindh is a region frequently hit by severe droughts affecting all aspects of life for its inhabitants, especially women.<sup>5</sup>

Women are particularly active in farm activities such as growing vegetables, poultry, processing and

distribution, with most of them involved in milk and value chain sectors. Despite the active female participation in the rural workforce in all provinces, women are significantly impacted by poverty and have unequal access to financial and social services. They also experience more hurdles regarding horizontal and upward social mobility, which leaves them more sensitive to the impact of natural disasters.

A Study of Disaster-Prone Areas in Sindh<sup>6</sup> highlights the vulnerability of the rural women of Sindh to climate change, focusing on how the women of Dadu district, once actively involved in fishing, net-weaving and other fishing-related activities, are no longer able to access these economic opportunities. This is largely due to a considerable decrease in the population of fish as a resulting shifting weather patterns. Consequently, their roles are now largely confined to domestic tasks. This chapter also highlights the worsening situation in Tharparkar, where water scarcity has affected agriculture and domestic survival, forcing women to fetch water from wells located at long distances. This water is not safe for drinking, contributing to water-borne diseases among women and children.

### **Recent Floods and Woman**

Women have often been disadvantaged in emergencies and this would appear to be high risk in the case of the Pakistan floods. For example, the cotton belt of south Punjab and Sindh has been severely affected as women are the main work-force in production and harvesting of cotton. Similarly, rice transplanting also falls under a similar domain where woman play role in transplanting.

Damage assessments often overlook the gender dimension of vulnerability. The forms being used by the Agriculture Cluster in Pakistan in the preliminary agricultural assessments, at least for the upper basin areas covered so far, do not seem to allow for

**FIGURE 8.2**

**Reducing Gender Gaps and Turning Constraints to Opportunities**



**Source:** Author Computation

differential analysis of the impact on women and men (Pakistan Agriculture Cluster, Preliminary Damage Assessment August 2010).

A case from India highlights another dimension --- disaster may present an opportunity to enhance gender equity in the design of the program of response. For example, in property rights, in the Maharashtra Emergency Earthquake Project advances were made by registering reconstructed houses in the name of both husband and wife (Background paper for 2006 Hazards of Nature Study). However, there are gender- related social

constraints in Pakistan beyond many other country situations evaluated by IEG that have contributed to slow progress on gender in many areas and call for realism.

While participatory approaches are inherent in community development interventions, they can still break down in implementation, especially when there is pressure to build structures, as would be the case in Pakistan recovery investment (IEG Community Driven Development Evaluation 2005). AR Green Fund are proposing a similar approach for building back a resilient economy in the wake of

### Box: 8.3

#### Woman drive some key value chains in agriculture

Although dates are grown in large quantities, the processing industry is at a cottage level in Pakistan. At present, there are over a dozen date factories and processing facilities in and around Rohri/Khairpur region, where a large workforce consisting of mainly women workers in the industry. During May to September, the region also attracts labor from neighboring districts as well as southern parts of Punjab and Baluchistan. Thus the industry provides employment opportunities for women in date palm orchards and in these factories in the region.

Gujranwala is the hub of seed industry in Pakistan, in this men dominated industry and one of the companies (Agricopak, Balochistan Seed Company) was run by a family originally from Quetta. The daughter of the owner, a foreign graduate, is now helping her father with his seed business a classical case where rural or urban women have risen and operating a successful business in the agriculture value chain. The author's interview with her was full of knowledge and provided the much needed links to seed industry in Baluchistan demanding quality seeds.



Najma Bibi from a small town in Pishin, Baluchistan is renowned in her small neighborhood for making apple jam (murabba) from the apples on her farm. Along with her friend Kafia, she has been making Murabba for home, and close relatives. With the encouragement and support of their husbands, the ladies have started taking small-scale orders from nearby places. Alongside Murabba, the family also prepares organic raisins from the grapes of their farms. The raisins are supplied to Afghanistan and Iran. They want to expand the organic raisins and apple jams business and hope to get support from public/private organizations.

Najma and Kafia are not the only ones doing this. Several women all across Baluchistan are involved in the small-scale production of jam and dried fruits but all the initiatives are self-driven and their access to knowledge and finance is limited. For these women to excel as well as the educated women quoted in the report, enabling environments have to be created. Farmer field schools should be used to reach out to such women of substance in the remotest of communities.

In the case of non-agriculture value chains, Rilli production and marketing is a woman dominated activity in Sindh. When JICA project was prioritizing value chain between agriculture and non-agriculture it received a high score, attributed largely to as a large section of poor women are involved Rilli Value chain.

**Source:** Adopted from reports where author was team of donor driven projects or Climate Technology Market Assessment in Pakistan, ITC, WIT/LUMS 2021

## Box 8.4:

### Women Drive some Key Value Chains in Livestock

In Sindh, livestock and dairy was prioritized by JICA value chain project due to the large rural population especially woman involved in the sector. Their contribution stand out in labor intensive operational activities-- milk production and maintenance of animals, producing and marketing of fodder, , and also the involvement of the entire value chains of producing from dairy products to labour intensive leather markets.

Younger urban girls have also demonstrated that agribusiness isn't just for the rural women. Sania Munif, a 14-year-old resident of Karachi, Sindh, Pakistan, is running a goat farm of her own. Sania's success was only made possible because of her compassion to know more about the animals and the support of her father in the process. Her journey as an urban farm girl started when she was doing her O-levels. Interested in observing multiple breeds and crossbreeds, she eventually was captivated by the Gulabi goats. This preference stemmed after seeing a YouTuber from Sindh rearing Gulabi goats and seeing their cheerfulness and attachment to the owner. Sania aims to pursue her undergraduate degree in the livestock value chain. For 2021's Eid-ul-Adha festival, her farm was able to sell around 650 goats. People from parts of Sindh and Pakistan get the Gulabi goats from her farm, which is encouraging her to see her future in the field.



Iqra Zaheen, a young girl from a small town in Mailsi, Vehari, Punjab was selected by British Council's COP26-Challenge Fund for a biogas plant installation in her hometown. She is pursuing her MSc Hons. in Climate Change from the Mohammad Nawaz Sharif University of Agriculture, Multan (MNSUA). The author of this article visited Mailsi, southern Punjab during the field trip to Multan and was able to see the biogas plant. The setup is shared between five households where cow dung is fed according to allocation. This has led to providing gas for cooking and lighting the house, a reduction in GHG emissions, through capturing the methane in biowaste, reduced use of natural gas, and provision of organic fertilizer for agriculture on their farms. Iqra plans to set up more profit-driven Agri-ventures for women in her region. Iqra and her brother highlighted the importance of their late father's dream and support for Iqra's achievements. With the technical support from Punjab Biogas, financial support of the British Council and Muslim Hands, MNSUAM, and the local community, she has been able to install 4 biogas plants in the rural area of Mailsi. This community-based project is benefitting 20 families, a local mosque, and over 2500 individuals directly and indirectly.

Housu Group dairy Field Assessment projects brings an experience from Abbottabad area where Doodhia aggregates fresh milk and re-sells the milk to bakeries, restaurants and hotels in Balakot, Garhi Habibullah and Muzaffarabad Markets to be used as milk or processed locally for final consumers. Since there is no bulk production and therefore no processor in the project area to add value to the milk by extending its shelf life and producing a variety of bye products. Woman lead households, a growing mini industry market yogurt, curd and Desi Ghee for their own consumption and market demand in the region and beyond. Establishment of mini milk processing plants leading to production of value added products like cheese, butter, Ghee and yogurt has hardly been explored in the region.

**Source:** Adopted from reports where author was team of donor driven projects



recent floods. Another example is from the Bank's Bangladesh Coastal Embankment Project, which involves significant embankment structures of the nature that may now be needed in Pakistan in some areas. The lack of community consultation resulted in public opposition to the alignment of embankments and was a significant factor in the implementation delays.

### Gender Sensitive Climate Smart Agriculture

For climate-smart agricultural practices to enhance productivity, there is a need to adopt a social system that enables such activities. This is not possible without social analysis (including gender analysis) influencing policies, projects, and other interventions aimed at achieving sustainable Climate Smart Agriculture (CSA).

Beuchelt and Badstue (2013) present a helpful framework for thinking about opportunities and trade-offs in interventions, policies, and actions aimed at enhancing gender and social equity in CSA (figure 8.3). The inner part of the circle shows key considerations that include livelihood assets, institutions, and broader food system activities (such as processing) and outcomes (such as food and nutrition security). The outer part of the circle shows the main program cycle steps of planning and design, implementation, and Monitoring and Evaluation (M&E). Opportunities exist to integrate gender into CSA initiatives at each phase of the project/program cycle as seen in Figure 8.3. The essential component listed below are

**Institutions** – formal and informal

**Lively hood Assets** - Human, natural, functional, physical, social

**Food Systems Activities** – farming systems, processing, marketing, value chain

**Food system outcome** – food nutrition security, health, poverty reduction, natural resources, sustainability

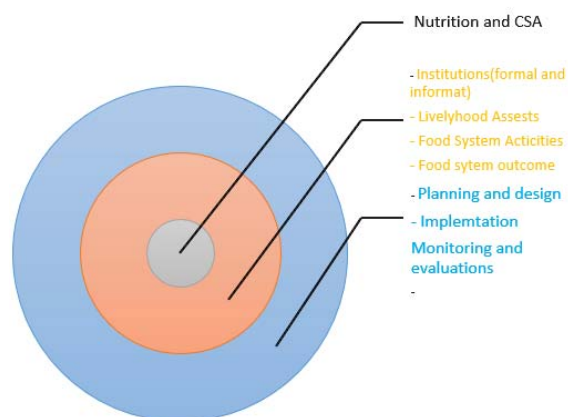
**Planning and Design**- gender analysis and tradeoff,

identification of alternative/compensatory measures  
**Implementation**- gender responsive or gender transformative approaches, if needed, alliance with actors mitigating tradeoffs.

**Monitoring and Evaluation** – participatory analysis, combining quantitative and qualitative analysis (sex disaggregation) joint learning and establishment of feedback loops

**FIGURE 8.3**

### Gender Sensitive CSA Framework



### Create Enabling Environment that Promotes Gender-Sensitive Policies

Over the last two decades as the focus on women within the environmental arena has grown, gender has been incorporated into national policies, project planning and development issues with a stronger voice. Given the importance of women in the rural economy, their contributions call for a need to enhance the integration of gender-specific policies into planning and Disaster Risk Management (DRM) at the district and provincial levels. Women are predominantly active in the livestock sector, whereas their contribution in areas such as agricultural production, food and job security, and disaster risk reduction remains to be acknowledged.

The key policy driver is to create off-farm employment. Adaptation through sustainable intensification and agricultural diversification may have to be

**TABLE 8.2**

**Strategic Path for the Role of Women in Agriculture and Livestock Value Chains**

	<b>Input Provision and Use</b>	<b>Production</b>	<b>Post-Harvest Processing and Storage</b>	<b>Transportation, Marketing, and Sales</b>
Role	<ul style="list-style-type: none"> <li>• Agro-dealers</li> <li>• Agro-agents</li> </ul>	Activities in agricultural production vary greatly across commodities and regions	Women's roles are highly varied but they often play crucial roles in processing &	Women are often limited to local transport and excluded from regional markets and
Constraints	<p>Access to inputs and their correct usage</p> <p>Access to technology and machinery</p>	<p>Access to training, extension services, and technical information</p> <p>Access to finance and mobile bank accounts</p> <p>Access to land ownership</p> <p>Access to cooperative leadership and participation</p>	<p>Access to quality storage</p> <p>Access to knowledge of best practices</p>	<p>Freedom of movement Access to infrastructure</p> <p>Access to information and networks</p>
Smart Solutions	<p>Support women in opening agro-dealerships and provide training on the use of inputs</p> <p>Develop targeted ICT outreach and products for consumer loyalty</p> <p>Enable use of mobile banking applications and pre-paid vouchers</p> <p>Increase consumer reach through women agro- agents</p> <p>Adjust training content and timing</p>	<p>Assess “who does what” among men and women in the value chain</p> <p>Increase supply chain sustainability through training adapted to women's schedules and mobility</p> <p>Seek targeted ways to increase women's access to finance</p> <p>Cooperate and leverage expertise of partner organizations</p> <p>Create economic incentives through trainings and direct payments</p>	<p>Access to quality storage</p> <p>Access to knowledge of best practices</p>	<p>Freedom of movement Access to infrastructure</p> <p>Access to information and networks</p>
Business Benefits	<p>Improved availability of products</p> <p>Connection of farmers with output markets through agro-dealers</p> <p>Increased consumer loyalty</p> <p>Increased and</p>	<p>Increased supply chain sustainability</p> <p>Maximized impact and profitability through targeted interventions</p> <p>Improved quality of products and outputs</p> <p>Increased crop yield and quality through</p>	<p>Reduced post-harvest losses</p> <p>Improved quality of production</p>	<p>Concentrated supplier networks</p> <p>Transparent and reliable supply chains</p> <p>New or strengthened</p>

**Source:** Adopted from Investing in women along agri businessvalue chain. IFC, October 2016.



combined, therefore, with the creation of off-farm opportunities, both locally through strengthened rural-urban linkages. Gender issues may need to be addressed – social norms often prevent women from pursuing off-farm activities. One possibility is developing value chains that provide business and employment upstream and downstream employment it generates. Social protection, education and active labor market policies are needed to mitigate many of the risks associated with diversification and migration. Further, policies need to be rolled out that facilitate access to technologies, goods and services small farmers need to meet product standards and safety norms.

We summarize the chapter by providing a matrix (table 8.2) that highlights the role of women in changing agriculture and livestock sectors, it identifies constraints in transformative efforts and provides smart solutions to mainstream gender issues in planning and policy discourse.

### Way Forward

We conclude this chapter by summarizing the role of women in agriculture and livestock, identifying the constraints it entails and outlining gender-smart solutions to address these constraints. It also highlights specific gender gaps and potential areas for private sector investment that may take into account: (1) Identifying the most relevant interventions and opportunities through gender value chain mapping (2) engaging non-farm actors such as seed providers and warehouse receipt programs to be promoted under different name tags (3) Consider hidden solutions that make markets more transparent and accessible, such as ICT-enabled commodity-aggregation platforms (3) Support an enabling environment by incentivizing nature-based solutions both in agriculture and water sector and (4) future priority recovery and reconstruction needs in the short, medium, and long-term for reviving agriculture under climate change where critical role

of woman can be recognized.

As women have potential to contribute to agricultural growth, it is a prudent policy for each provincial government for productive engagement in agriculture and livestock promoting home-based value added products on one hand but also in growing agro-industry to develop their human resources. Today Bangladesh garment industry is largely woman driven, we simply have not exploited the potential female labor market offers. Below are a few policy drivers proposed for future directions.

### Empowerment of Women

- At provincial levels, necessary support needs to be provided for the capacity building of women in promoting household food and nutrition security.
- It is important to facilitate increased women's participation in management decision-making and their advancement in agriculture, livestock and water sector.
- Enhancing younger women's capacities who are ready to contribute through demand-driven training and support must be encouraged. For this reason, men and social institutions to reduce resistance to transformation in women's roles.
- Women have been quietly becoming water visionaries, academics, scientists and researchers. But somehow, their role in agriculture and livestock has been overlooked. Unfortunately, residence base the doors of decision-making bodies on water and the premier water and other related sector institutions of the country remain largely closed to them

### Participation in Production and Marketing

- Women's participation in the agricultural production system should be facilitated through access to agricultural practices and technologies that support climate-smart agriculture and livestock

- The government is advised to put in policies that encourage the participation of rural and underprivileged women in the production of crops and livestock, particularly in agro-processing and agri-business activities to improve economic well-being.
  - The Government can also encourage women's participation in various extension programs like training, farmers' rally, farmer markets, food banks and workshops.
- activities such as residence-based or homestead gardening, post-harvest activities, seed production & preservation, nursery, bee-keeping and food processing.
- The government should also provide micro-credit support to women for small-scale agro-processing, storage and preservation.
  - Efforts need to be made to ensure non-discrimination in wages.

### **Income Generation**

- The Government needs to provide credit or micro-financing to women for agricultural





**Chapter**

**09**

**China's Economic and  
Technological Developments  
and Role of Women**

# China's Economic and Technological Developments and Role of Women

Dr. Daud Ahmad

## Introduction

This chapter takes an overview of China's economic development over the last four decades, which is a phenomenal story. The key policy instruments and government interventions used are briefly described. It then looks into China's progress in Science and Technology and how it has become a world leader in this field. A significant factor in China's overall development has been women's participation and contribution all across - labor force, higher education, science and technology, business and governance, etc. Today, Chinese women are important participants, contributors and beneficiaries of national economic development. This write-up is a desk study based on available online information and the writer's long working experience in China.

## China's Development as a Global Economic Power

China was a low-income country till the early 1980s with a per capita income of \$ 290, about the same as that of Pakistan. Starting in 1978 China, under Deng Xiaoping, embarked on a major program called “Reforms and Opening Up”. These reforms were intended to jumpstart China's economy and integrate it into the global systems. The next four decades saw rapid economic growth and transfor-

mation of the Chinese society of which there is no precedence in history. The basic thrust of the program was to move away from a closed, centrally planned system to a more market-oriented one that created links with the global markets. The main elements of the reforms included: the end of the commune system, expansion of private business and increased foreign investments. These initiatives resulted in a huge rise in China's annual Gross Domestic Product (GDP) growth rate that continues even today. China's economy grew at an average rate of 10 percent per year during the period 1990–2004, the highest growth rate in the world. It is still growing but at a lower rate. Measured on purchasing power parity (PPP) basis that adjusts for price differences, China in 2017 stood as the largest economy in the world, in terms of size, surpassing even the United States (U.S). China became the world's largest exporter in 2010, and the largest trading nation in 2013. In the process, China lifted over 800 million people out of poverty and made significant improvements in health, education, and provided access to other services over the same period.

The key elements of the Chinese reforms can be listed as maintaining political stability at all costs; focus on the grassroots, bottom-up reforms (starting



in agriculture, unlike industry and finance tried in other countries). It promoted large-scale rural industries despite their primitive technologies and environmental costs; used manufactured goods for technology and machinery import, instead of commonly used natural resources by other countries. Enormous government investments for supporting infrastructure buildup was followed while backing a dual-track system of government/private ownership. The focus remained on commercialization, not on wholesale privatization. This made it possible to make a gradual move up the industrial ladder, from light to heavy industries, from labor- to capital-intensive production and from manufacturing to financial capitalism. This approach was supported by a series of well thought through initiatives of which the key ones are listed below.

**Special Economic Zones (SEZs):** Established in several cities in early the 1980s to attract foreign investments and advance technology, for which tax incentives were provided. SEZs in mainland China are granted free market-oriented economic policies and flexible governmental measures. This allows SEZs to utilize economic management which is more attractive to foreign and domestic businesses. The Shenzhen SEZ, the front runner of the program, was a huge success. Today, there are well over 20 SEZs in China. The economies of cities like Shenzhen have grown to rival the entire GDPs of other countries.

**National Household Responsibility System:** This key policy started in 1981. It ended the Mao's era system of quotas which set targets on how many goods farmers could produce and shifted the responsibility of production and profits to local managers. This paradigm shifts rapidly increased outputs and family incomes. This policy initially implemented in the agriculture sector quickly spread to other sectors.

**Coastal Development Strategy (1989):** This promoted the development of eastern coastal provinces as a “catalyst” for the entire country's modernization. The coastal provinces developed remarkably within a decade. As a consequence regional disparities became a national issue.

**Shanghai and Shenzhen Stock Exchanges:** Opened in 1990–99, it created links to global financial markets. Currently, these stock exchanges are worth nearly US \$10 trillion in total market capitalization.

**National “8-7” Poverty Reduction Plan (1994–1996):** This plan successfully lifted over 400 million poor people out of poverty through this endeavor.

**Grasp the Large, Let Go of the Small (1996):** This was a major initiative to decentralize authority to downsize the massive state sector. Policymakers were urged to maintain oversight over large state-owned enterprises, e.g. railways, but give them the flexibility to operate in a “commercial mode”. Meanwhile, the central government was encouraged to relinquish control over smaller States Owned Enterprises (SOEs) to make those commercials.

**Western Development Strategy:** Initiated in 1999, this aimed to foster growth and development of the less developed western provinces by improving infrastructure linkages and promoting industries and trade comparable with their comparative advantages. It was an effort to “Open Up the West”; comprising 6 provinces, 5 autonomous regions, and 1 municipality for those to gradually integrate into the Chinese economy.

**Belt Road Initiative (BRI):** First announced in 2013, BRI reflects China's grand vision of connectivity extending from China to the Middle East, Africa, Southeast Asia and the Baltics in Europe. Under BRI, China planned to invest nearly US \$ 3

trillion, over the next 30 years or so, in nearly 60 countries all over the world to establish possibly six different economic corridors. The underlying objectives of BRI were to address the emerging challenges faced by China, like leveling off the GDP growth rate from double figures to 5-7 percent; surplus labor force (nearly 1.2 million in 2016); huge surplus of construction materials production capacity; large foreign exchange reserves and growing regional disparities (west and south underdeveloped). BRI aimed to redirect domestic capital and overproduction capacities for regional infrastructure development and trade; establish alternative trade routes; create new markets and foster regional development. China Pakistan Economic Corridor (CPEC) is a key component of this ambitious program. BRI has now been under implementation for nearly 10 years; results to date are mixed.

In summary, China's massive economic growth was achieved through a comprehensive set of policies, programs and government interventions which were carefully designed, gradually implemented and modified as necessary along the way. The powerful central government relinquished operational authority to localities and private enterprises and focused instead on policy/program formulation and monitoring of output results. This was an enormous program of "Chinese style privatization" in which the introduction of commercial behavior was the key objective and ownership issues were kept muddled.

### **China's Technological Development**

This section takes a brief overview of China's achievements in the field of science and Technology (S&T), the policy instruments and key government interventions used to support a massive "private sector" dominated development. This development phenomenon is no less impressive than China's overall economic growth. In the last couple of decades, S&T has become the main engine of

growth for the Chinese economy. The Chinese government viewed S&T's transformation as a fundamental part of the socio-economic development as well as for national prestige.

Despite being a relatively low-income country, China by its efforts, managed to develop S&T rapidly since the 1980s, with major scientific and technological achievements. It is no longer the "world's workshop". China's achievements in areas such as manned space ventures, super-fast trains, electric cars, and the world's fastest supercomputer highlight its ascendant. As late as 2010, the then USA Secretary of Energy, Steven Chu, described China's technological achievements as equivalent to the "Sputnik moment" for the United States. Parallel rapid advances in education, academic publishing, infrastructure, high-tech manufacturing, patents, and commercial applications contributed to the S&T development. China is now being acknowledged as a world leader in a number of these areas.

China's rise in science and technology is not an accident. Successive Chinese leaderships have seen S&T as integral to economic growth and have taken steps to develop related academic and infrastructure programs. Deng Xiaoping's assertion in 1978 that science and technology modernization is the "key to modernization" served as a catalyst. A strategy for "Rejuvenating the country through science and education" was adopted in 1995. An "innovation drive strategy" promoted by Mr. Xi Jinping was recently introduced. This reflects sustained support by the successive Chinese leadership in the sector.

Like the economic reform program, China undertook the S&T development through a set of long, well-thought-through, researched and deliberated inputs. Development of S&T has been a key objective of successive 5-Year Plans; China is now in its 14th Five Year Plan period (2021-25). Some key initiatives under these plans that impacted S&T are highlighted below.

**The 863 Plan:** or State High-Tech Development Plan is named after its date of establishment (March 1986, 86/3 by the Chinese date format). The program was intended to stimulate the development of advanced technologies in a wide range of fields to render China independent of financial obligations for foreign technologies. Under the plan, about US\$200 billion was to be spent on information and communication technologies, of which US\$150 billion was earmarked for telecommunications. After its implementation during the 7th Plan period, the program continued to operate through the two subsequent plans, with state financing of around 11 billion RMB and an output of around 2000 patents (national and international). Among the products known to have resulted from the 863 Program are the Loongson computer processor family (originally named Godson), the Tianhe supercomputers and the Shenzhou spacecraft.

**The 15-Year Science and Technology Plan:** Initiated in 2006, this plan had specific objectives and goals. It called for China to become an “innovation-oriented society” by the year 2020 and a world leader in S&T by 2050. It committed China to develop capabilities for indigenous innovations. The plan provided for an investment of 2.5 percent of China's growing GDP in Research and Development (R&D), up from 1.34 percent in 2005. It called for S&T's contribution to economic growth to rise by more than 60 percent and limit dependence on imported technology to no more than 30 percent.

**The 12th Five-Year Plan (2011-15):** This plan has brought in nearly \$1.7 trillion to several strategic technological sector investments, including renewable energy, biotechnology, efficient and environmentally friendly technologies, electric cars and a new generation of Information Technology, etc.

**The 13th Five-Year Plan of China (2016 - 2020):** This plan stipulates three goals: i) develop China

into an innovation-oriented country by 2020, ii) place China among the top innovation-oriented countries by 2030, and iii) turn China into a technological innovation powerhouse by 2025.

The three key supporting sectors underpinning the development of S&T are higher/science education, Research and Development (R&D) and physical infrastructure to facilitate the commercialization of new technologies. China did not fail in developing these areas either.

The achievements in institutions of higher learning are evident from the large number of universities and research institutes. These have added to the number of graduate and post-graduate scholars who have contributed to numerous scientific publications and innovations. Higher education in China has played an important role in economic growth, scientific progress and social development by bringing up large scale of advanced talents and experts for the construction of socialist modernization. China's higher education statistics have exploded in the past twenty-five years. In 1990, only 4 percent of 18 to 22-year old were pursuing higher education; by 2014, that number had increased almost tenfold, to 37.5 percent. The steep improvements in S&T performance were underpinned by significant efforts in science and engineering education. China is now the world's number one producer of undergraduates with science and engineering degrees, delivering almost one quarter of first university degrees in science and engineering globally. Since 1998, ten universities (e.g. Beijing, Tsinghua) have been selected by the Chinese government to become “world-class” institutions. To achieve this goal, the government promised to increase the education allocation in the national budget by 1 percent a year for each of the following five years. China now employs an increasingly large labor force of scientists and engineers at relatively attractive salaries and competes with the United States of America (USA) in producing science and engineer-

ing graduates.

National spending on Research and Development is a well-established development indicator. Chinese R&D investment has grown remarkably over the past two decades, with the rate of growth greatly exceeding that of the USA and European Union (EU). China is now the second-largest performer in terms of R&D spending and accounts for 20 percent of worldwide R&D expenditure. During the period 2000-2015, R&D spending, witnessed a staggering 10-fold increase. The Research outputs have also been sharply increasing, reportedly making China next to the USA in the yearly production of scientific papers.

Infrastructure development is another prerequisite for the endogenous growth of any country. Broadly speaking the term infrastructure includes roads, railroads, ports and air transport to provide internal and external linkages as well as electricity and communication networks. China has made great strides in infrastructure development in the last three decades, and it currently ranks as a world leader in this field. China achieved this with massive spending on infrastructure development, annually nearly 9 percent of its Gross Primary Product (GPP).

The above shows a serious and sustained commitment of successive Chinese leaders to the development of S&T. The results are there to see on the ground. China has forged ahead of many countries in almost all basic indicators of growth in science and technology, such as research spending, several scientific publications, manpower in S&T, etc. As a result, Chinese industries are getting closer to the technological frontier in conventional areas such as electronics, machinery, automobiles, high-speed railways and aviation. Technological innovations are also emerging in areas like new and renewable energy, advanced nuclear energy, next generation telecommunication technologies, big data and supercomputers, artificial intelligence, robotics,

space technology, etc.

## **Women's Role in China's Development Phenomenon**

Nearly a hundred years ago, Chinese women had to face the custom of 'foot binding' which involved breaking and tightly binding the feet of young girls to change their shape and size. Foot binding was a painful practice that limited the mobility of women and resulted in lifelong disabilities, yet it was considered a status symbol and a mark of feminine beauty. It was not until the early 20th century that the practice began to die out, following the efforts of anti-foot-binding campaigns. The international campaign for gender equality started in the early 19th century; March 8 was first established as International Women's Day in 1910. For more than a century, women across the world have fought hard for gender equality and for their advancement. The efforts and achievements of Chinese women in this regard are admirable. Women in China have made remarkable progress in enhancing their social and economic status, despite deep rooted cultural traditions favoring males. Traditional Confucian thinking does not sit easily with this notion of gender equality. Yet women today, though still lagging, are playing a significant role in all aspects of the Chinese economy. In the process of national economic and social development, Chinese women have made outstanding contributions in various fields, such as economic development, poverty alleviation and science and technology.

The rise of Chinese Women in social and economic life has been through a gradual process initiated by the active participation of women in the growing economy and supported by various government policies. The Chinese Communist Party (CCP) has supported women's liberation since the beginning of the People's Republic of China (PRC). Mao Zedong's famous saying, "Women hold up half the sky" served as a catalyst. In 1995, CCP General



Secretary Jiang Zemin made gender equality an official state policy. China's constitution now guarantees women "equal rights with men in all spheres of life". In the process of national economic development, Chinese women have made significant contributions and advancements. Chinese women have worked their way up through achieving education and involvement in such areas as business, governance and science and technology. Ranging from computer algorithms to advanced technology, the contributions of Chinese females has been remarkable.

Chinese women population, currently about 690 million, account for one-fifth of the world's female population. The male-to-female ratio in China is about: 105:100. At present, female life expectancy is a remarkable 80 years, compared to a mere 56 when PRC was founded in 1949. The maternal mortality rate has fallen continuously; currently 18.3 per 100,000, a decrease of nearly 80 percent in the last 3 decades. Women's participation in the labor force in 1949 was a low 10 percent. The economic reform program, starting in the late 1970's, created new job opportunities in agriculture and small industries which women availed; their labor force participation rose to nearly 70 percent towards end of the century. Female labor force participation later started to decline as women attained higher education and better jobs; it is currently around 60 percent, which is still the highest in Asia. The 'One-Child Policy' of China, initiated in 1978, had a secondary objective of the enhancing country's labor force and involving women therein. As China started to face labor shortages, the law was relaxed to a two-child policy in 2015 and has since been abolished. The gradual improvements in maternal and child health care legal framework and health services enhanced the health status of Chinese women.

China has made remarkable progress in reducing female illiteracy. The illiteracy rate of the female population, aged 15 and above has fallen from 90

percent before the founding of the PRC in 1949 to around 7 percent now. The 1986 Nine-Year Compulsory Education Law and the 1995 Education Law of the People's Republic of China established equal opportunities for women to pursue basic and eventually higher education, including Sciences and Engineering. These measures contributed to a rise in the literacy rate of women and to reduce the gender gap in education, which now has essentially disappeared. As China's education system developed, so did female participation therein. China currently has the largest higher education system in the world with nearly 40 million students and over 3,000 universities and colleges; women constitute 52.5 percent of enrollment in these institutions.

Women's participation in the high-tech sectors has also been on the increase. They are now making impressive achievements. Greater policy support for higher education is leading to more women becoming scientists, engineers, business entrepreneurs and leaders. The fields of science and technology have aroused interest and enthusiasm within their mindsets. There is an increase in female enrolment in these fields. The contribution of women in science and technology is not only important in enriching their lives, but through their effective participation in these fields, they are contributing to promoting the well-being of the community and nation as a whole.

Women in China are rushing ahead when it comes to entrepreneurship; China currently is reported to be home to an astonishing two-thirds of the world's top female billionaires. In the fast-growing new economy sector, the proportion of female entrepreneurs has been rising, with 55 percent of internet start-up founders being women. Women in various roles from business owners to researchers are now a force to be reckoned with in China and around the world as well. With female labor force participation of over 60 percent in China, the country's women contributed 41 percent of GDP in 2017, a higher percentage than in most other countries including

the US. Women are reported to hold 35 percent of the senior management positions in China compared to 20 percent in other parts of the world including in the U.S. and Europe. It is also interesting to note that women in China are not dominant just in human resources and accounting like in many countries of the West. About 20 percent of the women in management in China are serving as Chief Executive Officer (CEOs). Also, a significant number of partners with private equity firms in China are women.

On the governance front, women are still lagging behind, especially at the most senior levels of China's political system. Of the nearly 92 million members of the CCP, only 30 percent are reportedly female, just under 28 million. The 25-person Politburo, the Party's top decision-making body, currently has only one female member. However, at the lower level of governance, women are doing better. Women are now mayors or vice mayors in 250 of the 514 cities in China. Over 40 percent of Beijing Municipal employees are women.

Again, Chinese women's progress was a result of sustained government support through policies and programs. This included laws that ensured equal access to women in the field of education. The massive government investment in education and research facilities created an enabling environment. Much credit also goes to the young female population which availed this opportunity in a big way.

## **Conclusion**

There is much to be learned by other developing countries from China's remarkable growth phenom-

enon in economic, social and scientific fields. This achievement is a result of the long-term strategic vision of the successive leaders and a stable political system, which enabled continuity in policies and programs. Delegation of responsibilities, once controlled centrally, to provincial, municipal and prefecture and local level was essential to involve them in the process. China undertook "privatization" of a massive portfolio of state-owned enterprises by setting aside the ownership issue and focusing on their performance/outputs through commercial behavior. Large government investments, with clear output objectives, in essential supporting areas like education, R&D, and infrastructure created an enabling environment. China realized early that national development and growth is not possible if the female half of the population is not involved in the process. To do this, cultural and legal barriers to women's participation in the labor force, higher education (including S&T), business and governance were addressed. China showed to the rest of the world that democracy and laissez-fair do not automatically create global markets. The approach of many other countries to leap forward by investing in large capital-intensive industries, setting up the modern financial system and full-fledged privatization of state enterprises may not be the right approach. This top-down approach has failed in many developing countries.







**Chapter**

**10**

**Science and Development:  
Gender Perspective**

# Science and Development: Gender Perspective

Fauzia Nasreen

**D**uring the last few decades, the perspective on security has undergone a significant transformation. Human security has emerged as a critical subject in the context of sustainability as borne out by the Global Development Agenda 2030. The seventeen Sustainable Development Goals (SDGs) adopted in 2015 aim to comprehensively address the challenges of sustainability confronted by the world today. These goals clearly reflect the aspirational desire and the urgent need for global solidarity in reversing the dangerous path on which the world finds itself at this juncture. The inextricable link between sustainable security and sustainable development requires an innovative approach for practical solutions. The centrality of human security can no longer be neglected and very appropriately this approach is interwoven within the sustainable development goals. They call for collective actions by governments, civil societies, international organizations, financial corporations and business leaders so that “no one is left behind”.

The implementation and achievement of the SDGs require effective and efficient governance structures, nationally, regionally and internationally. Solidarity and cooperation alone can salvage humanity and planet earth from the precipitous downward slide.

Geopolitics and power competition regrettably are taking a centre stage diluting efforts to tackle the grave threats the world is facing. Proponents of major power cooperation argue that unless sustainability issues are collectively addressed, survival would be at stake. War and conflicts such as the one in Ukraine has already shown how the world is interlinked. Energy insecurity, adverse impact on climate, food insecurity and the global economic recession are upending whatever gains may have been achieved in the past. The after-effects of the Coronavirus Pandemic and the looming danger of the recurrence of another spell of infectious disease demand priority attention of world leaders and leading nations for vigilance and collaboration. Regrettably, that collective spirit is lacking as has been evident from the divergences on climate change issues.

The world population growth is taking place at an alarming pace and outpacing the resources. The inequitable distribution of wealth has created a dangerously wide divide. As the world population reaches 8 billion mark, sustainability questions have acquired urgent relevance. The United Nation (UN) Secretary General has noted in his article “Eight billion people; one humanity” (Express Tribune, 14 November) “a handful of billionaires control as

much wealth as the poorest half of the world” and “As the world has grown richer and healthier in recent decades, (the) inequalities have grown too.” He calls for bridging the “yawning chasm between the global haves and have-nots”. The onset of the fourth industrial revolution has further widened the broad and vicious aperture between the rich and poor. In order to become part of the technology world, resources, both human and financial are vitally important. The interconnectivity between geo-economics and human security can no longer be overlooked. This brings into focus the burden of debt on some countries in the Global South constraining meeting development priorities.

While some countries are experiencing an aging population there are other countries confronted with demographic change. Unless the burgeoning youth including girls and women, mostly in developing countries, is well trained, skilled and suitably capable, overall development and growth will remain retarded. Since women and girls constitute at least 50 percent of the total population they represent a vital human resource. Without their full participation and leadership in all sectors of economic, science, social and political life this endeavor would face serious hurdles. Specially in the current era of technological revolution, women can spur scientific transition which is so urgently required for sustainable development and socio-economic stability. For making countries climate resilient, science assumes added importance. Climate and climate-induced disasters affect women and children more than men. Science-based problem solving techniques and awareness rooted in scientific knowledge could help in mitigating some of the hardships.

Therefore, the education of women and girls is a necessity that can no longer be ignored. Access to quality education and opportunities for them are vitally important for a robust and resilient socio-economic viability. Since the world is witnessing

momentous developments in science related fields labelled as STEM (science, technology, engineering and mathematics) and every aspect of our daily lives is being affected by innovations in science, STEM education must be made accessible to women. Ignoring the role and talent of women especially in science militates against the urgent need to address the perilous issues threatening world sustainability. Climate crisis, environmental degradation and its impact on human health, combatting infectious diseases, food insecurity and water scarcity also require science based solutions. This has been amply borne out during the recent coronavirus pandemic and the speed with which all concerned in the field of science developed vaccine and other medical solutions as a response to the virus. Women have been at the forefront underlining the need for more trained human capital to combat such threats.

Moreover, technological transformations have compelled societies to re-orient and reshape their work-force. Research, Development and Innovation has become indispensable for the progress of societies, countries and regions across the world. Information technology, machine reading, computer science, big data and artificial intelligence have revolutionized human life. This phenomenon is also redefining the working environment with various disruptions affecting individuals and societies in different ways. The education systems and institutions are challenged in redesigning their curricula and training programmes prioritizing Research and Development (R&D), knowledge generation and commercialization. In this effort public-private partnerships and alignment of R&D with industry and business are key. The role of gender and empowerment of women for exploring new fields in STEM will have a salutary impact. It is pointed out in the latest United Nation Educational Scientific and Cultural Organization (UNESCO) science report, 2021, that “only one in three researchers is a woman” and in the engineering field only 28 graduates are women whereas in Artificial

Intelligence only 22 professionals are women.

The question arises what are the impediments, if any, holding back the full utilization of the women's force particularly in science. The Unesco Institute of Statistics (UIS) data quoted by UNESCO Institute of Statistics, indicates that less than 30 percent of the world's researchers are women. It emphasizes the need to explore what are the dynamics that shape women's decision to pursue or otherwise STEM careers. This inter alia, includes the social factors, such as family compulsions and the overall working environment. The UNESCO Science Report: Towards 2030 released in 2017 maintains that socio-economic factors and gender based discrimination prevent girls and women from exercising their choices in education. This is also apparent in STEM disciplines. Therefore, gender dimensions of policies in the application of science, technology and innovation (STI) for development require special attention. Furthermore, neglecting the inquiry into what leads to under-representation of women in STEM is relevant as it results in the loss of "critical mass of talent, thoughts and ideas" that are essential for the realization of full development potential (Stem and Gender Advancement-SAGA; working Paper II).

Two prominent handicaps in the context of the advancement of women in science relate to cultural and societal orientations and public policy. The cultural barriers are generally skewed against women. In addition to the patriarchal reasons the lack of educational facilities especially in remote areas creates handicaps. Moreover, education of boys and men is given preference over education of girls and women. The argument generally given pertains to role differentiation as girls have to get married and their defined role is to raise a family. Science education somehow does not fit within the role definition for women. Even if women acquire degrees in these disciplines and pursue their careers in specific fields, the unfriendly working environ-

ment is a major disincentive. More awareness about the dividends of pursuing smart development and the immediate gains that can be accrued through science education of women could help in changing attitudes towards women studying science subjects. The key role of digital technology, green growth and climate resilient measures demands inclusivity - a central pillar of the SDGs. Target 5.5 makes women's full and effective participation, opportunities for leadership at all levels of decision-making an imperative. For which 5.c makes it incumbent upon the all adoption and strengthen of public policies and enforcement of legislation for the promotion of gender equality.

The aforementioned argument leads to the critical question how have the outlined factors impacted the implementation of the SDGs as well aspiration for inclusive development and "reaching furthest behind first". A clarion call exists for creating peaceful societies with environmental and economic sustainability and respect for the ecosystems. SDG 4 clearly talks about inclusive and equitable education for all. To overcome the sustainability challenges access to education more importantly integration of women in science education can be instrumental in reversing the adverse trends related to climate change and disasters, food and agriculture sustainability, smart industrial growth and productivity. In all these sectors women are associated and involved in big and small ways. Their reliance on the ecosystem is much more than on men as they work though in informal manner in these sectors. Science can provide answers to these challenges and technically skilled and equipped women force emerging from the science-based education can transform their lives in a huge manner. Hence the case for inclusion of women in research and development and STEM education is strong.

Conclusion: Stereotyping roles for women is detrimental to the advancement of women. STEM disciplines have become an indispensable part of our



daily lives. Holding back girls and women from venturing into these fields both in education and careers is a self-defeating exercise. Smart economies and smart development hinges on the efficient utilization of human capital. As women confront sustainability challenges in everything that they do, science solutions can help them in bringing about modest change in their working habits and environment. In higher education and professional careers, the visibility of women in leadership and at decision-making levels will positively impact societal attitudes. It will help in popularizing the pursuit of science disciplines by women. Their contribution to planning and development, industrialization and production, agriculture and sustainable town and urban planning will make habitats of more friendly use environment for them. This could in turn bring about a new approach to women working in different fields and enable their circulation within towns and cities.

Digital technology has made it possible for women to make an impact in different sectors. Computer science and software innovation demands are growing worldwide. Since women are gifted with dexterity and attention to details, there is a very promising potential for them to bring about breakthroughs in technological fields. Some of them are already utilizing their skill and knowledge in cutting edge technology based on data analytics and computer science. Medicine and biotechnology are critically important fields with far reaching implications for sustainability. Women committed to R&D in these fields can contribute in a game changing way to agriculture, medicine, industry and other areas. They can become a source for providing economic strength to the economy. As major strides have been made in the field of women entrepreneurship and gradually acceptability ratio has gone up, so can happen in science related careers for women. The benefits of it in tangible terms can be made more visible in the public domain. Sensitizing individuals, society and institutions on the possibilities and

recognition that can come with it will significantly and incrementally bring about a behavioral change including the cultural orientation of societies.

Policies are instruments for creating space for women in science based fields especially STEM disciplines. Women scientists should be seen in decision-making positions such as in Science Academies and other scientific organizations. Acknowledgment of their contribution and recognition of their abilities will receive a boost if specific policies are made for their recognition. Incentives that encourage more women to pursue Research Development and Innovation (RD&I) and STEM education should form an integral part of public policies and policies of various institutions. The coronavirus and recent climate induced disasters have created an urgency for allowing women to contribute along with their male counterparts toward finding science-based answers to the catastrophic impact of these challenges. Policies that aim at identifying and locating capable women in science related fields would help in mitigating some of the threats that individuals and societies currently face. As believed if sustainable adaptation is to be successful, the focus has to be on the role of women as they play a central part in every productive area of the ecosystems. Their knowledge, voices and traditional knowledge can help in a big way in dealing with challenges. A holistic policy framework recognizing the role of women in providing science based solutions is need of the hour.



**Chapter**

**11**

**Empowering Women  
through Vote:  
A Case for Good Government**

# Empowering Women through Vote: A Case for Good Government

**Babar Yaqoob Fateh Muhammad**

**E**lectoral democracy invokes, in its very essence, the fundamental right to Good Government. To make it more pragmatic, Grayling has termed this to be a right of Good (enough) Government.<sup>1</sup> The argument goes that unless there is a good enough government, the door to the other rights remains shut (or partially so). Theoretically speaking good government, as an outcome of democracy, is a right because it creates and ensures an environment where rights, for instance, of assembly or association or education or protection against various forms of discrimination are attained and protected. To reap the benefits of the *Right of Good Government*, a fair but competitive electoral process is mandatory. It is well recognized that the grant of equal rights to men and women has to be seen in the human rights context 'It is an essential tenet of any democratic framework.'<sup>2</sup>

In this context, for the electoral process to be a fair and equitable implementation of the universal franchise is the starting point. In the colonial Indian sub-continent, the franchise was limited to the co-opted ruling elite. At no time, suffrage exceeds one-fifth of the population. According to Shani and Ornit,<sup>3</sup> making a joint electoral roll based on a universal franchise broke the ground for ushering in democracy in India after independence. Indeed, the

failure of the state to prepare an inclusive, all-comprehensive and accurate electoral roll defeats the very idea of a universal franchise. This form of disenfranchisement is the primary source of disempowerment by denying sections of society the right of voice and thus the right of good government. Women in Pakistan have suffered a lack of voice among other factors through being disproportionately unregistered as voters. Even for women registered as voters, there are barriers to participate in electoral process as voters, impacting their turnout and as an equal partner in party politics, impeding their involvement in the process.

In the proceeding paragraphs, we shall present an overview of national and international legal commitments and literature on barriers and obstacles to women's participation in politics. Our basic thrust, however, will be to dwell on the failure of the state in registering Pakistani women as voters according to their ratio in the population. In this regard, existing trends shall be identified and ways forward suggested that women in Pakistan are empowered through adequate enfranchisement.

## **Legal Framework**

Ironically, the Election Commission of Pakistan,

mandated by the constitution to hold fair polls and register votes in the country, conceded in its 2nd Five Year Strategic Plan (2014-2018) that fair elections were possible only if equal opportunities were made available to all segments of society. This realization gets all the more starker if we go through the Election Commission stating that “12.17 million eligible Pakistani women are not registered to voters' lists”.<sup>4</sup>

Women represent only 43.7 percent of citizens on the electoral rolls this gap is likely to increase leading to the disenfranchisement of many women in the next General Election 2018. Sadly, the disenfranchisement of a large number of women did take place in the 2018 elections. The following figures in Table 11.1 are a reflection of this phenomenon.

**TABLE 11.1**

**Number of Voters (in millions)**

Total Voter	Male	Female
105.96	59.22	46.73
100%	56.7%	43.3%

**Source:** Election Commission of Pakistan (2014-2018)

Despite all the good intentions of the Election Commission, this form of disenfranchisement continues to exist. Female population being thus disenfranchised is denied the basic right of protection against discrimination based on basis of sex. The state institutions which are bound under Article 25 of the Constitution to protect against such discrimination are also signatories to some important international protocols and conventions. In this regard Article 7 of Convention on Elimination of all forms of Discrimination Against Women (CEDAW) calls for the elimination of discrimination against women in the political and public life of the country ensuring women<sup>5</sup> to vote in all elections, to participate in the formulation of government policy, hold public offices and to participate in non-

governmental organizations in the public and political life of the country. Likewise, Article 3 of the International Covenant on Civil and Political Rights demands<sup>6</sup> equal rights for men and women to enjoy all civil and political rights. Denial of fundamental rights of franchise through non-registration of voters is discriminatory in terms of Article 25. It also negates commitments made under international human rights protocols. Commonwealth Secretariat in its Compendium of Election Management has laid down a clear principle<sup>7</sup> that an election cannot be acceptable where many people were excluded from registering to vote. In this sense non-registration of women as voters become malpractice based on discriminatory failure on the part of the state which is otherwise responsible for the equal empowerment of women.

Not less significant is the Fifth Sustainable Development Goal as identified and prescribed by the United Nations. The said Fifth Goal calls for gender equality and empowerment of all women with an aim for men and women to be represented equally in national political leadership.

Most importantly, under Article 218(3) of the Constitution, the Election Commission is bound to ensure to conduct of elections honestly, justly and fairly. The constitution also mandates the Election Commission to prepare electoral rolls for election to the National Assembly, Provincial Assemblies and Local Governments in terms of Article 219. The question before us, therefore, is whether elections can be held fairly in a situation where electoral rolls have a large number of voters missing. Unfair elections held on the basis of inequitable electoral rolls cannot guarantee women the right to Good Government as defined by Grayling.

**Situation Analysis**

It has been observed that “voter registration” has been historically used to disenfranchise certain

classes and groups of individuals". Obstacles to voter registration amount to electoral<sup>8</sup> manipulation. By denying the right to weaker sections of society. The long-term impact of this practice has far-reaching socio-economic consequences. The Black populace of the USA has<sup>9</sup> suffered similar if not more, obstacles in being ineligible to vote. Its impact continues to be felt in the American political and economic life of Black Americans. Likewise, obstacles to women's franchises in Pakistan have had implications for their role in public life.

For bringing women as registered voters at par with men, as per their population ratio, socio-economic impediments and institutional barriers have to be identified and minimized if not done away with, once and for all. It is necessary, again, not only for the fairness of the elections but also for the grant of right of Good Government. There is even evidence to suggest that the protection of electoral rights may have economic benefits for the affected groups of people. In the USA, for instance, Voting Rights Act of 1965, narrowed the wage gap between white and black populations where it was most strictly enforced.<sup>10</sup> In case of women participation in political process the dividends can be even more significant. This has the potential to impact political and public policy choices. Voice is an important determinant of the empowerment of a social group. It is said that empowering women means accepting and allowing women who are on outside of decision-making process to be inside.<sup>11</sup> It puts a strong emphasis on participation in political structures and formal decision making and in the economic sphere, on the ability to obtain income".<sup>12</sup>

A study carried out by the United States, Institute of Peace in July, 2019 termed this as Pakistan's Participation Puzzle which examined the voting gender gap. The study equated the situation with Pakistan's rank in the UN Global Gender Gap Index as per which the country was second lowest in 2016.<sup>13</sup> . Women's participation in political life is recognized

as an essential factor of gender equality and according to various studies, this gap is particularly wide in Pakistan. This gap has been signified by 11 million less women exercising their right to vote than men. The most interesting finding of the study, however, is that the gap is bigger in metropolitan cities. A similar finding was reflected in a 2021 study called "The Empty Province of Urbanization"<sup>14</sup> by the same authors. Both studies have advocated robust canvassing to bring out women to vote, In the latter study, authors list individual, household and contextual determinants of women's political participation. Generally speaking, literature is rife with education as a key individual level determinant in women's political participation. Labour force participation has also been identified as a factor affecting women's role in politics. Likewise, role within a household has been identified as another determinant. Among contextual factors violence in voting areas, women's position in party structures and political environment are discussed as important factors. In another analysis, Sarah Khan has dwelled upon similar factors impinging on<sup>15</sup> women's role in Electoral Politics, which has been described as an account of exclusion. There is less emphasis on institutional and bureaucratic factors. It has been argued elsewhere that correlation between educational attainment and turnout of women voters has not been proved, particularly in mega cities like Lahore where basic issues such as availability of clean drinking water, and sanitation have not been addressed. Furthermore, being absent from campaign tend to discourage women from coming out to vote.<sup>16</sup>

Elsewhere, literature on electoral politics usually lists three areas posing obstacles to women's participation in the political arena. These have been identified as political, socio economic and ideological and psychological obstacles.<sup>17</sup> Political obstacles include male dominated models of politics, deficiency in party support and even the dynamics of the electoral system. Among socio-



economic factors “feminization of poverty and unemployment” in addition to burden of multiplicity of roles and low literacy are discernible. Ideological and psychological obstacles consist of traditions, lack of confidence, perception of politics as dirty along with an adversarial mass media.<sup>18</sup>

To make sense of the foregoing discussion, we have to take a look at the following table. It is obvious that the gap between the number of registered male and female voters in Pakistan is wide and has continued to exist.

These figures become all the more alarming if we compare them with a few democracies of South Asia namely India, Sri Lanka and Nepal. (Table 11.2)

percent. In absolute terms, around 12 million women were not registered as voters which is a huge number. In the electoral demographic map of India, there are nine states which have more women registered as voters. These states include Kerala, Tamil Nadu, Andhra Pradesh, while Punjab and Rajasthan are on the opposite extreme.<sup>20</sup> Capital territory of New Delhi is where gender disparity in voter registration is the worst. Even in Nepal, female voter registration is better, being 49 percent of the total voters.

As we know, barriers to voters registration have been numerous and various ever since elections were introduced in colonial India. Generally, these barriers related to social and economic classes limit

**TABLE 11.2**

**Number of voters in South Asia**

Name of Country	Total Voters (millions)	Male Voters (millions)	Female Voters (millions)	Female as % of Population	Female as % of Voters
India	950	490	460	48%	48.5%
Srilanka	16.2	6.5	9.7	52.1%	56%
Pakistan	106	59.2	46	48.5%	43.3%
Nepal	17.98	9.1	8.9	53.9%	49.2%

**Source:** IFES

(Figures for India and Sri Lanka are for 2019 Elections and for Pakistan for 2018 Elections, 19 while for Nepal these are for 2022 Elections)<sup>19</sup>

We see that in the case of Sri Lanka, the percentage of women registered as voters surpasses the percentage of men. In India, the gap in favour of male voters is minimum considering that even otherwise women are 48 percent of the population. In the 2018 General Election percentage of registered Pakistani women voters as compared to men was only 43.3 percent while the share of women in total population as per 2017 census was 48.5

the extent of suffrage. India provides a very pertinent example of how women were brought, universally, on the draft electoral rolls even the before adoption of the Constitution. Shani made a revealing statement that "from September 1947 to March 1948,<sup>21</sup> during the process of devising instructions for the preparation of electoral rolls based on adult franchise, not a single difficulty, administrative or otherwise, was envisioned in relation to enrolment of women." The first electoral roll was based on house-to-house, village to village coverage." Again, according to Shani, this practice was meant not for people as useful entry but "people were also taken

into account as sovereigns of the new state.”<sup>22</sup> Accordingly, the question of citizenship as prerequisite of being a voter was taken care of.

On the other hand, in Pakistan, the biggest legal barrier to registration of women voters has been the mandatory condition of National Identity cards as proof of citizenship. Under the Electoral Rolls Act, a prospective voter had to be exposed to two state offices i.e., National Data Registration Authority (NADRA) and Election Commission. This is what created the basic barrier for women to register as voters. This was manipulated by the powerful elite to influence state offices to register only those voters who would vote for them. This explains, as indicated earlier, also why the gap between male and female voters continued to exist ever since the first General Election in 1970. In recent years, one positive development is the passage of the 2017 Elections Act which under Section 25 binds NADRA to transmit all relevant details, electronically to Election Commission, of all new Identity Card applicants for registration as voters also. This has definitely reduced the interface with state offices for prospective women voters but the barrier of identity cards as proof of citizenship does not entirely diminish. There are still more than 10 million women, in 2022 as per Election Commission, who are not registered as voters. According to an IFES survey, more than 27 percent<sup>23</sup> of female respondents said they did not need a CNIC, 24 percent cited lack of time, others cited lack of support from family (13 percent), not having the required documents (8 percent), high costs (5 percent) and distance (3 percent). These are some of the major perceived impediments to having a CNIC which serves as the main barrier for registration as a voter, in particular for women.

On the question of electoral empowerment in Pakistan, therefore, women face double jeopardy. On one hand, more than 10 to 12 million women are not registered as voters, which in itself is equivalent

to suppression of their voting rights. Being thus outcasted from the political process their participation in socio-economic life remains at the periphery. On the other hand, as non-holders of CNIC which is a major institutional barrier, Several other socio-economic opportunities are denied to this group of women. Before examining the consequences of non-registration as voters we need to see the data relating to the issuance of CNIC to women.

According to (Gallup Big Data Analysis of Census Reports 2017), it has been pointed out in light of the 2017 census that 82 percent of all eligible population hold a national identity card out of<sup>24</sup> which number 89.65 percent are men while 74.11 percent are women. Men have 15.46 percent more National Identity Cards as compared to women. Perhaps more alarming is the general trend of women of younger age not possessing identity cards according to a survey carried out by IFES on Assessing Barriers to Women Obtaining Identity Cards out of

**TABLE 11.3**

**Women Don't Possess ID**

Percentage(%)	Age Bracket (Years)
45	18-24
17	25-34
14	35-44

**Source:** IFES

women who do not possess identity cards (ID).

Actually, this is the very age group among women who need to be equipped socially and institutionally to play a role in the political process through vote. The said Survey on Assessing Barriers also discovers that most of the young women in this cohort who do not possess Identity Cards are from low-income groups. Now let us see how this vicious circle takes place in the electoral arena.

The gap in registration of CNIC and as voters are

exacerbated by the low turnout of woman voters. A gap of 15.46 percent of women not possessing CNIC is a major contributor to more than 12 million women not registered as voters. Among a myriad of other consequences, the male female gap in turn out is alarming. According to a World Values Survey (2014),<sup>25</sup> the chances of women voting in Pakistan were at the lowest rung of 59 countries studied.

As per the Election Commission of Pakistan official data, out of a total of 51.5 percent voters turning out to vote for National Assembly Election in 2018 only 39.78 percent were women. On the other hand, 60 percent of the male voters turned out to vote in the 2018 General Election. Female turnout of women

**TABLE 11.4**

**Voters in Provincial Assembly**

Assembly	Male	Female
Punjab	58.47	41.53
Sindh	59.96	40.04
Khyber Pakhtunwa	67.32	32.68
Balochistan	62.4	37.64

**Source:** Election Commission of Pakistan 2018

voters for Provincial Assembly is depicted in Table 11.4.

The above variation in female turnout for the four provinces is significant as a reflection of the state of empowerment of women in various provinces.

Initial findings are that in the case of Pakistan political challenge “Stems from the design of electoral institutions, the incentives of political parties, the constraints imposed by families,<sup>26</sup> and gender biases among the electorates. These factors interact with each other to produce the condition of women's low presence in politics”. There is also evidence that some of the legal measure adopted to make politics more exclusive have a questionable record. For instance, the reservation of quotas for

women has not improved inclusivity in elections. One manifestation of this phenomenon is a comparison of the number of women returning in the last

**TABLE 11.5**

**Number of Female candidates in National Assembly**

Year of General Election	Number of Female returned candidates in National Assembly
2008	16
2013	9
2018	8

**Source:** Election Commission of Pakistan 2008, 2013, 2018 three general elections in Pakistan.(Table 11.5)

It is worth noting that the 2018 elections saw a maximum number of women contesting elections for the National Assembly. The number of winning candidates, however, was negligible in comparative terms. A large number of women contestants in 2018 owes to a provision in the 2017 Elections Act that at least five percent of candidates shall be women. (Section 207). Political parties circumvented the law by fielding women in five percent of the weakest constituencies. So, making conducive legislation is a good intervention but not sufficient. For instance, The Elections Act 2017, under section 47 enjoins the Election Commission of Pakistan to take special measures for the enrolment of women voters, particularly when the variation in the male and female voters is more than ten percent in a constituency. These special measures include the expedition's issuance of National identity cards for women and their consequent registration as voters. Failure of political parties to play a critical role in enhancing the registration of women as voters have been counter-productive to the said provisions in the Elections Act. For instance, the Election Commission of Pakistan in 2017,<sup>27</sup> had written to all party heads having representation in the parliament for effective measures at their respective levels but no one even chose to respond, barring one or two heads

of political parties.

## Conclusion

We have seen that the number of women who were not registered as voters stood at around 12 million during the 2018 General Elections. We have also noted that out of 51.5 percent of voters turn out in 2018, around 40 percent were women. This means that out of 105 million total voters only slightly more than 20 million women came out to vote. This figure is all the more dismal in terms of women's political empowerment considering that the number of women above the age of 18 in Pakistan is 55 million. There may be several reasons and justifications for women not voting. These include what has been identified as contextual, household and individual factors. General disillusionment with the quality of political culture and electoral process is part of the contextual determinants of women not voting in Pakistan.

A huge backlog of 10 to 12 million unregistered women voters, however, points to the failure of state institutions like NADRA and the Election commission as well to the culpability of political parties. In addition to making special efforts to prepare an inclusive electoral roll enfranchising all sexes alike. There is also a dire need to create an environment

conducive enough for women to come out and vote. The more women are registered as voters at par with men and the greater their turnout in elections, the better their chances of availing political and leadership opportunities. This will help Pakistan meet the standard set by CEDAW in Article 7 and by the International Content in on Civil Rights Article 3. Likewise, Goal number five of the Sustainable Development Goals of the United Nations for gender equality and empowerment will also be met.

Most importantly, however, the umbrella of the Right to Good Government will be made available to women in a democracy based on fair elections held on genuine universal franchise. It has been observed that there is a need to “reposition power as political rather than as an individualized economic force in the process of women's empowerment”.<sup>28</sup> The political power of the state is critical in shaping policies that govern women's lives. Unleashing this political power is the responsibility of the Election Commission, political parties, media and civil society. This amounts to joint action on the part of executive authorities, opinion makers and political forums. It is time to make a national strategy to bring women's voter registration at par with men's voter lists.







# **Statistical Appendix**

## **Key Indicators**

# Statistical Appendix

## Key Indicators

**Table A-1**  
**Level of Pattern of Growth**  
**(Base year 2005-06)**

	<b>GDP Growth Rate (%)</b>	<b>Incremental Capital Output Ratio</b>	<b>Volatility of Growth% a</b>	<b>Extent of Balanced Growth b</b>	<b>Growth Rate of Labor Intensive Sector c</b>
2000/01	2.0	9.9	-2.2	6.3	0.8
2001/02	3.1	6.1	-0.2	4.4	0.9
2002/03	4.7	4.1	1.4	4.1	1.1
2003/04	7.5	2.3	3.9	10.2	0.6
2004/05	9.0	2.0	4.8	11.6	0.9
2005/06	5.8	3.4	0.6	17.4	0.7
2006/07	5.5	3.5	-0.5	3.4	0.9
2007/08	5.0	3.9	-1.5	5.4	0.8
2008/09	0.4	7.0	-6.2	5.6	3.9
2009/10	2.6	3.8	-2.6	3.8	1.1
2010/11	3.6	8.6	-0.2	8.6	1.0
2011/12	3.8	3.2	0.4	3.2	1.1
2012/13	3.7	4.4	0.6	4.4	1.2
2013/14	4.1	3.4	1.3	6.6	1.0
2014/15	4.1	3.8	0.5	4.7	0.9
2015/16	4.6	3.5	0.7	<b>7.1</b>	1.0
2016/17	5.2	3.2	1.2	5.7	1.1
2017/18	5.5	3.1	1.2	5.7	1.3
2018/19	1.9	7.7	-2.6	5.5	0.9
2019/20	-0.4	-37.6	-4.6	5.2	-0.6
2020/21	5.7	0.3	2.4	5.2	0.9
2021/22	6.0	2.8	2.4	4.8	1.0
<b>Average</b>	<b>4.2</b>	<b>2.4</b>	<b>0.0</b>	<b>6.3</b>	<b>1.0</b>

**Note:** The base year of all calculations has been changed from 1999-00 to 2005-06. The values before 2005-06 will differ compare to previous reports.

n.c. = not computed

**Source:** Pakistan Economic Survey (various issues)

<sup>a</sup> Difference in the growth rate of GDP during a year minus the trend growth rate (as approximated by the average growth rate during the previous five years)

<sup>b</sup> Computed as the weighted (share of value added in 2005-06) standard deviation of the growth rates of individual sectors during a particular year. The larger the magnitude of this indicator the less the extent of balanced growth

<sup>c</sup> Labor-intensive sectors of the economy are identified as agriculture, small scale manufacturing, construction, whole sale and retail trade, public administration and defence and social services

**Table A-2**  
**Level and Pattern of Investment**  
**(Base Year 2005-06)**

	<b>Gross Domestic Capital Formation (% of GDP)</b>	<b>National Savings as % of Investment</b>	<b>Private Investment as % of Total Fixed Investment</b>	<b>Share of Private Investment in Labor Intensive Sectors (%)</b>
2000/01	17.2	95.8	64.6	46
2001/02	16.8	110.7	72.9	39.8
2002/03	16.9	123.1	73.9	38.6
2003/04	16.6	107.8	72.7	38.6
2004/05	19.1	91.5	74.9	42.9
2005/06	19.3	78.8	76.3	34.3
2006/07	18.8	74.5	73.3	35.4
2007/08	19.2	57.3	72.7	34.6
2008/09	17.5	68.6	73.6	38.3
2009/10	15.8	86.1	73.9	43.2
2010/11	14.1	100.7	74.4	46.5
2011/12	15.1	86.1	71.9	47.1
2012/13	15	92.7	73.1	47.3
2013/14	14.6	91.8	72.6	46.1
2014/15	15.7	93.6	73.8	43.0
2015/16	15.7	88.5	73.0	41.4
2016/17	16.2	74.1	69.2	43.2
2017/18	16.70	62.3	68.2	41.9
2018/19	17.3	65.3	66.9	43.1
2019/20	15.6	69.2	75.0	39.20
2020/21	15.3	88.9	77.4	39.80
2021/22	15.2	100.7	72.1	34.40
<b>Average</b>	<b>16.5</b>	<b>86.7</b>	<b>72.6</b>	<b>41.1</b>

**Source:** Pakistan Economic Survey (various issues) SBP, annual Report (various Issues)

**Table A-3**  
**Agricultural Growth and Profitability**  
**(Base Year 2005-06)**

	<b>Growth Rate (%)</b>	<b>Share of Growth in Crop Sector (%)</b>	<b>Volatility in Agriculture Growth</b>	<b>Change in of Output Prices to Fertilizer Prices (%)</b>	<b>Change in Agriculture Terms of Trade with Manufacturing (%)</b>
2000/01	-2.2	n.c	-7.1	-3.8	4.6
2001/02	0.1	n.c	-2	-5.4	0
2002/03	4.1	57.8	2	-0.3	-0.8
2003/04	2.4	42.4	0.4	-0.3	0.2
2004/05	6.5	90.9	4.4	-4.8	-2.1
2005/06	6.3	n.c	4.1	-4.1	-6.7
2006/07	3.4	55.8	-0.5	10.2	4.2
2007/08	1.8	n.c	-2.7	-20.6	-4.2
2008/09	3.5	62.5	-0.6	-10	9.6
2009/10	0.2	n.c	-4.1	17.3	1
2010/11	2.0	20.8	-1.1	-4.9	3.3
2011/12	3.6	36.3	1.4	-48.3	-9
2012/13	2.7	23.2	0.5	7.8	6.2
2013/14	2.5	47.8	0.1	10.6	3.1
2014/15	2.1	14.1	-0.1	4.7	7.9
2015/16	0.2	<b>n.c</b>	-2.4	6.9	6.6
2016/17	2.2	16.5	0.0	30.9	3.1
2017/18	4.0	37.1	2.0	0.0	-0.5
2018/19	0.9	n.c	-1.6	-19.4	-7.7
2019/20	3.9	44.1	1.5	-56.9	-19.7
2020/21	3.5	69.8	1.7	15.2	6.9
2021/22	4.4	62.3	1.2	-22.2	-8.6
<b>Average</b>	<b>2.6</b>	<b>42.1</b>	<b>-0.1</b>	<b>-4.4</b>	<b>-0.1</b>

n.c. = not computed, n.a. = not available

Source: Pakistan Economic Survey (various issues)

**Table A-4**  
**Level of Pattern of Manufacturing Growth**  
**(Base Year 2005-06)**

	<b>Manufacturing Growth Rate (%)</b>	<b>Large Scale Manufacturing Growth(%)</b>	<b>Small Scale Manufacturing Growth (%)</b>	<b>Share of Growth in Large Manufacturing (%)</b>	<b>Manufactured Goods Exports Growth(%)</b>
2000/01	9.3	11	6.2	76.3	21.3
2001/02	4.5	3.5	6.3	52	7.7
2002/03	6.9	7.2	6.3	68.2	21.3
2003/04	14	18.1	-20	84.6	8.9
2004/05	15.5	19.9	7.5	87	21.7
2005/06	8.7	8.3	-20	75.2	13.5
2006/07	9	8.7	7.5	74.3	3.5
2007/08	6.1	4	8.7	58.9	13.2
2008/09	-4.2	-8.1	8.1	n.c.	14.5
2009/10	1.4	4.8	7.5	24.9	12.8
2010/11	2.5	1.1	7.5	54.8	26.7
2011/12	2.1	1.13	7.5	44.5	1.2
2012/13	4.9	4.46	8.28	74.9	8.4
2013/14	5.7	5.46	8.29	78.3	11.3
2014/15	3.9	3.28	8.21	68.2	-8.4
2015/16	3.7	2.98	8.19	65.0	-5.3
2016/17	5.8	5.64	8.15	77.2	0.3
2017/18	5.4	5.12	8.17	75.2	14.9
2018/19	-0.7	-2.6	8.2	n.c.	25.6
2019/20	-7.8	-11.3	1.37	24	49.8
2020/21	10.5	11.49	8.97	7	-5.0
2021/22	9.8	10.48	8.9	4	33.4
<b>Average</b>	<b>5.3</b>	<b>5.2</b>	<b>5.0</b>	<b>58.7</b>	<b>13.2</b>

n.c. = not computed

**Source:** Pakistan Economic Survey (various issues)  
SBP, Annual Report (various issues)

**Table A-5**  
**Inflationary Trends**

	Rate of Inflation (Consumer Prices) (%)	Rate of Inflation (Food Prices) (%)	Core Rate of Inflation (Non-Food Non-Energy) (%)	Rate of Inflation in Import Prices (%)	Rate of Monetary Expansion less GDP Growth (%)
2000/01	4.4	3.6	n.a	15.2	7
2001/02	3.5	2.5	n.a	0	12.3
2002/03	3.1	2.8	n.a	3.7	13.3
2003/04	4.6	6	3.9	14.8	12.1
2004/05	9.3	12.5	8.8	10.4	10.3
2005/06	7.9	6.9	7	17.3	9.4
2006/07	7.8	10.3	6.9	7.6	13.8
2007/08	12	17.6	10.2	27.7	10.3
2008/09	17	23.5	11.4	25.1	9.2
2009/10	10.1	12.6	7.6	6.2	9.9
2010/11	13.7	18.3	9.4	20.7	12.2
2011/12	11	11	10.6	21.8	9.8
2012/13	7.4	7.1	9.6	7.8	12.3
2013/14	8.6	9	8.3	4.3	8.5
2014/15	4.5	3.5	6.5	1.3	9
2015/16	2.9	2.1	4.2	-13.45	9
2016/17	4.1	3.9	5.2	-1.34	8.4
2017/18	3.8	2.0	5.4	5.2	3.9
2018/19	7.3	4.6	7.9	6.1	8.0
2019/20	11.2	14.9	8.2	2.0	18.0
2020/21	8.6	12.9	5.8	5.9	12.3
2021/22	11.0	12.1	7.6	35.5	7.6
<b>Average</b>	<b>7.9</b>	<b>9.1</b>	<b>7.6</b>	<b>9.0</b>	<b>10.4</b>

n.c = notcomputed

Source: Pakistan Economic Survey (various issues)

SBP, Annual Report (various issues)

IMF

**Table A-6**  
**Fiscal Policy**  
**(Percentage of GDP)**

	<b>Revenue</b>	<b>Expenditure</b>	<b>Non-Interest Current Expenditure</b>	<b>Budget Balanced</b>	<b>Revenue Deficit/ Surplus</b>
	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>
2000/01	13.1	17.1	9.4	4.0	-2.2
2001/02	14	18.6	9.6	4.6	-1.7
2002/03	14.8	18.4	11.4	3.6	-1.5
2003/04	14.1	16.9	9.8	2.8	0.3
2004/05	13.8	17.2	9.7	3.4	0.5
2005/06	14	17.1	9.7	4	-0.5
2006/07	14.9	18.1	10.9	4.1	-0.8
2007/08	14.1	21.4	12.8	7.3	-3.3
2008/09	14	19.2	10.7	5.2	-1.4
2009/10	14	20.2	11.7	5.2	-2.1
2010/11	12.3	18.9	12.1	6.5	-3.5
2011/12	12.8	21.6	12.9	8.8	-4.5
2012/13	13.3	21.5	12.0	8.2	-3
2013/14	14.5	20.0	11.3	5.5	-1.5
2014/15	14.3	19.6	11.3	5.3	-1.8
2015/16	13.6	17.7	10.4	4.1	-0.8
2016/17	13.9	19.1	10.8	5.2	-0.7
2017/18	13.3	19.1	11.1	5.8	-1.6
2018/19	11.2	19.1	11.4	7.9	-5
2019/20	13.2	20.3	12.4	7.1	-4.8
2020/21	12.4	18.5	11.4	6.1	-3.9
2021/22	16.3	22.6	13.5	6.3	-2.9
<b>Average</b>	<b>13.72</b>	<b>19.19</b>	<b>11.20</b>	<b>5.50</b>	<b>-2.12</b>

**Source:** Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

MoF, Fiscal Operations

a Total revenues of federal and provincial governments

b Revenue and development expenditure of federal and provincial governments

c Current expenditure minus interest payments

d Total revenue minus total expenditure

e Revenue receipts minus current expenditure of federal and provincial governments



**Table A-7**  
**Fiscal Policy**  
**(Base Year 2005/2006)**

	Primary Balance (% of GDP)	Total Government Debt (% of GDP)	Effective Interest Rate on Domestic Debt %	% of Deficit Financed by Bank Borrowing %
	a	b	c	
2000/01	1.3	82.4	11.3	-18.4
2001/02	0.1	73.1	12.4	7.4
2002/03	0.4	68.9	10.2	-30.5
2003/04	1.1	62.3	9.4	47.4
2004/05	0.3	58	8.5	27.7
2005/06	-1.1	53.1	10.2	21.8
2006/07	-0.1	52.1	13.8	37.5
2007/08	-2.7	56.8	13.7	80.5
2008/09	-0.3	57.8	12.9	54.2
2009/10	-1.9	59.9	12.4	32.8
2010/11	-2.7	58.9	10.5	51.5
2011/12	-4.3	54.3	10.7	52
2012/13	-3.8	59.3	9.7	79.5
2013/14	-1.0	60.2	9.5	23.3
2014/15	-0.6	58.1	9.3	61.2
2015/16	-0.3	58.3	8.1	58.3
2016/17	-1.4	61.3	8.2	55.7
2017/18	-1.9	61.5	8.1	49.57
2018/19	-1.3	77.7	8.8	65.7
2019/20	-1.6	80.0	9.9	57.5
2020/21	-1.2	74.9	9.6	54.9
2021/22	-0.7	75.0	9.1	59.0
<b>Average</b>	<b>-1.08</b>	<b>63.81</b>	<b>10.34</b>	<b>41.41</b>

n.a = not available

Source: Pakistan Economic Survey (various issues)

SBP, Annual Reports (various issues)

Ministry of Finance, Fiscal Operations

Ministry of Finance, Debt Policy Statements

a Estimated as revenue receipts minus total expenditure net of interest payments

b Includes domestic and external debt

c Defined as the ratio of domestic interest payment to outstanding domestic debt

**Table A- 8**  
**Monetary Policy**

	<b>Net Foreign Assets a (% Change of broad money)</b>	<b>Net Assets a (% Change of broad money)</b>	<b>Private Credit Growth %</b>	<b>Interest on Six Treasury Bill (%)</b>	<b>Broad Money Growth (%)</b>	<b>Spread Interest Rate</b>
	a		b			c
2000/01	5.1	3.9	4.0	10.4	9.0	8.3
2001/02	13.4	2.0	4.8	8.2	15.4	9.6
2002/03	17.5	0.5	18.9	4.1	18.0	7.8
2003/04	2.1	17.5	29.8	1.7	19.6	6.3
2004/05	2.2	17.1	33.2	4.7	19.3	7.4
2005/06	2.5	12.4	23.2	8.5	14.9	8.7
2006/07	8.1	11.3	17.2	8.9	19.3	9.0
2007/08	-7.8	23.2	16.4	11.5	15.3	8.4
2008/09	-3.2	12.8	0.7	12.0	9.6	9.8
2009/10	-6.9	0.8	3.9	12.3	12.5	9.3
2010/11	23.5	-2.4	4.0	13.7	15.9	9.0
2011/12	-40.2	5.3	7.5	11.9	14.1	8.3
2012/13	-55.8	4.1	-0.6	8.9	15.9	7.0
2013/14	97.9	-3.1	9.1	9.7	12.5	7.3
2014/15	20.5	-1.3	11.7	8.0	13.2	5.6
2015/16	9.1	-0.7	11.1	5.9	13.8	5.7
2016/17	-8235.6	26.5	11.6	12.7	11.3	5.9
2017/18	-961.2	11.9	2.1	7.5	17.5	6.3
2018/19	-8235.6	26.5	11.6	12.7	11.3	5.9
2019/20	-961.2	0.0	2.1	7.5	17.5	6.3
2021/22	-	-	17.4	-	13.6	5.3
<b>Average</b>	<b>-801.7</b>	<b>8.0</b>	<b>10.5</b>	<b>9.0</b>	<b>14.9</b>	<b>7.4</b>

**Source:** State Bank of Pakistan, Annual Report (various issues)

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a Growth rate of net foreign assets/broad money ratio

b Growth rate of net domestic assets/broad money ratio

c Difference between the interest rate on advances and deposits

**Table A- 9**  
**Effective Tax Rates**  
**(Tax Revenues as percentage of Tax Base<sup>a</sup>)**

	<b>Income Tax (%)</b>	<b>Customs Duty (%)</b>	<b>Excise Duty (%)</b>	<b>Sales Tax (%)</b>	<b>Total FBR Taxes (%)</b>
2000/01	4.2	17.8	4.7	13.1	9.3
2001/02	4.5	12	4.3	14.1	9.1
2002/03	4.4	14.8	3.6	14.8	9.4
2003/04	4	14.3	3.1	12.7	9.2
2004/05	3.8	11.2	2.9	10	9.1
2005/06	3.9	12.1	2.4	10.3	9.4
2006/07	5	10.5	2.7	9.9	9.7
2007/08	4.9	7.6	2.9	10	9.8
2008/09	4.6	5.7	5.7	10	9.1
2009/10	4.8	5.7	5	10.1	8.9
2010/11	4.4	5.6	4.3	10.3	8.6
2011/12	4.6	5.6	3.3	11	9.1
2012/13	4.3	5.5	4.1	11.4	9.5
2013/14	4.6	5.2	4.3	12.6	10.1
2014/15	4.9	6.6	5.3	13.9	11
2015/16	5.3	8.7	5.6	16.1	12.4
2016/17	5.5	8.8	5.4	14	12.5
2017/18	5.2	10.0	5.1	14.4	10.7
2018/19	4.8	8.6	5.3	13.3	9.6
2019/20	4.8	8.8	4.9	13.9	10.0
2020/21	4.0	8.8	4.2	13.0	8.5
2021/22	4.4	7.9	3.6	11.7	9.2
<b>Average</b>	<b>4.62</b>	<b>9.26</b>	<b>4.24</b>	<b>12.29</b>	<b>9.82</b>

**Source:** SBP, Annual Reports (various issues)

Pakistan Economic Survey (various issues)

FBR (various issues)

**a** Tax bases for various taxes are as follows:

Income tax: Non-agricultural GDP

Custom Duty: Value of imports

Excise Duty: Value of manufacturing

Sales Tax: Value of Imports plus value of manufacturing

**Table A-10**  
**Balance of Payments**

	<b>Current Account Balance (% of GDP)</b>	<b>External Debt as a % of Exports of Goods and Services</b>	<b>Net Reserves (US \$ Million)</b>	<b>Gross Reserves (In months of next year's import of goods and services)</b>	<b>Change in Value of Pakistani Rupee per US \$ (%)</b>	<b>Change in Real Effective Exchange Rate (%)</b>
1999/20	-1.6	322.1	908	0.9	3	-0.6
2000/01	-2.7	309.4	1679	1.7	12.8	-2.5
2001/02	3.9	282	4337	3.7	5.1	-2.6
2002/03	4.9	229	9529	6.5	-4.7	-0.1
2003/04	1.8	209.5	10564	5	-1.5	-1.8
2004/05	-1.4	183.7	9805	3.5	3.1	0.3
2005/06	-3.9	167.2	10760	3.7	0.8	5.3
2006/07	-4.8	169.2	13345	4.5	1.3	0.5
2007/08	-8.4	169.7	8577	2.7	3.2	-1.12
2008/09	-5.5	212.9	9118	2.8	25.5	-1.0
2009/10	-2.3	218.9	12958	2.9	6.8	1.0
2010/11	0.1	204.9	14784	3.6	2.0	6.5
2011/12	-2.1	212.2	10803	2.9	4.4	3.1
2012/13	-1.0	182.3	6008	1.5	8.4	-1.3
2013/14	-1.3	204.1	9098	2.7	6.3	7.3
2014/15	-0.8	204.9	13532	3.9	-1.5	5.4
2015/16	-1.7	250.9	18130	9.0	2.9	4.6
2016/17	-4	284.6	16242	4.4	0.4	3.5
2017/18	-4.8	317.2	7285	1.7	23.9	-15.4
2018/19	-1.1	368.4	12132	3.3	16.1	2.2
2019/20	-1.1	387.3	17,299	3.9	1.3	7.3
2020/21	-1.1	387.3	17,299	3.9	1.3	7.3
2021/22	-4.6	253.6	9,816	2.2	10.9	-5.8
<b>Average</b>	<b>-1.9</b>	<b>249.2</b>	<b>10609.1</b>	<b>3.5</b>	<b>5.7</b>	<b>1.0</b>

**Source:** SBP, Annual Report (various issues)  
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**Table A- 11**  
**Level and Pattern of Trade**

	Merchandise Export Growth (US \$; %)	Extent of Product Diversificat ion of Exports (a)	Extent of Market Diversificat ion of Exports (a)	Merchandise Import Growth (US \$; %)	Change in Terms of Trade %	Share of Essential Imports (a) %
1999/20	11.2	0.801	0.23	13.1	-15.3	39.3
2000/01	12.5	0.798	0.221	14.3	-7.1	39.3
2001/02	2.3	0.786	0.221	-7.5	-0.2	36.7
2002/03	20.1	0.791	0.223	20.1	-9.6	35
2003/04	13.5	0.782	0.232	21.2	-4.1	28.8
2004/05	16.2	0.778	0.218	38.3	-6.5	25
2005/06	14.3	0.769	0.229	31.7	-11.7	30.7
2006/07	3.2	0.737	0.228	8	-3.7	29.1
2007/08	16.5	0.722	0.21	31.2	-11.5	38.9
2008/09	-6.4	0.709	0.202	-10.3	2.8	41.9
2009/10	2.9	0.717	0.199	-1.7	0	42.3
2010/11	28.9	0.697	0.184	14.9	2.8	42.7
2011/12	-2.6	0.722	0.183	12.8	-5.9	45.8
2012/13	0.4	0.719	0.189	-0.6	-2.4	42.9
2013/14	1.1	n.a	n.a	3.8	0.9	40.8
2014/15	-3.9	n.a	n.a	-0.9	-0.4	33.8
2015/16	-12.2	0.768	0.202	-2.5	4.2	25.5
2016/17	-1.7	n.a	n.a	18.5	1.5	24.5
2017/18	12.6	0.745	0.193	16.2	-0.6	44.4
2018-19	-2.2	n.a	n.a	-7.4	1.5	40.3
2019/20	-7.1	n.a	n.a	-15.9	3.7	50.1
2020/21	13.7	n.a	n.a	23.3	-5.0	50.0
2021/22	26.6	n.a	n.a	32.9	-2.4	55.4
<b>Average</b>	<b>7.0</b>	<b>0.8</b>	<b>0.2</b>	<b>11.0</b>	<b>-3.0</b>	<b>38.4</b>

**Source:** Pakistan Economic Survey (Various issues)  
United Nations Conference on Trade and Development  
State Bank of Pakistan, Annual Report (various issues)

a This is estimated by UNCTAD as the Herfindahl Index, which ranges from a value of 0 to 1.

The greater the extent of diversification the lower the value of the index

Essential imports are of wheat, edible oil, fertilizers, medicines and POL products

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8. Ibid
9. Finland (86%, 2nd), Norway (84.5%, 3rd), New Zealand (84.1%, 4th), Sweden (82.2%, 5th), Rwanda (81.1%, 6th), Nicaragua (81% 7th), Namibia (80.7%, 8th), Germany (80.1% 9th)
10. Comprises: labor force participation rate, wage equality, estimated earned incomes, senior job positions, professional and technical worker: *Gender Gap Report 2022 WB*
11. Afghanistan, Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka and Turkey
12. Comprises: Literacy rate, enrolment in primary, secondary and tertiary education; *Gender Gap Report 2022 WB*
13. Comprises: See-birth ratio, healthy life expectancy *Gender gap Report 2022 World Bank*
14. Comprises: women in parliament, women in Ministerial positions, years with female head of state:



15. Measures gender parity progress across four key dimensions: Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment
16. Comprises own account workers, unpaid family workers, those paid below minimum wage and engaged in the informal sector.
17. <https://asiapacific.unwomen.org/en/countries/pakistan/wee/wee-participant>
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27. For example: The Domestic Violence (Prevention and Protection Bill (2009-2013), The Acid Control and Acid Crime Prevention Act (2010), The Protection Against Harassment of Women in the Workplace Act (2010), The Prevention of Anti-Women Practices Act (2011), The Criminal Law (Amendment) Act (targeted at preventing acid-related crimes) (2011), The National Commission on the Status of Women Act (2012), The National Commission for Human Rights Act (2012), The Dowry and Bridal Gifts Act, The Women, Violence and Jirgas Act, Women Agriculture Bill 2019 and Sindh Women Agriculture Workers Act 2021, The Dissolution of Muslim Marriage Act (1939, amended in 1961), The Muslim Family Laws Ordinance (1961) etc.
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29. NCSW has so far reviewed around 45 laws and enacted and/or amended a number of pro-women laws in conjunction with Provincial Commissions on the Status of Women/Women Departments (PCSW). However, these laws and their lack of implementation and systemic dysfunctions continue to disenfranchise women. The laws relating to the property and inheritance rights in particular need to be reformed to provide women economic and financial independence.

30. [https://womendeliver.org/wp-content/uploads/2017/09/2019-7-D4G\\_Brief\\_Economic.pdf](https://womendeliver.org/wp-content/uploads/2017/09/2019-7-D4G_Brief_Economic.pdf)

31. Goal 3: including reduction of the maternal mortality ratio, deaths of children under 5 years of age; Goal 4: inclusive and equitable quality education and promote lifelong learning opportunities for girls; Goal 5: gender equality and empowerment of women including elimination of discrimination, violence, trafficking and sexual and other types of exploitation, early marriage etc., recognition of domestic work and social protection, access to reproductive rights in accordance with the Program of Action of the International Conference on Population and Development; Goal 8: promote inclusive and sustainable economic growth, full employment; Goal 13: combat climate change impacts with focus on women; and Goal 16: peaceful and inclusive societies and access to justice.

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