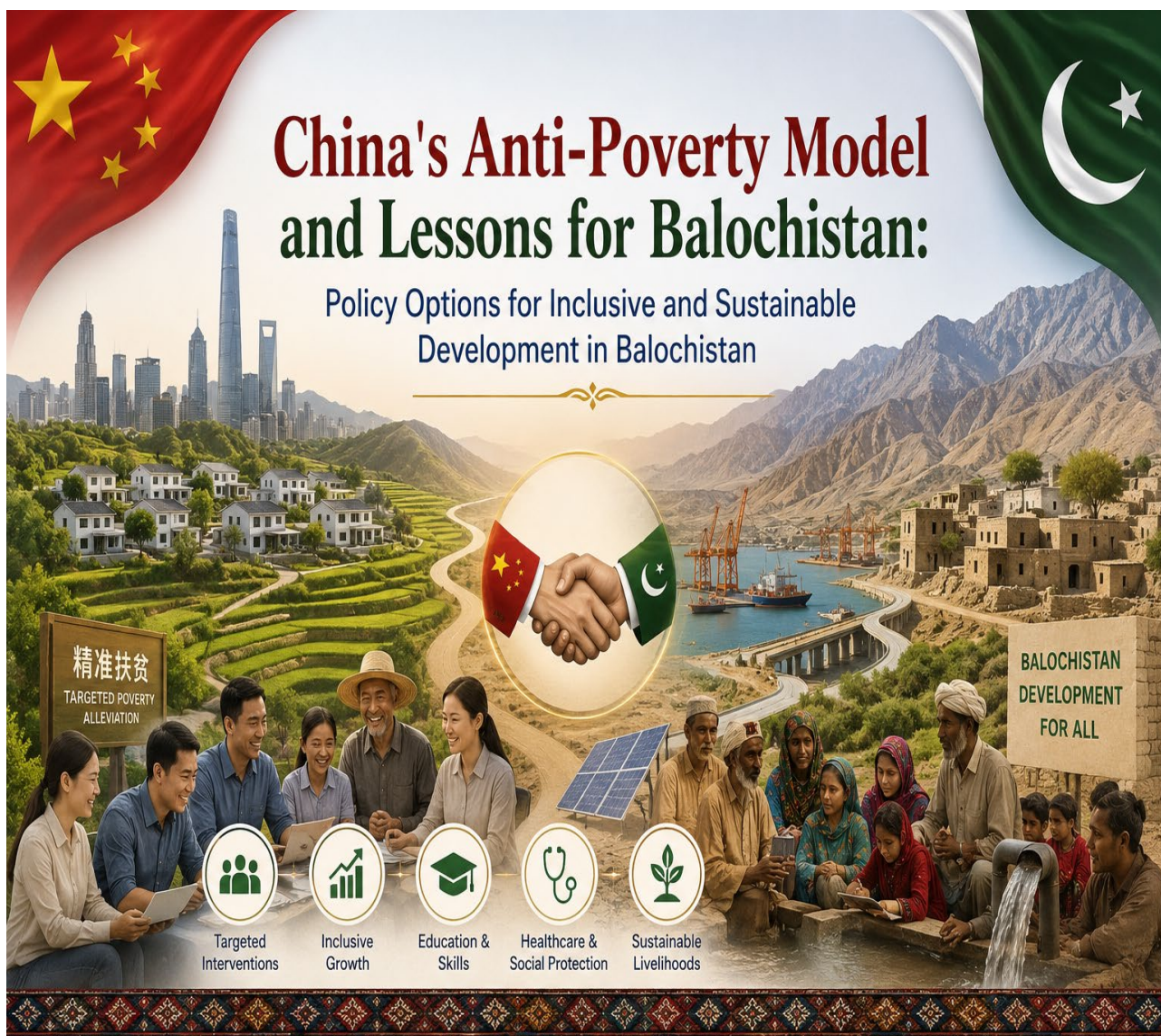




China's Anti-Poverty Model and Lessons for Balochistan: Policy Options for Inclusive and Sustainable Development in Balochistan

Dr. Siraj Bashir Baloch

Abstract

Poverty remains one of the most persistent development challenges in Balochistan, despite the province's abundant natural resources and strategic geographical location. This study examines China's anti-poverty model and explores its relevance for addressing multidimensional poverty in Balochistan through inclusive and sustainable development policies. Drawing on secondary data from policy documents, government reports, international development agencies, and scholarly literature, the study analyzes the key pillars of China's poverty alleviation strategy, including targeted poverty alleviation, rural revitalization, infrastructure development, human capital investment, industrial development, digital inclusion, and strong institutional coordination. The research argues that while China's development model cannot be replicated wholesale due to differences in political, institutional, and socio-cultural contexts, several policy instruments offer valuable lessons for Balochistan. The study identifies critical areas where localized adaptation of China's experience could strengthen poverty reduction efforts in the province. These include evidence-based targeting of vulnerable populations, expansion of rural connectivity, promotion of vocational and technical education, development of agriculture and livestock value chains, support for micro, small, and medium enterprises, improved public service delivery, and enhanced local governance. Particular attention is given to integrating poverty reduction with employment generation, social protection, environmental sustainability, and community participation to ensure long-term development outcomes. The paper also emphasizes the importance of leveraging the opportunities created by the China-Pakistan Economic Corridor (CPEC) to promote inclusive regional development rather than concentrating benefits in limited geographical areas. The study concludes that an adapted, context-sensitive anti-poverty framework inspired by China's development experience can contribute significantly to reducing socio-economic disparities in Balochistan. It recommends strengthening institutional capacity, improving intergovernmental coordination, expanding data-driven policy planning, and prioritizing human development alongside economic growth. These measures can help transform poverty alleviation from a welfare-oriented approach to a sustainable development strategy that promotes resilience, social inclusion, and equitable economic opportunities across the province.

Keywords: China's Anti-Poverty Model; Balochistan; Inclusive Development; Sustainable Development; Poverty Alleviation Policy.

1. Introduction

1.1. Background of the Study

Poverty is a major development issue globally that is affecting human well-being, economic prosperity, social justice and sustainable development. While much has been achieved for human development over the last few decades, poverty still remains and is especially entrenched in low and middle-income countries where poor institutions, unequal opportunities, conflict, climate change, and economic instability create vicious cycles of poverty and deprivation. Poverty eradication is acknowledged as a key precondition for sustainable development by the international community, as part of the 2030 Agenda for Sustainable Development and Sustainable Development Goal 1 (SDG 1) "no poverty" (United Nations [UN], 2015). SDG 1 goes beyond just income growth, and includes access to education, health services, social protection, employment, financial inclusion and resilient infrastructure. This corresponds to the increasing understanding of poverty as a lack of capabilities, opportunities and social inclusion in addition to lack of income.

Although significant progress has been achieved on the global scale in reducing poverty, the recent crises have slowed down development gains. Vulnerable groups have been pushed back into poverty as a result of the COVID-19 pandemic, geopolitical conflicts, inflation, food insecurity and climate-related disasters. While there has been substantial progress in reducing extreme poverty since the 1990s, disparities exist in the Middle East and North Africa, and South Asia and Sub-Saharan Africa still struggle with high poverty rates (World Bank, 2024). Poverty reduction has been made more complex by increasing inequalities within and between countries. The above challenges illustrate the need for integrated approaches which combine economic growth with social inclusion, good institutions, human development, and environmental sustainability.

In developing countries, poverty is likely to be multidimensional and structural. Inclusive development is limited by low agriculture productivity, poor infrastructure, demographic pressures, economic shocks, unemployment, and weak governance and public services. Given the social and economic condition in rural communities, where access to education, healthcare, financial services, transportation, digital connectivity, and markets is constrained, the vulnerability is especially high in this setting. Water scarcity, droughts, floods, reduced agricultural output, and environmental degradation as a result of climate change, especially in households relying on natural resources, exacerbates these challenges (United Nations Development Programme [UNDP], 2024). Thus, poverty alleviation efforts must be based on policies which tackle the interrelated aspects of poverty, such as the economic, social, institutional and environmental dimensions.

This wider concept of poverty is captured by the Capability Approach of Amartya Sen (1999), which considers poverty as a lack of capabilities and freedoms, not just income. Likewise, multi-dimensional poverty indexes devised by the UNDP and the Oxford Poverty and Human Development Initiative (OPHI) measure deprivation in education, health, housing, sanitation and living conditions. These strategies highlight the need for investments in human capital, infrastructure, productive employment, institutional capacity and social protection, without just focusing on income transfers or short-term welfare programmes.

In the international context, China's experience is a significant example to study the issue of structural poverty in the context of long-term policy. From a largely agrarian and mostly poor

economy in 1978 when economic reforms began, China has become a leading global economic power, and has lifted hundreds of millions of people out of extreme poverty. Economic transformation and poverty reduction in China is one of the world's key development success stories of the modern era, according to the World Bank (2022). The Chinese experience shows that a mix of economic growth and targeted interventions, infrastructure investments, investments in human capital, institutional coordination, and rural transformation are crucial.

The development of the poverty reduction strategy in China went through various phases, such as agricultural reform, rural development, industrialization, infrastructure construction, social security measures and institutional innovation. The early reform in agriculture, especially the Household Responsibility System, boosted agricultural productivity and the income of farmers' households. The emergence of township and village enterprises and rural entrepreneurship also provided jobs other than agriculture. The government has gradually begun to integrate market-oriented reforms with specific public actions, as the rate of economic growth has been stepped up, to guarantee that development impacts disadvantaged areas and vulnerable groups (Ravallion, 2009).

One of the key changes to China's poverty alleviation policy was the launch of the Targeted Poverty Alleviation (TPA) approach in 2013. In contrast to the general poverty alleviation programmes, TPA concentrated on the identification of impoverished individual households and on the specific poverty factors. Local governments were also given clear responsibilities and monitoring and evaluation systems were put in place to evaluate implementation and outcomes. This allowed for the implementation of interventions based on the characteristics of socioeconomic conditions in each local area, as opposed to using the same approach in all areas (State Council Information Office of the People's Republic of China, 2021).

In short, China's anti-poverty model was a comprehensive policy mix that was interdependent. Massive public infrastructure investments in roads, electricity, telecommunications, irrigation and digital infrastructure tied rural people together with markets and economic opportunities. Human capabilities were enhanced and intergenerational poverty was decreased through investments in education, healthcare, vocational training, and social protection. Agricultural modernization, rural industries, e-commerce, tourism, entrepreneurship and financial inclusion brought about diversified sources of income and employment. China focused on productive employment, enterprise development, infrastructure and local economic transformation instead of providing only income support (World Bank, 2022).

Strong political commitment and institutional coordination were another important factor. Poverty reduction was seen as a long-term national development priority, with well-defined responsibilities, resource allocations, monitoring and coordination mechanisms between central and local governments. Other organizations such as financial institutions, enterprises, universities, state-owned enterprises, etc. also played a part in poverty reduction. This institutional coordination contributed to minimising policy fragmentation and resource utilisation. But China's experience is not to be seen as a model to be replicated elsewhere. Instead, it offers lessons about long-term planning, institutional coordination, evidence-based policy making, infrastructure investments, human capital development and locally targeted interventions (UNDP, 2021).

In February 2021, China officially declared its eradication of poverty from the country according to its national poverty line (State Council Information Office of the People's Republic of China, 2021). As debates about measurement, sustainability and regional

differences still ongoing, China's experience provides useful lessons to developing regions with entrenched structural poverty. In this regard, the Chinese model is relevant to Balochistan as poverty in the province is linked with a lack of infrastructure, low industrialization rates, poor public service provision, unemployment, human capital shortages, rural deprivation, and climate vulnerability. The main message of the central lesson is that, sustainable poverty reduction can only be achieved with economic growth. It calls for the adoption of integrated development policies that will boost institutional development, enhance human skills, develop infrastructures, provide productive jobs, modernize rural economies and make development opportunities accessible to marginalized communities. These lessons, which are adapted locally from China can support a more inclusive and sustainable pathway to poverty reduction and development in Balochistan.

1.2. Poverty and Development Challenges in Balochistan

Balochistan, is the largest of Pakistan's provinces, makes up nearly 44% of the country's area however the province is still plagued by poverty and deprivation in multiple forms. The poverty is despite the very rich countrysides, mineral resources, strategic location, development potential, etc. Pakistan is a vast and difficult landscape with only about 6% of the population living in a few pockets, making education, health, infrastructure and public services provision expensive and difficult. Besides, deprivation is not just limited to income; it extends to education, health, housing, sanitation, electricity, clean water, and other basic services (Government of Pakistan, 2023; UNDP & OPHI, 2021).

The poverty clinics are especially high in rural and remote areas including Awaran, Wasuk, Chagai, Kharan, Kech, Panjgur, Dera Bugti and Musakhel. These areas have weak infrastructure, low employment levels and suffer from poor public services as well as weak market access. The rural households are highly reliant, prone and sensitive to drought, water shortage, weather related climate change, environmental degradation and market volatilities in connection to agriculture, livestock and fisheries. Long-standing and inter-generational poverty is compounded by geographical isolation and the fact of having scattered settlements.

Education continues to be an important component of deprivation. Lack of literacy, low enrollment rates, poor school infrastructure, and a smaller number of instructors is especially problematic in rural areas. Women and girls are also potentially stymied by distance, poverty, lack of facilities, early marriage, as well as restrictions rooted in sociocultural norms. These challenges are associated with high school dropout rates, low human-capital formation and restricted access to gainful employment.

Limited access to health care compounded affected household vulnerability. Access to doctors, hospitals, health centers, emergency services, maternal and child health centres is limited in many remote communities. Households facing long distances to facilities suffer higher burdens and malnutrition, and mothers and babies suffer health problems. Therefore poverty and the unequal use of basic services, including health services, is closely correlated.

Another one of the structural limitations is infrastructure. But as a consequence of poor roads, electricity, telecommunications, digital networks, irrigation, water systems and public transport, the market and other services such as education, healthcare, finance and employment are not easily accessed. Water shortage is especially critical as agriculture and livestock are other key rural livelihood sources. Drought, dwindling groundwater, poor water management

and climate change all play a role in the problem of food insecurity, joblessness, migration and volatile family income.

Balochistan is also a paradox of rich natural resources and yet underdeveloped, poverty. Its natural gas and mineral resources, such as copper, gold, coal and chromite are also ample. But inadequate industrialization, low level of local value addition, governance issues, and low participation of communities has restricted benefited reaching communities. Ongoing reliance on extraction, not processing and downstream industries, limit employment and economic diversification and local development.

The results show that national poverty-alleviation initiatives are not able to resolve the above-mentioned structural problems. BISP and other forms of social protection offer vital short-term support; however, they are not effective in tackling a shortage of infrastructure, employment, human capital, and productive capacity on their own. Hence, there is a need to formulating a place-based development strategy in Balochistan that is in sync with its geo-spatial and border economy, climate change vulnerability, institutional capacity, and sociocultural context.

Emphasis of the development strategy should be focused on productive employment and change in the rural economy. Sustainable livelihood is the potential of agricultural modernization, livestock and fisheries development, mineral and agro-processing, entrepreneurship, SMEs, TVET, and digital inclusion. Investment is required in irrigation, water management, renewable energy, roads, transport corridors and digital infrastructure, which should link remote communities to markets and economic opportunities. Education, health care, skills and employment should continue to play a pivotal role toward human-capital development especially women and youth.

Proper government is key to converting spending on development to poverty reduction. Enhancing accountability and effectiveness requires strengthening of local institutions, better interdepartmental coordination, evidence-based planning, better monitoring and evaluation, and expanded community involvement. Local people should be involved at a planning, implementation and benefit-sharing level as well as being the beneficiaries.

The opportunities are immense in the context of Balochistan's connectivity with South Asia, Central Asia, Middle East and western China as well as Gwadar Port and CPEC. But infrastructure is not sufficient for inclusive development. To achieve equitable inclusion in new economic opportunities, local employment, training, procurement, community enterprises and benefit sharing arrangement need to be put in place and be transparent.

China offers China Lessons on four subjects: 1) Targeted Interventions, 2) Infrastructure, 3) Institutional Coordination, 4) Human Capital and Rural Transformation, as well as in Evidence-based Planning and Monitoring. Its political and administrative system cannot be replicated, however. Rather, policy adaptation in the socio-economic, institutional, constitutional and political context of Pakistan seems to be the right approach.

Seen overall, poverty in Balochistan is multidimensional and structural in nature and is influenced partly by geographical isolation and lack of infrastructure, human-capital deficits, water shortages, underindustrialization and governance weaknesses, climate risks, and unequal development opportunities. Thus, a strategy locally adapted and coordinated with measures of economic opportunity, social inclusion, institutional reform, environmental sustainability and

community participation is a necessary shift in direction to achieve sustainable poverty reduction.

1.3.Problem Statement

Although having huge natural resources, strategic location, economic potential, etc. Balochistan is the poorest province of Pakistan and is suffering from multi dimensional poverty, unemployment, lack of infrastructure, lack of education and health facilities, institutional shortfalls, etc. Federal and provincial programmes to alleviate poverty have been supportive, but with short-term thinking about welfare, the inability to address structural factors, and minimal knowledge about the Balochistan's geography, socioeconomic and demographic conditions, and governance. Poverty is therefore a serious constraint to human development, economic diversification, social inclusion and sustainable growth.

China did use a comprehensive approach to poverty alleviation, including targeted alleviation, building infrastructure, industrializing, investing in human capital, transforming the countryside, coordinating these institutions, and evidence-based implementation to make significant progress. Despite the difference between the political, administrative and economic system of both countries, there are some lessons to be learnt from China's experience that may be applicable for Balochistan. To date, however, there has been little systematic research into what parts of China's model may be introduced and adapted to the province-specific socioeconomic and institutional constraints.

This study attempts to bridge this gap in understanding, by critically analyzing China's anti-poverty model and pinpointing context-specific policy choices for inclusive and sustainable development in Balochistan. Instead of direct replication, the study evaluates transferable policy instruments, institutional practices and governance mechanism. Finally, it puts forward evidence-based locally adapted strategies to push back multidimensional poverty in Balochistan, and to affect long-term socio-economic transformation.

1.4.Research Objectives

The primary objective of this study is to examine China's anti-poverty model and identify policy options that can promote inclusive and sustainable development in Balochistan.

The specific objectives are to:

1. To examine the political, institutional, and socioeconomic factors that contributed to the success of China's anti-poverty model.
2. To identify the policies, strategies, and institutional mechanisms of China's anti-poverty model that are transferable to the socioeconomic context of Balochistan.
3. To analyze the structural, institutional, governance, and socioeconomic barriers that may affect the adaptation and implementation of China's anti-poverty strategies in Balochistan.
4. To assess the potential role of the China-Pakistan Economic Corridor (CPEC) in supporting poverty reduction, inclusive growth, and sustainable development in Balochistan.
5. To propose context-specific policy options by integrating lessons from China's anti-poverty experience to promote inclusive and sustainable development in Balochistan.

1.5. Research Questions

1. What political, institutional, and socioeconomic factors contributed to the success of China's anti-poverty model?
2. Which policies, strategies, and institutional mechanisms of China's anti-poverty model are most relevant and transferable to the socioeconomic context of Balochistan?
3. What structural, institutional, governance, and socioeconomic barriers may hinder the adaptation and implementation of China's anti-poverty strategies in Balochistan?
4. How can the China-Pakistan Economic Corridor (CPEC) be leveraged to support poverty reduction, inclusive growth, and sustainable development in Balochistan?
5. What context-specific policy options can be developed by integrating lessons from China's anti-poverty experience to promote inclusive and sustainable development in Balochistan?

2. Literature Review

2.1. Conceptualizing Poverty: Absolute Poverty

Absolute poverty is a state of being in which people or a family lacks the basic necessities for survival such as food, clean water, housing, health care and sanitation. Absolute poverty is measured by a fixed poverty level or threshold that is less than the minimum income or consumption requirements to maintain a standard of living while relative poverty compares the well-being of a specific group within a society to the general level of living within that society. The World Bank's current definition of extreme poverty is living on less than \$2.15 USD per person per day (PPP 2017) and is widely used to measure progress towards the achievement of SDG 1 (World Bank, 2024). While this financial indicator is still relevant, current research suggests that poverty is also a lack of access to education, health care, public services, and employment opportunities (OECD, 2024).

Absolute poverty was introduced because Rowntree's research (1901) on primary poverty focused on households' failure to obtain minimum standards of subsistence. Later, Sen (1999) developed this view by introducing the Capability Approach which contended that poverty should also be seen as the lack of capabilities for living healthy, educated and productive lives. However, in the absence of any other measure, absolute poverty is still a key indicator of whether people have enough resources to live a decent life.

One of the most extraordinary examples of absolute poverty reduction is in China. China has pulled hundreds of millions out of extreme poverty by promoting sustained economic growth, structural transformation, infrastructure investment, rural industrialization, human capital development and the Targeted Poverty Alleviation (TPA) programme. The World Bank estimates that more than 70 percent of poverty reduction has occurred in China since the early 1980s. But in recent times, global struggles such as COVID-19 pandemic, climate change, inflation, and food insecurity have hampered global progress in achieving poverty eradication (Yusuf et al., 2024).

Most of the households in Pakistan especially in Balochistan are still facing absolute poverty due to lack of access to basic infrastructure, productive livelihood and services. While social protection programmes have helped alleviate the immediate suffering of the poor, long-term poverty reduction will need policies that integrate and address economic growth, infrastructure,

human capital investment and good governance. China's experience therefore can provide policy lessons for designing sustainable poverty reduction strategies in Balochistan (World Bank, 2022).

2.2.Relative Poverty

Relative poverty is where people or families have much lower income and standards of living than the majority of people in a society. Relative poverty is different from absolute poverty, which is about surviving, and relative poverty is about inequalities, social exclusion and unequal access to resources and opportunities. According to Townsend (1979) poor people are not able to engage fully in the normal activities and lifestyle of their society. The OECD (2024) also measures relative poverty in terms of the income distribution with those below a certain proportion of the median income. Therefore, unequal access to education, healthcare, employment, public services and social participation are also part of relative poverty.

Even if economic growth is achieved, relative poverty cannot be reduced if economic growth is not evenly distributed. Ravallion (2020) points out that growth is most effective in reducing poverty when it is for the disadvantaged and Stiglitz (2012) emphasizes that inequality is a constraint on social mobility and access to opportunities. Digital exclusion, as well as restricted access to financial and public services, are other aspects of relative poverty that have come into focus (UNDP, 2024). China has turned to narrow down regional disparities, enhance rural services, jobs and social safety nets, as can be seen in its Rural Revitalization Strategy for the post-2021 period (State Council Information Office, 2021). To achieve the goal of reducing the relative poverty, in the context of Pakistan and especially Balochistan, equitable distribution of resources, human capital development, robust institution building and inclusive participation in projects like CPEC are needed.

2.3. Multidimensional Poverty

Multidimensional poverty sees poverty in a holistic manner and not just as a lack of income; it incorporates indicators for education, health, nutrition, water, sanitation, electricity, as well as housing. The Capability Approach introduced by Sen (1999) focuses on the capabilities of people to live healthy, educated and productive lives. On this basis, Alkire and Foster (2011) created the Multidimensional Poverty Index (MPI) that reveals multiple deprivations of households. The Global MPI is based on health, education and living standards (UNDP & OPHI, 2024). Income-based measures are not sufficient: more than one billion people live in multidimensional poverty, especially in developing countries. MDP is also associated with climate vulnerability, food insecurity, gender inequality and poor institutions. In China, they have tackled these issues through their Targeted Poverty Alleviation programme, which includes education, healthcare, housing, safe water, infrastructure, vocational training, industrial development, digital connectivity, and social protection (State Council Information Office, 2021). This comprehensive approach made a huge difference in the fight against extreme poverty.

2.4.Sustainable Development and the Sustainable Development Goals (SDGs)

Sustainable development is an integrated approach that aims to achieve a balance between economic, social and environmental development, for the long-term well-being of human beings. It is development that does not hinder the future generations to meet their needs while meeting the needs of the present (WCED, 1987). The idea has grown to also encompass poverty

alleviation, social inclusion, good governance, human development and economic resilience. Sachs (2015) stresses the importance of the policies in sustainable development that aim to encourage economic growth, environmental sustainability, and equity.

This was reinforced by the UN Sustainable Development Goals (SDGs) under the UN 2030 Agenda, with a particular emphasis on SDG 1 on poverty and education, gender equality, decent work, reduced inequalities, infrastructure, climate action and strong institutions. But COVID-19, climate change, inflation, food security and geopolitical tensions have hampered progress. The Chinese experience shows how vital long-term planning, targeted interventions, infrastructure, revitalization of the countryside and good governance are (State Council Information Office, 2021). The key to fighting poverty, unemployment, insecurity, lack of infrastructure and climate vulnerability and promote inclusive and sustainable development in Balochistan is integrated and locally adapted strategies.

2.5. Inclusive Growth Theory

Inclusive growth is a process of growth along with equitable distribution of the benefits. It has a focus on job creation, inequality reduction, and equity in access to education, healthcare, infrastructure, finance, and productive opportunities, instead of the traditional trickle-down approach (ADB, 2024; World Bank, 2024). It is related to Sen's (1999) Capability Approach which emphasizes opportunities and capabilities of people in addition to income. Inclusive growth is defined by Ali and Son (2007) as the extensive engagement of individuals and equitable distribution of the gains of economic growth. China's investments in rural infrastructure, education, healthcare, farming mechanization, vocational training and digital connectivity are key examples. Its Rural Revitalization Strategy and common-prosperity agenda are designed to narrow the gap between different regions and enhance public services (State Council Information Office of the People's Republic of China, 2021). Productive Employment, Value Added Industries, TVET, Entrepreneurship, Digital Connectivity and Equitable Public Services are critical for inclusive growth in Balochistan. These can help narrow the gap between regions, enhance human capital, and deliver the benefits of development to marginalized groups.

3. Theories

3.1 Capability Approach (Amartya Sen)

The Capability Approach views poverty as deprivation of people's capabilities and freedoms rather than simply a shortage of income. Sen (1999) argues that development should expand people's ability to live healthy, educated, productive, and fulfilling lives. Thus, access to education, healthcare, employment, infrastructure, and other essential services is central to understanding poverty. The approach influenced multidimensional measures such as the Multidimensional Poverty Index, which considers deprivations beyond income (Alkire & Foster, 2011). China's Targeted Poverty Alleviation programme reflected this perspective by investing in education, healthcare, vocational training, housing, drinking water, infrastructure, and employment opportunities (State Council Information Office of the People's Republic of China, 2021). This approach is highly relevant to Balochistan, where poverty is associated with limited access to education, healthcare, infrastructure, and employment. Poverty reduction therefore requires expanding human capabilities through investment in human capital, public services, and inclusive institutions.

3.2 Structural Poverty Theory

Structural Poverty Theory explains poverty as the outcome of systemic economic, political, social, and institutional conditions rather than individual shortcomings. Lewis (1954) and Myrdal (1957) emphasize that unequal access to education, employment, markets, infrastructure, and public services can create persistent poverty traps. From this perspective, poverty continues when institutions and economic structures prevent disadvantaged groups from accessing productive opportunities. China's poverty reduction experience demonstrates the importance of addressing these structural constraints. Its Targeted Poverty Alleviation programme combined infrastructure development, industrialization, agricultural modernization, education, healthcare, employment support, and regional development (State Council Information Office of the People's Republic of China, 2021). The approach is particularly relevant to Balochistan, where weak infrastructure, limited industrialization, unemployment, inadequate public services, climate vulnerability, and institutional challenges contribute to persistent poverty. Sustainable poverty reduction therefore requires structural reforms, stronger institutions, improved connectivity, human capital development, and greater economic opportunities rather than short-term welfare interventions.

3.3 Institutional Economics

Institutional Economics emphasizes the importance of institutions in shaping economic development and poverty outcomes. North (1990) argues that effective institutions reduce uncertainty, protect rights, improve coordination, and create conditions for economic activity, whereas weak institutions and poor governance can perpetuate poverty. Acemoglu and Robinson (2012) similarly distinguish between inclusive institutions, which distribute opportunities broadly, and extractive institutions, which concentrate benefits among powerful groups. China's poverty reduction experience illustrates the importance of institutional coordination and administrative capacity. Under Targeted Poverty Alleviation, responsibilities were distributed across different levels of government, while monitoring, assessment, and accountability mechanisms supported implementation (State Council Information Office of the People's Republic of China, 2021). This perspective is highly relevant to Balochistan, where weak institutional capacity, limited coordination, and implementation gaps can reduce the effectiveness of development programmes. Strengthening local institutions, improving monitoring, enhancing coordination, and promoting evidence-based policymaking are therefore essential for sustainable poverty reduction.

3.4 Human Capital Theory

Human Capital Theory explains how investment in education, health, skills, and training increases productivity, employment opportunities, income, and long-term economic development. Schultz (1961) and Becker (1964) emphasize that knowledge and skills are productive assets that enhance individual and national economic capacity. Poverty can persist when people lack access to quality education, healthcare, vocational training, and decent employment. China incorporated these principles into its poverty reduction policies by expanding education, healthcare, vocational training, and skills development in poor rural areas. Targeted interventions helped improve employment opportunities and strengthen household livelihoods (State Council Information Office of the People's Republic of China, 2021). The theory is particularly relevant to Balochistan, where limited educational opportunities, weak technical skills, inadequate healthcare, and unemployment constrain economic mobility. Poverty reduction strategies should therefore prioritize education, TVET,

healthcare, entrepreneurship, and digital skills. Developing human capital can improve employability, strengthen local economies, and create more sustainable livelihoods, particularly for young people and other disadvantaged groups.

3.5 Rural Development Theory

Rural Development Theory focuses on improving the economic and social conditions of rural communities through better livelihoods, infrastructure, services, participation, and economic opportunities. Chambers (1983) emphasizes the needs of marginalized rural populations, while Ellis and Biggs (2001) highlight economic diversification through agriculture, small enterprises, markets, infrastructure, and non-farm employment. China's poverty reduction strategy strongly reflected these principles through investments in rural roads, electricity, irrigation, healthcare, education, digital connectivity, agricultural modernization, and rural industries. The Rural Revitalization Strategy subsequently continued efforts to strengthen rural economies and public services (State Council Information Office of the People's Republic of China, 2021). This theory is highly applicable to Balochistan, where many communities depend on agriculture, livestock, fisheries, and natural resources. Water scarcity, weak infrastructure, limited market access, and low agricultural productivity remain important constraints. Investments in water management, rural infrastructure, agricultural value chains, local enterprises, and market connectivity can therefore support sustainable rural livelihoods and reduce poverty.

3.6 Inclusive Development Framework

The Inclusive Development Framework emphasizes that development should benefit all sections of society, particularly poor, marginalized, and vulnerable groups. It focuses on equitable access to education, healthcare, employment, infrastructure, finance, public services, and decision-making rather than relying solely on economic growth. Gupta et al. (2015) associate inclusive development with social justice, reduced inequality, and broad distribution of development benefits. The framework is also closely connected with SDG 1 on poverty reduction and SDG 10 on reducing inequalities (United Nations, 2015). China's Targeted Poverty Alleviation and Rural Revitalization strategies incorporated inclusive measures including education, healthcare, infrastructure, social protection, employment, and local economic development (State Council Information Office of the People's Republic of China, 2021). For Balochistan, the framework is particularly relevant because of regional disparities and unequal access to public services. Inclusive development requires equitable resource allocation, community participation, human capital development, employment opportunities, and stronger social and economic inclusion.

3.7 Developmental State Perspective

The Developmental State Perspective emphasizes the role of an effective state in promoting economic transformation, structural change, and poverty reduction through long-term planning, strategic investment, and capable institutions. Johnson (1982) highlighted the role of the state in Japan's development, while Evans (1995) emphasized effective cooperation between government, business, and society. Weiss (2000) further identifies state capacity, policy coordination, strategic resource allocation, and institutional continuity as important characteristics of developmental states. China provides a significant example of this approach through long-term planning, infrastructure investment, industrialization, agricultural modernization, and targeted poverty reduction. Strong coordination between central and local

governments supported implementation and monitoring (State Council Information Office of the People's Republic of China, 2021). This perspective is relevant to Balochistan, where institutional weaknesses, limited policy coordination, and implementation gaps constrain development. While China's political system cannot simply be replicated, its emphasis on long-term planning, institutional capacity, coordinated investment, and effective implementation offers useful lessons for sustainable poverty reduction in Balochistan.

4. Research Methodology

4.1 Research Design

This study adopts a qualitative, descriptive, exploratory, and analytical research design to examine China's anti-poverty model and its implications for inclusive and sustainable development in Balochistan. The approach is appropriate for examining policy processes, institutional arrangements, governance mechanisms, and development experiences rather than statistical relationships (Creswell & Poth, 2018). It focuses on Targeted Poverty Alleviation, rural revitalization, infrastructure, industrialization, and human capital development.

4.2 Data Sources

The study relies exclusively on secondary data from credible national and international sources, including the World Bank, UNDP, ADB, FAO, OECD, Government of Pakistan institutions, Planning Commission, Pakistan Bureau of Statistics, BISP, and Government of Balochistan. Peer-reviewed articles, books, policy papers, and institutional reports, mainly from 2018–2025, were also examined. Triangulation across sources was used to strengthen credibility and comprehensiveness.

4.3 Document Analysis

Document analysis was the principal method for collecting and examining qualitative evidence (Bowen, 2009). Chinese policy documents, including Targeted Poverty Alleviation, the Rural Revitalization Strategy, and Five-Year Plans, were reviewed alongside Pakistan's poverty-reduction policies, Balochistan development plans, CPEC documents, and national planning frameworks. Documents were assessed for relevant policy interventions, institutional arrangements, implementation mechanisms, and development outcomes.

4.4 Comparative Policy Analysis

Comparative policy analysis examined China's anti-poverty experience in relation to Balochistan's poverty-reduction context (Knill & Tosun, 2020). The analysis focused on poverty targeting, rural development, infrastructure, human capital, industrialization, and governance. The purpose was to identify transferable principles rather than directly replicate Chinese policies, considering Balochistan's institutional and socioeconomic conditions.

4.5 Thematic Analysis

Thematic analysis was used to identify and interpret patterns within the selected documents and literature (Braun & Clarke, 2006). Evidence was organized around targeted poverty alleviation, rural revitalization, governance, infrastructure, human capital, industrialization,

social protection, and inclusive development. These themes were interpreted against the research questions to identify policy lessons and develop recommendations.

4.6 Limitations

The study is limited by its exclusive reliance on secondary data and absence of interviews, surveys, or field observations. Findings therefore depend on the availability and reliability of published literature and official documents. The study also focuses only on China and Balochistan, rather than multiple countries. Finally, differences in governance, institutional capacity, political structures, and socioeconomic conditions limit direct policy transferability. Accordingly, the study emphasizes contextual adaptation and policy learning rather than replication.

5. Findings and Discussion Thematically:

THEME ONE:

5. China's Success in Eliminating Extreme Poverty: An Analysis of Its Anti-Poverty Model

The thematic analysis identified China's anti-poverty model as a comprehensive and integrated approach that combined strong political commitment, long-term planning, targeted interventions, institutional coordination, and sustained investment in human and physical capital. Rather than relying solely on income support or welfare programmes, China addressed the structural causes of poverty through rural transformation, agricultural modernization, employment generation, education, healthcare, digital innovation, and effective governance. The findings indicate that China's success was driven by the interaction of multiple policy instruments implemented through a coordinated governance system and supported by continuous monitoring and accountability. This theme presents the major factors that contributed to China's elimination of extremely rural poverty and examines how these elements collectively created an enabling environment for inclusive and sustainable development. Understanding these success factors provides the analytical foundation for identifying policy lessons that can inform poverty reduction strategies in Balochistan.

5.1. Evolution of China's Poverty Alleviation Policies

China's poverty alleviation policies have gone through several phases to adapt to the changing pattern of its economic system, development goals and governance structures. Poverty reduction is a national development goal since the establishment of the People's Republic of China in 1949, though the approach to poverty reduction has undergone a great deal of change over time. During the early phase, the government emphasized land reform, agricultural collectivization and development of basic social services. These measures included better access to education, better access to healthcare and less inequalities in land ownership. But the centrally planned model had only a relatively modest impact on economic productivity and by the late 1970s, significant portions of the rural population was in extreme poverty (World Bank, 2022).

However, a landmarks year was 1978, when Deng Xiaoping launched the Reform and Opening-Up Policy, beginning the shift to a socialist market economy. One of the more significant initial changes was the Household Responsibility System (HRS). It has replaced the system of

collective farming with the household-based production and given more autonomy to farmers in their farm decisions. Once the State procurement was done, the farmers got more liberty to sell the produce in the market. The productivity, rural income and economic activity have increased significantly with this reform. At the same time, the development of Township and Village Enterprises (TVEs) created non-agricultural employment and diversified rural economies, helping millions of households increase their incomes (Lin, 1992).

In the 1980s and 1990s, the Chinese government changed its poverty alleviation policy to a regional-based approach. Poor counties were identified and the government implemented programmes to enhance infrastructure, irrigation, agricultural production, education, health care and market access. An important attempt to focus public resources in poorer rural areas and to encourage employment and economic opportunities was the Seven-Year Priority Poverty Alleviation Programme (1994-2000) (Ravallion, 2009). Meanwhile, the fast pace of industrialization, export-led economic growth, and urbanization provided jobs and facilitated the migration of millions of people from low productivity rural pursuits to high productivity industries. This led to a greater association of poverty reduction with structural economic transformation than just with welfare assistance.

The poverty alleviation mechanism in China further shifted to a comprehensive approach that included social security and safeguards, rural development, education, healthcare, and human capital development in the national development planning during the 21st century. Better living conditions in the rural areas came as a result of measures like the abolition of agricultural taxes, the extension of compulsory education, the establishment of a system of rural health insurance and improved social security. But poverty was quickly localized in remote mountainous regions, minority ethnic groups areas, and environmentally sensitive regions. China's response was to take a more targeted and household-based approach, which led to the launch of the Targeted Poverty Alleviation (TPA) strategy in 2013 (State Council Information Office of the People's Republic of China, 2021).

TPA was a very different approach from targeting poor regions to identifying the poor households and the specific causes of their poverty. Local governments were able to provide poverty databases, identify the needs at the household level, implement the interventions and monitor outcomes. This meant industrial development, vocational training, relocations from ecologically sensitive places, education support, healthcare, ecological compensation and social assistance. This targeted approach allowed resources to be targeted to households based on their needs (World Bank, 2022). China has officially declared to end extreme poverty based on its national poverty line in February 2021 as a big achievement in its poverty alleviation journey.

The Chinese case shows that eradicating poverty is a long-term, adaptive and multidimensional process. China's policy approach was not one intervention alone; it was a series of interventions as part of national development, which included market-oriented reforms, agricultural modernization, industrialization, infrastructure development, human capital investment, social protection, and targeted interventions. With regard to its policies, it adapted to the evolving socioeconomic context but remained focused on poverty reduction in the long run (Ravallion, 2009; World Bank, 2022).

While there are many differences between the political and administrative structure in China and Pakistan, there are some lessons in this experience that are relevant for Balochistan. Evidence-based planning, targeted interventions, localized implementation, integrated rural

development, infrastructure investment, institutional coordination and a sustained policy commitment can be used to develop a poverty reduction strategy for the province. However, the principles will need to be adjusted to the socio-economic, geographical, institutional and political setting in Balochistan and not be adopted wholesale.

5.2.Targeted Poverty Alleviation (TPA)

Targeted Poverty Alleviation (TPA) is generally considered as one of the most important aspects of China's success in alleviating extreme poverty in the countryside. TPA was launched in 2013 as a way of moving away from region-based poverty reduction programmes to a more targeted, household-based approach. It acknowledged that poverty is a cause with varying factors among households and communities and that interventions need to be tailored to these factors, the available resources, and the specific constraints. It has adopted a targeted and responsible strategy to reduce poverty that focuses on precise identification of the poor, proper allocation of funds, efficient project implementation, and rigorous monitoring of outcomes.

One of the key points of TPA was the focus on the “Six Precisions” and “Five Key Measures.” The Six Precisions consist of the right identification of poor households, design of the project, disbursement of funds, execution of measures, assigning officials, and assessment of poverty reduction outcomes (Zuo, 2021). Five Key Measures were aimed at industrial development, moving away from environmentally sensitive zones, ecological compensation, education assistance, and social assistance. The use of a comprehensive poverty database helped authorities to identify poor households, understand the causes of poverty, and design interventions accordingly. This data-driven method contributed to better resource targeting, transparency and effectiveness of policies.

TPA also underscored that implementation needs to be done at the household level. Local officials were detailed to poor villages and households to track progress, update household information, coordinate public services, and make sure that interventions were delivered to the target population. These measures involved agricultural modernization, creation of employment opportunities, vocational trainings, microfinance, infrastructure, healthcare, educational support and relocation from disaster-prone or environmentally fragile areas. Industrial poverty alleviation also promoted enterprises, cooperatives and private investors to set up economic activities in poor areas to provide jobs and sustainable income opportunities. These integrated interventions contributed to a betterment of the household livelihoods, access to services and economic opportunities (World Bank, 2022).

Coordinated and held accountable institutions were also key. National poverty reduction targets were set by the central government and responsibilities were set for provincial, county, township and village governments. There was greater accountability as performance evaluation systems were tied to the effectiveness of poverty reduction efforts and the performance of local officials. Poverty data were regularly updated, and monitoring and household assessments were carried out to help policymakers identify gaps in implementation and refine interventions as needed (State Council Information Office of the People's Republic of China, 2021). As a result, TPA differed from traditional welfare-oriented strategies in that it was characterised by strong political will, institutional cooperation, bottom-up execution, and oversight (Zuo, 2021).

From 2013 to 2020, China has been successful in reducing nearly 100 million rural population from extreme poverty and eliminated 832 counties from the national poverty list. In 2021, China announced the completion of its poverty eradication task according to the national

poverty standard (State Council Information Office of the People's Republic of China, 2021). But it is important to keep the focus on rural revitalisation, social protection, income diversification and climate resilience, as well as to limit the risk of a return to poverty (World Bank, 2022).

TPA has important lessons for Balochistan. Geographical isolation, poor infrastructure, unemployment, low education and health levels, and climate vulnerability are among the factors influencing poverty levels, which varies markedly between districts in the province. Therefore a uniform poverty reduction strategy might have limited effectiveness. A district level approach based on evidence would help pinpoint poor households and communities and identify district-specific causes of deprivation, and design interventions. The idea of targeted interventions, data-based planning, institutional accountability, inter-agency coordination and continuous monitoring, which is an essential principle of centralised governance in China, can be translated to Balochistan. This would help to make poverty reduction programmes more effective and contribute to inclusive and sustainable development.

5.3.Rural Revitalization Strategy

China launched the Rural Revitalization Strategy (RRS) in 2017 as a national policy to consolidate the poverty reduction achievements and work on rural development. China changed focus on structural factors after poverty alleviation success such as rural-urban disparity, low productivity of agriculture, environmental limits and region disparities etc. Thus, the reform of the “poverty alleviation” perspective to be “rural transformation” with the core emotional points including agricultural modernization, economic diversification, ecological protection, public service and governance (Central Committee of the Communist Party of China & State Council, 2021).

The strategy consists of five objectives: industrial prosperity, ecological livability, rural civilization, governance and living standards (CCCPC & SC, 2021). It has encouraged the adoption of modern farming, rural industries, transport and digitalization, health care, education, water and sanitation and protection. employment has grown and reliance on agriculture has diminished with livelihood diversification as a result of agribusiness, tourism, e-commerce and entrepreneurship. Integrated approach to rural development can boost food security and resilience (FAO, 2022).

Modernization of agriculture through scientific cultivation practices, technology, irrigation, mechanization, high value crops, agro-processing, storage and market linkages continue to lie at the heart of preservation. This has been conducive to linking farmers to more value chains and productivity (World Bank, 2022). Following investments in education, healthcare, water, sanitation, social protection and environmental protection, rural living conditions in Bangladesh have improved and village governance has facilitated investment (State Council Information Office of the People's Republic of China, 2021).

The RRS provides lessons to Balochistan because in rural areas, livelihoods rely on agriculture, livestock, fisheries and natural resources, and are challenged by factors such as scarcity of water, limited productivity, inadequate infrastructure, short value chains and poor value addition initiatives. A context-specific strategy may entail creating market reach, connectivity to digital platforms, market development, stronger local institutions, livestock, fisheries and agro-processing, and modern irrigation, among others, as priorities. China's experience indicates that it is necessary to step beyond the provision of short-term welfare support toward

long-term investments in productivity, human capital, infrastructure, environmental sustainability and governance.

5.4.Industrial development and employment creation

Industry is a keen factor contributing to both the improvement of poverty alleviation and economic transformation in China. Since the Reform and Opening Up Policy in 1978, China has advocated export-oriented industrialization, manufacturing, SMEs and labour-intensive industries, which have generated employment and raised household incomes. International investment, technology transfer and industrial development were encouraged in the Special Economic Zones (southern regions of Shenzhen, Zhuhai, Xiamen and Shantou), (Naughton, 2018). Township and Village Enterprises (TVEs) were also important diversifiers of rural economies as they engendered new manufacturing, processing and service jobs, away from the big cities, took up surplus rural labour, and boosted rural income (Lin, 1992).

China also included industrialization in its Targeted Poverty Alleviation strategy. Industries that rely on local resources and local comparative advantages were encouraged in poor counties, such as agriculture, livestock, food processing, handicrafts, renewable energy and rural tourism. Poor households benefited from government's support in infrastructure development, financial incentives, technical assistance, and market access, allowing them to join through wage employment, cooperative groups, start their own businesses, and value chains (State Council Information Office of the People's Republic of China, 2021; World Bank, 2022). Vocational training and labour market policies also enhanced the productivity and employability of workers.

The Chinese experience has valuable lessons to draw from for Balochistan. The province has huge potential in mineral resources, agriculture, stock and fisheries, renewable energy and its rapidly changing strategic location within the CPEC, but the lack of industrialization is a major constraint in employment and poverty reduction in the province. Potentially productive employment and locally higher value addition could be achieved through the development of mineral processing, agro-processing, fisheries, renewable energy, industrial estates and SMEs. But a supportive role of infrastructure, TVET, entrepreneurship, access to finance, private investment and functionality of institutions to industrialization are required. It is not, in other words, the Chinese lesson and is a cautionary tale to industrialize the Baloch province using industrialization methods but rather to use local resources and socioeconomic conditions to employ people in industry. This strategy can also help boost productive jobs, build local economies, boost family incomes, and make a meaningful impact in ending poverty on a sustainable basis.

5.5.Infrastructure-Led Development

China's poverty alleviation efforts have largely focused on infrastructure development, which has helped to boost economic growth and connectivity in the region, and to improve the standard of living of its people. One problem that the Chinese authorities identified is that lack of infrastructure limited rural communities' ability to access markets, public services and economic opportunities. For this reason, China took up an infrastructure-first development strategy that focused on roads, railways, bridges, electricity, irrigation, telecom, safe drinking water and digital connectivity. The investments lowered transportation expenses, boosted trade, enhanced access to education and healthcare, and opened the way for private investment and

industrialization (World Bank, 2022). Infrastructure development thus became a key tool to mitigate regional disparities and inclusive development.

One of the key elements in China's infrastructure plan was to connect the poor, remote, mountainous regions. National development schemes and the Targeted Poverty Alleviation (TPA) programme provided successive improvement in road, power, broadband, public transport, and essential services to the rural community. Improved connectivity helped farmers access markets, lower production and transport costs, and facilitated rural industries and tourism. The infrastructure development also enhanced access to educational, medical, financial and governmental services in remote communities (State Council Information Office of the People's Republic of China, 2021).

Infrastructure investment also facilitated the process of industrialization, employment and modernization of agriculture. An infrastructure of transport routes, logistics facilities, industrial zones and energy infrastructure fostered investment and enabled the growth of manufacturing and services. Investment in irrigation, electrification and water-management systems raised the productivity and resilience of agriculture, and investment in infrastructure created short-term jobs during construction and longer-term economic opportunities (Asian Development Bank, 2024).

The Chinese experience has several lessons for Balochistan, where lack of adequate road connections, power outages, limited irrigation, lack of digital connectivity and difficulty accessing markets still hamper development efforts. Thus, rural roads, water management, renewable energy, digital infrastructure, logistics and transport corridors connected to CPEC should be accorded priority. These investments can foster better market access for agriculture, livestock, fisheries, mining and SMEs and generate jobs and better public services. In that way, infrastructure-led development can help to become a strategic tool to reduce multidimensional poverty and inclusive and sustainable development in Balochistan.

5.6.Human Capital Development

In China, human capital development has been a major approach in the fight against poverty, with the understanding that poverty alleviation must be done through investment in people. In addition to economic growth and employment generation, China invested in education, healthcare, vocational training and social protection to help the poor to join in and benefit from development. Such investments led to an increase in labour productivity, household incomes and social mobility, and to a decrease in intergenerational poverty (World Bank, 2022).

China was focused on human capital in the form of education. The government introduced laws to extend compulsory education, provided additional funding for rural schools, provided better teachers and teacher training, and provided money for poor families. The Targeted Poverty Alleviation (TPA) programme ensured that students of remote and poor communities were given scholarships, tuition support, free textbooks and accommodation (State Council Information Office of the People's Republic of China, 2021). Technical and Vocational Education and Training (TVET) also offered market oriented skills for employment in manufacturing, agriculture, services and emerging industries, enhancing the employability and income opportunity.

Another important component was the reform of health care. China invested more in the rural hospitals and community health centres, and improved the primary healthcare and enlarged the

New Rural Cooperative Medical Scheme. These measures helped to increase access to affordable health care and lower the cost of medical bills on low-income families (Yip et al., 2019).

China's experience provides valuable lessons for Balochistan, as its poor educational performance, technical capacity and health care system remains a source of multidimensional poverty. The province should focus on quality education, TVET, digital education, Primary healthcare, maternal and child health services, and workforce development, specifically for women and youth. Enhanced cooperation between government, education and industry can enhance skills and employment outcomes. Investment in human capital should then not be considered solely as a social investment, but as an investment in productivity, employment and sustainable poverty reduction.

5.7.Digital Poverty Reduction

Digital technology has been increasingly playing a key role in China's poverty alleviation efforts, especially in the latter period of the Targeted Poverty Alleviation (TPA) programme. The Chinese government came to understand the potential of digital infrastructure and information technology to overcome geographical isolation, expand market access, foster financial inclusion and enhance public service delivery in rural areas. Therefore, the digital solution for poverty reduction was included in the national development policies by investing in the broadband internet, mobile communication, e-commerce, digital platforms and smart agriculture. These technologies not only opened up new economic avenues but also enhanced access to education, health, financial and government services in remote areas (State Council Information Office of the People's Republic of China, 2021).

One of the significant events was the growth of rural e-commerce, which allowed farmers and small businesses to market their agricultural produce directly to consumers. Platforms like Alibaba, JD.com and Pinduoduo created rural service centres, logistics chains and digital platforms that linked far-flung villages with larger markets across the country. This lowered marketing restrictions and transaction costs, boosted the farmers' access to consumers and facilitated rural entrepreneurship (OECD, 2023). Digital payments and online financial services also expanded credit, savings, and insurance services, facilitating greater access by rural households and small businesses to the formal economy. Meanwhile, e-commerce created new jobs in logistics, packaging, warehousing, transport and other digital services.

The use of digital technology in education, healthcare, governance and poverty monitoring was also introduced. The rural–urban digital divide was decreased through the enhanced availability of broadband services and the greater access it offered to online education, telemedicine services and government services. In the process of TPA, digital databases and geographic information systems (GIS) were used to identify the poor households, monitor the implementation of the programme and measure the poverty reduction impact. These tools enhanced policy coordination, transparency and evidence-based decision making (World Bank, 2022). The use of digital technologies in agriculture, such as precision agriculture, remote sensing, and smart irrigation, also contributed to agricultural productivity and the efficient utilization of natural resources.

The Chinese example is instructive for Balochistan, which is plagued by a significant digital divide that is a major limitation to socioeconomic growth. Many rural communities are still facing limited internet access, poor digital infrastructure, lack of digital literacy and limited

access to online financial and education services. Enabling providers to invest in broadband networks, mobile connectivity, digital skills and e-government services could facilitate access to markets, education, health care, finance and public services. Digital platforms could also provide farmers, livestock producers, fisheries and small businesses access to larger markets and lower transaction costs. Given CPEC and the new opportunities arising from a digital economy, the experience of China in Digital Poverty Reduction can be applied to Balochistan in a way that fosters economic inclusion, job creation, improved public service provision and inclusive and sustainable development.

5.8.Governance and Institutional Coordination

The Chinese experience indicates that besides growth, investment in infrastructure and human capital, good governance and institutional coordination are equally vital for poverty alleviation. The government adopted multi-level approach, national poverty reduction policies were implemented through provincial level, county level, township level and village level governments. This facilitated the process of turning national goals into relevant interventions at a local level, and minimised the duplication of service provision across government agencies (State Council Information Office of the People's Republic of China, 2021).

A key component of the Targeted Poverty Alleviation (TPA) programme was accountability. Government officials were provided specific poverty-reduction tasks, gathered household-level data, facilitated interventions and followed up implementation. They were evaluated based on the following measurable poverty reduction outcomes: strengthening institutional accountability and implementation effectiveness (World Bank, 2022).

China also advocated for government departments, financial institutions, state-owned enterprises, enterprises, universities and civil society organizations to coordinate. This partnership brought together financial, technical, human and technological resources to address poverty in an all-encompassing manner (OECD, 2023). The implementation was also enhanced by the data-based planning, regular assessment and policy adjustment using household poverty databases (State Council Information Office of the People's Republic of China, 2021).

These lessons are applicable to Balochistan where poverty reduction is limited by weak institutional capacity, lack of coordination, lack of monitoring and implementation gaps. Inter-agency coordination, integrated poverty databases, evidence-based planning, accountability and community participation can enhance the effectiveness of programmes. The principles of long-term planning, coordination, results-based management and data-driven policymaking have value for inclusive and sustainable poverty reduction in Balochistan, but cannot be replicated in the context of China's centralized political system.

5.9.Agricultural Modernization

Agricultural modernisation has been one of the keys to rural development and poverty alleviation in China. China has been investing in irrigation, mechanisation, agricultural research, rural infrastructure and modern technologies to enhance productivity and rural incomes since the Household Responsibility System was introduced in the late 1970s (World Bank, 2022; Naughton, 2024). Agricultural policy also focused on diversification, value addition and market integration. Extension services, rural credit, subsidy and market information have been provided to encourage farmers to produce high-value crops, modern livestock, aquaculture, and agro-processing.

The Targeted Poverty Alleviation programme also provided access to better seeds, technical support, tools, training and financing to poor families with the aid of local conditions. Farmer groups and rural enterprises contributed to creating economies of scale and market access (State Council Information Office of the People's Republic of China, 2021). Efficient water management, ecological conservation, climate-resilient agriculture and sustainable land use also contributed to the promotion of environmental sustainability.

The lessons are applicable to Balochistan where agriculture and livestock are still significant livelihoods. Rural development is hampered by water shortages, low yields, low level of mechanization, weak extension services, and poor market access. Investing in modern irrigation, climate-smart agriculture, research, cooperatives, agro-processing and rural value chains can boost incomes and catalyse inclusive and sustainable rural transformation

5.10. Healthcare and Social Protection

Poverty can cause and exacerbate poor health and vice versa, which is why healthcare and social protection are important parts of China's poverty reduction strategy. In rural areas, particularly, high medical costs can slide vulnerable families back into poverty. To alleviate the financial burden on low-income families, China thus expanded public healthcare, enhanced the medical system in rural areas and reinforced health insurance coverage.

One of the major measures was to enhance the Basic Medical Insurance Scheme and Critical Illness Insurance Programme, thereby reducing the out-of-pocket healthcare costs and access to essential services. China's rural hospitals, township health centres and village clinics were also developed, and trained health workers in remote areas were increased (WHO, 2023). Social protection measures in the areas of minimum living allowances, pensions, social assistance and disaster relief were put in place. For those severely ill or disabled households, under the Targeted Poverty Alleviation programme, targeted support was given to ensure they would not experience a regression into poverty (State Council Information Office of the People's Republic of China, 2021).

From China's experience, the coupled attention to healthcare, social protection, education and employment in the context of poverty reduction policies is essential. This combined strategy helped to enhance household resilience and promoted human development (World Bank, 2022). The lessons are especially pertinent in Balochistan as current multisectoral poverty is exacerbated by a lack of health facilities, shortage of health personnel, lack of health insurance, and weak social protection in the province. Reliance on primary healthcare, building up the district hospitals, strengthening maternal and child health services and introducing a focused health insurance for vulnerable households can diminish poverty-related vulnerabilities. Mainstreaming healthcare within nutrition, education, social protection and livelihood programmes can help to consolidate inclusive and sustainable human development in the province.

5.11. Monitoring, Evaluation and Accountability

The key to the success of the Chinese anti-poverty model was the monitoring, evaluation and accountability. The Chinese government has put in place an extensive performance management system to evaluate poverty reduction policies, monitor key results, and assure that

resources reach the target groups. The continuous data collection, frequent reassessment, and evidence-based decision-making allowed for identifying issues in programme implementation, enhancing programme efficiency, and making adjustments as needed (World Bank, 2022; State Council Information Office of the People's Republic of China, 2021).

One of the components was a national database of poverty, reflecting household information on income, education, health, housing and employment. Household data was frequently refreshed with local officials visiting households and using digital systems. This enhanced the precision, minimised the error, and adjusted the intervention in accordance with the changes in the household circumstances (State Council Information Office of the People's Republic of China, 2021).

China also set clear accountability at central, provincial, county and village levels. The officials were set poverty reduction targets and inspections; audits and verification mechanisms were set up to monitor progress. Coordination and real-time monitoring (RTM) were further enhanced by the use of digital tools, geographic information systems (GIS) and online reporting (OECD, 2023).

The lessons for Balochistan emphasise the need for development of an integrated provincial poverty database, transparent reporting, frequent impact evaluation, greater institutional accountability and evidence-based policy making. These mechanisms can help to enhance resource allocation and make poverty reduction programmes more effective, inclusive and sustainable.

Theme 2: Poverty Situation in Balochistan

Despite its substantial natural resources and strategic potential, Balochistan remains Pakistan's least developed province, with poverty shaped by interconnected economic, social, institutional, and geographical factors. Poverty extends beyond income to limited access to education, healthcare, infrastructure, employment, clean water, and public services. Weak governance, low industrialization, climate vulnerability, and regional disparities further deepen deprivation (UNDP & OPHI, 2021; World Bank, 2024). Existing poverty-reduction programmes have faced implementation, institutional, infrastructure, and contextual challenges. Understanding these dimensions is essential for identifying policy gaps and assessing relevant lessons from China's anti-poverty model for inclusive and sustainable development in Balochistan.

6.1 Nature and Dimensions of Poverty

6.1.1 Income Poverty

A key factor in China's success fighting poverty was monitoring, evaluation and accountability. To evaluate poverty reduction policies and to measure the outcomes, the Chinese government set up a comprehensive performance management system to ensure that the resources were sent to the aimed target groups. The strategy was based on ongoing data collection, frequent reassessment and evidence-based decision-making to help policy makers learning about implementation gaps, fine tuning the programme for increased efficiency, and making necessary adjustments (State Council Information Office of the People's Republic of China, 2021; World Bank, 2022).

Despite Balochistan having low poverty levels, income poverty continues to be a problem in the province as significant proportion of households are engaged in subsistence agriculture, livestock rearing, informal activities and daily wage labour. Although the province has abundant natural resources, economic diversification opportunities have been limited, and private investment and employment growth have been weak, limiting income opportunities and making it vulnerable to inflation and economic shocks (World Bank, 2024; Pakistan Economic Survey, 2023–24).

Thematic analysis reveals that income poverty has a significant linkage with low productive employment and low industrialization. There is still limited access to jobs in manufacturing or services and value added, especially in remote rural areas. Income-generating opportunities are further limited by poor transport infrastructure, weak market access, limited financial services, and poor institutional support, which further exacerbates spatial disparities (UNDP & OPHI, 2021; ADB, 2024).

There is a need to diversify livelihoods, enhance access to productive assets, financial inclusion and education to reduce the income insecurity of vulnerable groups, such as women, youth, small farmers and landless labourers. Seasonal work and reliance on subsistence livelihoods also makes households more vulnerable (World Bank 2024).

Overall, poverty in Balochistan is not only an income issue, but is basically structural. Productive employment, industrialization, entrepreneurship, agricultural modernization and human capital development are needed to achieve sustainable reduction. This experience, as a whole, is similar to China's, which has also experienced long-term poverty reduction through economic transformation, infrastructure and job creation.

6.1.2 Multidimensional Poverty

Multidimensional poverty is one of the most prominent aspects of underdevelopment in Balochistan, in addition to the poor income situation. The analysis shows that a lot of households are deprived in several sectors like education, health care, nutrition, housing, sanitation, electricity, clean drinking water, productive assets etc. These intersecting disadvantages affect people's capabilities, reduce their capacity to engage in economic and social activities, and contribute to chronic and intergenerational poverty (UNDP & OPHI, 2021; World Bank, 2024).

Balochistan always has the highest Multidimensional poverty rate among the provinces of Pakistan. There is a high level of deprivation of schooling, child health, housing, sanitation and basic infrastructure in rural communities. These challenges are exacerbated by geographical isolation, scarcity of institutional capacity, lack of public investment and unequal access to services. Hence if there is no advancement in basic services and human development, income growth will not have a significant impact on living standards (UNDP & OPHI, 2021).

Multidimensional poverty is exacerbated by climate and environmental issues. Agriculture and livestock are critical livelihoods that are directly impacted by droughts, water scarcity, land degradation and climate variability. These pressures affect household incomes and impact upon food security, health and education. Poverty is thus multi-faceted and demands a coordinated policy response and not stand-alone interventions (World Bank, 2024; UNDP, 2024).

It is also concluded that women, children, people with disabilities and those in remote rural areas are more vulnerable. Lack of access to education, healthcare, transportation, and digital connectivity hinders their economic potential and contributes to social marginalization. Inclusive policies for better access to productive opportunities and essential services are required to address these inequalities.

In summary, the multidimensional poverty reduction in Balochistan needs to be addressed through a holistic effort focused on various sectors, including education, health, water and sanitation, infrastructure development, social protection, and employment. This closely mirrors China's experience in poverty reduction which involved building human capital, infrastructure, public services, institutions, and specific interventions. This approach can help towards inclusive and sustainable development in Balochistan.

6.1.3 Rural Poverty

Poverty in Balochistan in many ways is also about rural poverty, as large portions of the population are living in rural areas and reliant on natural resources, such as agriculture, livestock and fisheries. The study reveals substantial inequalities in poverty rates between rural districts and urban centres, which are primarily driven by low agricultural productivity, poor infrastructure, low economic opportunities, geographical isolation, and poor public services (UNDP & OPHI, 2021; World Bank, 2024).

Rural livelihoods are mostly subsistence and traditional farming based, with low levels of irrigation, poor value chain, storage, transport and marketing infrastructure. Additionally, food insecurity and income vulnerability are exacerbated by drought, water scarcity, land degradation, and climate variability (FAO, 2022; World Bank, 2024). The availability of basic services is also restricted in many rural communities through lack of quality of schools, healthcare facilities, electricity, clean water and sanitation, internet access, and financial services. These gaps limit the development of human capital, entrepreneurship, and non-farm employment opportunities, and deter private investment (Pakistan Economic Survey, 2023–24).

There is also some evidence of poor institutional support such as the lack of agricultural extension, vocational training, rural credit and market information. Such constraints can hinder farmers' capacity to access modern technologies and boost productivity, and low employment prospects draw young people to urban areas (ADB, 2024).

In general, the problem of rural poverty needs not only the short term welfare measures but integrated rural transformation. We need investments in irrigation, infrastructure, climate smart agriculture, value chains, rural enterprises, skills and local institutions. China's experience shows that combining agricultural, infrastructure, economic and local governance reforms can have a significant positive impact on rural livelihoods and inclusive and sustainable development.

6.1.4 Gender Dimensions of Poverty

Gender inequality is one of the most important aspects of poverty in Balochistan, with women and girls being more deprived than men in terms of education, employment, health care, productive assets and decision making. The analysis reveals that traditional social norms,

restricted mobility, and low economic participation are especially significant factors affecting women in rural areas, leaving them more vulnerable to multidimensional poverty and social exclusion (UNDP, 2024; World Bank, 2024).

Access to education is a concern for women. Girls are limited in their educational opportunities by poverty, distance to schools, lack of infrastructure, school drop-out rate and sociocultural barriers. Limited education and technical skills further limit women's access to formal employment and help to perpetuate intergenerational poverty (Pakistan Economic Survey, 2023-24; UNESCO, 2024). Women are also involved in unpaid agriculture, livestock, handicrafts and domestic duties and have limited access to finance, entrepreneurship, digital technology and productive assets, which limits their economic empowerment (ADB, 2024)

Women's vulnerability is also exacerbated by the lack of healthcare and social protection, especially in remote places. Women are burdened by limited access to maternal health services, inadequate nutrition, limited water availability, and food insecurity (UNDP, 2024). Hence, emphasis should be on girls' education, TVET, health services, financial inclusion, entrepreneurship and participation in local decision-making by women in poverty reduction. Based on China's experience, investing in women's education, employment, health and livelihoods can help to improve household welfare and more inclusive development.

6.2 Structural Causes of Poverty

6.2.1 Weak Governance

A key structural factor of poverty in Balochistan is poor governance. Thematic analysis reveals that programme effectiveness is hindered by weak institutional capacity, poor policy implementation, lack of inter-agency collaborative efforts, and lack of monitoring. These governance gaps are responsible for inequities in service delivery, especially in remote places (World Bank, 2024). Inefficiencies in administration and a lack of evidence-based policy making also influence resource allocation, while poor local government systems hinder community engagement and ownership (UNDP, 2024). Lack of transparency, slow project delivery, and poor performance monitoring also hamper the effectiveness of poverty reduction initiatives, preventing vulnerable communities from enjoying better access to education, healthcare, infrastructure, and job opportunities (ADB, 2024). The Chinese experience points to the need for political will, inter-institutional collaboration, results-driven governance and robust monitoring to achieve poverty reduction. Building up the provincial institutions, ensuring accountability, evidence-based decision-making and enhancing local governments is therefore crucial for inclusive and sustainable poverty reduction in Balochistan.

6.2.2 Limited Infrastructure

One of the key structural limitations to poverty alleviation in Balochistan is infrastructure shortages. Thematic analysis revealed that the lack of road, electricity, water supply, irrigation, public transport and digital connectivity are a hindrance to economic activity and access to basic services. These gaps drive up production and transport costs, limit market access, reduce private-sector investment, and limit job creation, especially in rural areas (World Bank, 2024). Other gaps in infrastructure are also highlighted in agricultural, educational, health, trade and industrial development sectors which is a cause of disparities at regional level (Pakistan Economic Survey, 2023-24). Access to online education, digital finance, e-commerce, and government services is also limited, especially for women and rural youth, due to limited digital

infrastructure (UNDP, 2024). The Chinese experience shows that investment in rural roads, electricity, irrigation, broadband and public facilities contributes to improving productivity, connectivity and market integration. Infrastructure investments can therefore boost economic opportunities, better access to services, (lessening regional disparities), and inclusive and sustainable poverty reduction in Balochistan, if targeted.

6.2.3 Low Industrialization

Despite having a vast mineral resources and strategic location and energy potential, Balochistan is still highly under industrialized province. Agriculture, livestock, informal trade, and mining are all critical sectors in the province, and they are generally low productivity and low employment (World Bank, 2024). From the analysis, it is revealed that in addition to energy shortage, limited investment, difficult access to finance, shortage of skilled labour and weak market access, the development of industry and the growth of SMEs is hindered by the lack of industrial infrastructure. Such restrictions hamper value addition and deter private investment, especially for jobs for young people. The province has also failed to fully realize the benefits of its mineral resources and related activities of CPEC due to the lack of value-added industries and weak industrial connections (Government of Pakistan, 2024). The Chinese experience shows that industrial clusters, infrastructure investments, SMEs and employment oriented industrial policies are poverty supporting. Mineral processing, agro-processing, SEZs, SMEs, entrepreneurship and value-added industries can help to diversify the economy, create productive jobs, and can contribute towards inclusive and sustainable development in Balochistan.

6.2.4 Water Scarcity

Limited water resources are one of the biggest structural barriers for poverty alleviation in Balochistan. The thematic analysis reveals that the availability of scarce surface and groundwater resources, low rainfall, frequent droughts, climate change, and poor water management have impacted agriculture, livelihoods and food security (World Bank, 2024; FAO, 2022). Rural vulnerability is further exacerbated by inadequate irrigation, excessive extraction of groundwater, the lack of conservation and a lack of safe drinking water. Farmers struggle to sustain their farm and livestock, which leads to unemployment and migration, especially in districts prone to drought (Government of Pakistan, 2024). Sustainable water governance has become more significant in the context of climate change, which is exacerbating these pressures, characterized by higher temperatures, extended droughts, and irregular rainfall patterns (UNDP, 2024). The Chinese experience demonstrates the importance of investing in efficient irrigation, water-saving, modern agricultural technologies and combined rural development. Watershed management, rainwater harvesting, efficient irrigation, groundwater regulation, and climate-smart agriculture can play a significant part in enhancing rural livelihoods, agricultural productivity, and sustainable poverty alleviation in Balochistan.

6.2.5 Human Capital Deficit

Human capital deficit is one of the critical structural factors that is responsible for the continuing poverty in Balochistan. The thematic analysis indicates that the province is still behind the other provinces on education, health care, technical skills, and labour productivity. The employability and earning potential of the population is low due to low literacy rates,

inadequate educational facilities, poor healthcare services and limited access to Technical and Vocational Education and Training (TVET) (World Bank, 2024 and Pakistan Economic Survey, 2023–24).

The results show that inequalities in education are high, especially in rural areas where many communities do not have access to good schools, trained teachers and learning materials. Likewise, lack of health facilities, lack of health workers and poor quality maternal and child health care services have a negative impact on human development. These challenges affect the productivity of the workforce and contribute to intergenerational poverty (UNDP, 2024).

The analysis also reveals that gaps between the labor market demand and the skills of the workforce limit the path to economic diversification as well as to the development of the private sector. However, limited technical education, entrepreneurship education, and digital skills of the youths have hindered them in access to productive employment opportunities; aside from that, women continue to face additional challenges in education and labour force participation (Asian Development Bank [ADB], 2024).

To tackle similar challenges, China made significant efforts and investments in education, vocational training, healthcare and skills development for its poverty alleviation strategy. Labour productivity can be increased and employment can be created by strengthening human capital through quality education, TVET, health care, digital literacy and entrepreneurship programmes in Balochistan, which will contribute to inclusive and sustainable development for the province.

6.3. Existing Poverty Reduction Policies

6.1. Benazir Income Support Programme (BISP)

The Benazir Income Support Programme (BISP) is the largest social protection programme in Pakistan that seeks to alleviate poverty by providing unconditional cash transfers to low-income families, focused on women recipients. BISP's coverage has been steadily increasing since its launch in 2008, and the National Socio-Economic Registry (NSER) is used to identify its beneficiaries. This programme has helped to enhance the household consumption, food security and access to basic services of vulnerable groups. However, in Balochistan, its overall contribution to long-term poverty reduction is limited as it mostly provides for immediate income needs and does not focus on employment or skills development or local economic growth (World Bank, 2022; Government of Pakistan, 2024).

6.2. Ehsaas Programme

In 2019, the Ehsaas Programme was launched to tackle poverty more comprehensively through a multi-pronged strategy, including cash transfers, scholarships, nutrition initiatives, interest-free loans, financial inclusion, and livelihood assistance. The objective of the programme was to augment the social protection and encourage human capital development and financial inclusion for vulnerable groups. In spite of its detailed design, the implementation process in

Balochistan has been hampered by weak institutional capacity, geographic constraints, poor service delivery and lack of coordination among implementing agencies. Hence, the programme has made limited progress to tackle the structural poverty in the province (Government of Pakistan, 2023; UNDP, 2024).

6.3. Public Sector Development Programme (PSDP)

Public Sector Development Programme (PSDP) is the major instrument of Federal government for financing infrastructure and social-economic development projects. PSDP investments in Balochistan have facilitated the development of roads, education, health, water supply and energy infrastructure. These investments have helped to enhance connectivity and public services in multiple districts. But, PSDP has been held back by project delays, funding limitations, implementation inefficiencies, and inadequate monitoring, thereby limiting its overall effectiveness for achieving sustainable poverty reduction efforts. The focus needs to be expanded to productive sectors and local economic development in order to maximise its long-term impact (Planning Commission of Pakistan, 2024; World Bank, 2024).

6.4. Provincial Initiatives

The Government of Balochistan has been working on improving livelihoods of the people of Balochistan in various fields such as agriculture, livestock, education, health, rural development and employment generation. The provincial programmes, many of them with the support of development partners, have included a strong emphasis on the extension of basic services, infrastructure and the social welfare. However, financial resources, institutional capacity, planning capacity and the uneven implementation of these initiatives have restricted the effectiveness of these initiatives. Enhancing provincial governance and coordination with federal programmes is key to improving development outcomes (Government of Balochistan, 2024; UNDP, 2024).

6.5. Limitations

The thematic analysis reveals that poverty reduction policies in Balochistan have mostly been concerned with social assistance and have been unable to deal with the structural determinants of poverty. Poor governance, poor coordination between institutions, weak monitoring, low job creation and low investments in human capital and productivity remain to be major constraints to programme effectiveness. Current interventions are fragmented and don't have a long-term development plan, unlike the 'whole-of-society approach' to poverty alleviation in China. Future poverty reduction initiatives should thus include social protection, infrastructure development, agricultural modernization, industrialization, skills development and evidence-based governance to ensure inclusive and sustainable development (World Bank, 2024; State Council Information Office of the People's Republic of China, 2021).

Theme III

7. Which Chinese Policies Are Transferable to Balochistan?

The thematic analysis shows that the Chinese model of poverty alleviation has several policy implications that can be utilized in poverty alleviation in Balochistan. The results also indicate that these policies can't be simply replicated due to variations in political systems, governance structures, institutional capability, fiscal resources and socioeconomic factors. The analysis does not suggest replication of policies but policy adaptation, which involves changing the successful aspects of China's policies to accommodate the local context of Pakistan and Balochistan. This aligns with comparative policy analysis, which focuses on learning from other countries' best practice whilst taking into account local institutional contexts (Dolowitz & Marsh, 2000; Knill & Tosun, 2020).

The results categorize the policy transferability in three different categories. Several policies are highly adaptable, as they are compatible with Pakistan's institutional framework and development priorities, such as targeted poverty identification, rural infrastructure development, skills development, monitoring systems, and digital governance. Second, policies like rural revitalisation, agricultural modernisation, industrial clusters and integrated social protection are moderately transferable and require more financial resources, institutional reforms and long term planning. Lastly, some elements of the Chinese development model, such as the centralisation of political power, the Hukou system, the administrative system and the fiscal system, cannot be easily extrapolated as they are integral to the specific political and governance context in China. The next sections explore these categories and the conditions required to transfer successful approaches to poverty reduction into Balochistan's socioeconomic environment, based on the Chinese experience.

7.1 Policies with High Transferability

7.1.1 Poverty Targeting

Targeted poverty identification is one of the most transferable elements of China's anti-poverty model for Balochistan as identified by the thematic analysis. The Targeted Poverty Alleviation (TPA) programme in China was based on extensive databases of poor households, which facilitated the identification of poor families and the design of interventions to address their needs. This evidence-based approach resulted in more efficient public expenditures, fewer errors of inclusion and exclusion, and a better targeting of poverty reduction programmes to the most vulnerable groups (State Council Information Office of the People's Republic of China, 2021; World Bank, 2022).

Pakistan already has an institutional setup with the National Socio-Economic Registry (NSER) and Benazir Income Support Programme (BISP). The results show that poverty targeting in Balochistan is still primarily along the lines of cash transfers instead of an integrated livelihood development. More frequent updating of household data, use of multidimensional poverty indicators and linking beneficiaries to education, skills training, health and employment programmes would greatly enhance the effectiveness of policies. Thus, the adaptation of precision-targeting in China, instead of replication, can enhance evidence-based policy making and help to achieve more inclusive and sustainable poverty reduction in Balochistan.

7.1.2 Rural Roads

The second highly transferable aspect of China's anti-poverty model that emerges through the thematic analysis is rural road development. China has made large investments in the infrastructure in rural areas – providing links between villages, markets, schools, hospitals and jobs. Better road access lowered transportation costs, promoted commercialization of farming,

attracted private investment, and improved access to public services. Thus, developing rural infrastructure has become an important factor contributing to poverty alleviation and equitable development of rural and urban areas (World Bank, 2022; State Council Information Office of the People's Republic of China, 2021).

The findings indicate that the problems in Balochistan are similar and many rural villages are still geo-isolated due to poor road infrastructure. Unreachability reduces market access, raises production cost and reduces access to education, health care and government services. Access to better and more roads in rural areas would increase economic opportunities, boost agricultural value chains, and facilitate service provision especially in under-served rural districts. Instead of China's centralized approach of implementation, infrastructure development in Balochistan should be a coordinated undertaking of federal and provincial government, in which the communities are engaged, and projects managed transparently. This would make a major contribution to poverty alleviation and inclusive development at the regional level.

7.1.3 Skills Development

Among the policy lessons that can be transferred, one of the most salient skills developments is identified through the thematic analysis. China has provided substantial support to Technical and Vocational Education and Training (TVET), entrepreneurship and market-oriented skills programmes to enhance employability and raise household incomes along with economic growth. Vocational training was customized through TPA program to fit in the local labour market demands and help poor households get productive employment or open small enterprises. These efforts have contributed significantly to alleviating poverty and fostering inclusive growth (World Bank, 2022; State Council Information Office of the People's Republic of China, 2021).

The results show that this strategy is viable for the province of Balochistan as there is a direct link between the unemployment and low labour productivity with lack of technical skills and human capital in the province. Growing TVET institutions, industry–academia interface, encouraging entrepreneurship and implementing digital and market-oriented skills can uplift employment opportunities, especially of young women and youth. Skill development in emerging industries like mining, agriculture and fisheries, tourism, renewable energy and CPEC related industries will further augment the economic participation and sustainable livelihoods. So, it is imperative that human capital should be a major component of the poverty alleviation strategy of Balochistan.

7.1.4 Monitoring and Evaluation

Monitoring and evaluation (M&E) is a very transferable aspect of China's anti-poverty model, as revealed by the thematic analysis. China developed a solid monitoring framework with household data, frequent field checks, indicators and an ongoing policy review. Local governments had to submit regular reports on the progress made and officials had to be held accountable for meeting poverty reduction targets. The evidence-based monitoring system enhanced transparency, enhanced policy implementation and ensured the resources are going to the intended beneficiaries (World Bank, 2022; State Council Information Office of the People's Republic of China, 2021).

The results show that the monitoring mechanisms in Balochistan are still fairly weak, with weak institutional capacity, weak data systems and poor performance assessment. Development programmes are poorly evaluated, with few monitoring mechanisms in place, and thus are far less effective. Programme implementation can be improved through strengthening of digital databases, introducing results-based monitoring, independent evaluation, and better coordination of provincial departments. The adjustment of the Chinese monitoring system in line with the governance system of Pakistan would help in enhancing accountability, optimizing the use of resources, and evidence-based policy decision making for sustainable poverty reduction in Balochistan.

7.1.5 Digital Governance

Thematic analysis reveals that the digital governance is a policy that can be replicated at a high level from the Chinese model of combating poverty. The Chinese government applied digital technologies to poverty alleviation through electronic governance systems, digital household databases, online public services and real-time monitoring platforms. These technologies helped in better coordination between policies, transparency, minimize administrative delays, and facilitated better targeting of poor households. Digital governance also boosted service delivery and evidence-based decision-making at various government levels (OECD, 2023; State Council Information Office of the People's Republic of China, 2021).

The findings indicate that Balochistan has a significant potential in implementing similar digital governance. Digital infrastructure has not been deployed in many districts, but the use of digital infrastructure for e-governance, digital beneficiary databases, service delivery and integrated management information systems can enhance the efficiency of poverty reduction programmes. Digital governance can also boost transparency, minimise leakages, enhance interdepartmental coordination and ensure real-time tracking of development projects. But adaptation will need investments in broadband connectivity, digital infrastructure, institutional capacity and digital literacy. These changes would help in bringing accountability in governance and would be helpful in inclusive and sustainable development in Balochistan.

7.2 Policies with Moderate Transferability

7.2.1 Rural Revitalization

Rural Revitalization is a policy with moderate transferability to Balochistan as per the thematic analysis. After rural poverty was eradicated, China has launched the Rural Revitalization Strategy aimed at modernizing the agricultural sector, developing rural industries, building infrastructure, protecting the environment and enhancing public services. The objective of the strategy was to narrow down the development gap between the regions and to enhance the rural life quality in a sustainable way. On the other hand, its success was driven by the strong political will, significant public funding, and effective coordination between the central and local governments (State Council Information Office of the People's Republic of China, 2021; World Bank, 2022).

The results indicate that the rural revitalization principles are applicable to Balochistan, where the majority of the population relies on agriculture, livestock and natural resources. But the direct replicability is limited by insufficient financial resources, low institutional capacity and governance issues. However, Balochistan could make some key elements of the strategy work for the province by focusing on rural infrastructure, value chains for agriculture, water

management, local businesses, education, and health services and community engagement. This would enhance rural livelihoods, narrow down regional disparities and encourage inclusive and sustainable development, all while maintaining the province's socioeconomic realities.

7.2.2 Agricultural Modernization

Thematic analysis reveals that agricultural modernization is a policy with moderate transferability to Balochistan. China invested heavily in irrigation, breeding, mechanization, extension, R&D, and market-oriented reforms, thus making a great contribution to agricultural productivity. These interventions improved farmers' incomes, improved food security and established good linkages with agriculture and rural industries. The modernization of agriculture was one of the important measures to reduce poverty in China, by reducing subsistence-like farming and turning agriculture more productive and market oriented (FAO, 2022; World Bank, 2022).

The results have shown that Balochistan has significant agricultural and livestock potential but productivity is still low because of water scarcity, traditional agriculture and limited extension service and market access. Although the Chinese model cannot be completely duplicated due to differences in climatic, institutional and financial background, there are some elements that are transferable. Improved productivity and rural incomes can be achieved through investments in efficient irrigation systems, value chain development, farmer trainings, agricultural research, cold storage and climate-smart agriculture. Implementing these measures with local context would help in improving food security, creating employment and sustainable reduction of poverty in Balochistan.

7.3 Policies with Limited Transferability

7.3.1 Political Structure

According to the thematic analysis, one of the policy components that is not likely to be transferred to Balochistan is China's political structure. Centralized political system which facilitated long-term planning, policy continuation, speedy decision-making and coordinated implementation at all levels of government helped to achieve poverty reduction in China. This governance model enabled the creation of the financial resources, administrative capability, and institutional coordination required in the implementation of large-scale poverty alleviation programmes over a number of decades (State Council Information Office of the People's Republic of China, 2021).

The findings show that Pakistan's system is democratic and federal, development is a shared responsibility of federal and provincial governments. Development programmes are subject to continuity and discontinuity, due to policy changes, political transitions, fiscal constraints and administrative fragmentation. Hence the centralized political system of China is not applicable to Balochistan. But some core concepts such as long-term development planning, political will, intergovernmental coordination and evidence-based policy making are adaptable in the context of Pakistan's constitution. Improved governance practices, to help strategies for poverty reduction to be more effective and help influence policies to be more consistent, do not need to change the political system.

7.3.2 Hukou System

Thematic analysis reveals that the Hukou (household registration) system is a policy with limited transferability to Balochistan. Historically, the Hukou system has been used to categorize citizens based on where they live, and it has had an impact on access to education, healthcare, social welfare, and employment. In the poverty alleviation, the system made it possible for the government to keep detailed records of the population, pick out the poor households and carry out targeted measures under an all-in-one administrative system. But the Chinese context can't simply be replicated elsewhere, as the Hukou system developed in China's particular political, legal and governance landscape (World Bank, 2022; OECD, 2023).

The results show that Pakistan has no equivalent system of household registration, and that such a system would be impractical and not in keeping with the constitutional and administrative framework of Pakistan. However, the principle of having accurate and regularly updated household databases for evidence-based policymaking can be applied in Balochistan. Enhancing the National Socio-Economic Registry (NSER), consolidating provincial registries, and leveraging digital information systems to identify vulnerable households can enhance targeting, transparency and improve service delivery, without replicating the Chinese models of the Hukou system. So, the administrative concepts that are underlying the system can be transferred, but the mechanism itself cannot.

7.3.3 Administrative Hierarchy

Thematic analysis reveals that China's administrative hierarchy is a policy that is not transferable in Balochistan. The poverty alleviation programme in China was supported by a highly centralised and hierarchical administration system with responsibilities delineated between the central administration and provincial, county, township and village administration. This system allowed for effective coordination, speedy action, stringent monitoring, and results-oriented accountability across the poverty reduction process (State Council Information Office of the People's Republic of China, 2021; World Bank, 2022).

Results have shown that Pakistan's federal governance involves both the distribution of powers between federal, provincial and local governments, and often faces issues of overlapping responsibilities and coordination. Therefore, it is not possible to copy the administrative structure of China in Balochistan. There are however, a few administrative strategies which can be integrated into the existing governance system in Pakistan such as: more rigorous interdepartmental coordination, performance monitoring, clearer institutional responsibilities and strengthening local government capacity. Further strengthening of these administrative systems will help in enhancing the effectiveness of poverty reduction programmes in Balochistan in terms of better policy implementation, accountability and service delivery.

7.3.4 Fiscal Model

Thematic analysis results show that China's fiscal model is a policy that has limited transferability to Balochistan. The poverty relief program in China was accompanied by significant financial resources, a centralized budget system and continued public funding in infrastructure, education, health, agriculture and rural development. The government had sufficient fiscal capabilities to fund long term poverty alleviation programmes and implement them in all regions. This financing model was supported by China's massive economy, its high growth rate and its centralized fiscal system (World Bank, 2022; OECD, 2023).

The results show that there is an alternative fiscal regime of low provincial revenues, reliance on the federal transfers, and restricted development budgets in Pakistan, especially in Balochistan. Therefore, it is not possible to directly copy the fiscal model of the Chinese Government. But Balochistan can implement certain important principles including focus on poverty reduction in development planning; efficient use of public expenditure; financial accountability; encouraging private-sector investment; and development partnership. There is a need to improve the allocation of resources and financial management transparency in the implementation of poverty reduction programmes in a manner consistent with the fiscal and constitutional systems of Pakistan to make them more effective.

7.4 Conditions Needed to Adapt Policies

The results of the thematic analysis reveal that in order for China's anti-poverty policies to be successful in Balochistan, a host of institutional, economic and governance factors are necessary. The results do not suggest replication of the development model of China, but making some modifications in the basic principles of the Chinese development model in Pakistan's constitutional and administrative setup. Successful policy adaptation requires strong political commitment, long-term policy continuity, evidence-based planning and effective coordination between federal and provincial governments (Dolowitz & Marsh, 2000; World Bank, 2022).

The results also demonstrate the importance of building up institutional capacities for ensuring successful implementation. There is a need to enhance the planning, monitoring, data management and policy evaluation systems in provincial departments to facilitate efficient service delivery. Programmes would be more effective and gain greater public trust through the expansion of digital governance, strengthened local government institutions, and greater transparency and accountability. Institutional reforms should also foster coordination within the government, between development partners and local communities (UNDP, 2024).

A key requirement is continued investment in productive areas that will create long-lasting job and income opportunities. Based on the analysis, it is recommended that agriculture, livestock, mining, fisheries, tourism, renewable energy and small and medium enterprises (SMEs) should be the main sectors for inclusive growth. Alongside this investment, there is a need for quality education, technical and vocational education and training (TVET), healthcare, and digital connectivity to boost human capital and enhance labour productivity.

The results also highlight the need for a place-based development approach. There are significant differences in poverty levels across districts in Balochistan, so policies for poverty alleviation should be formulated according to the local socioeconomic conditions and not be uniform throughout the province. Development resources could be better targeted by regular poverty mapping, keeping household information up to date, and involving communities.

The analysis ultimately suggests that China's experience offers policy lessons and not a blueprint to be replicated. To achieve sustainable poverty reduction in Balochistan, it is necessary to tailor the Chinese experience to the local context, specifically in terms of targeted interventions strategies, integrated rural development, infrastructure investments, human capital development, and effective governance strategies. A context specific approach can help to reinforce inclusive and sustainable development, and contribute to the province's long-term socioeconomic transformation.

Theme IV

8. What Are the Major Barriers to Poverty Reduction in Balochistan?

8.1 Governance Deficit

Thematic analysis shows that governance deficit is one of the most important challenges to poverty alleviation in Balochistan. Poor policy coordination, an absence of accountability, political instability, and poor public service delivery have dampened the capacity of development programmes. Lack of planning and inadequate monitoring leads to delays and wastage of public resources. Results indicate that bolstering governance, including institutional reforms, evidence-based policy making, transparency and coordination between federal and provincial entities, is critical to attain inclusive and sustainable poverty reduction (World Bank, 2024; UNDP, 2024).

8.2 Weak Institutional Capacity

The results show that there is still a limitation in the institutional capability in effective poverty reduction in Balochistan Province. Many government departments suffer from a lack of trained staff; lack of financial resources; poor data management systems; and poor monitoring systems. These difficulties decrease the effectiveness of policy implementation and service delivery. Investing in institutions, strengthening administrative capacity, better interdepartmental coordination, and digital governance are essential to better development outcomes and to make poverty alleviation programmes more effective (World Bank, 2024).

8.3 High Multidimensional Poverty

Thematic analysis reveals poverty in Balochistan not only in terms of income but also in educational, health, housing and sanitation, electricity, and clean drinking water. The province has the highest multidimensional poverty rates in Pakistan, especially in rural areas, which are far removed from cities. These multiple deprivations exacerbate social exclusion and restrict economic opportunities. Thus, poverty reduction policies should be integrated, covering income generation, investments in human capital development, in infrastructure, and in provision of essential public services (UNDP & OPHI, 2021; UNDP, 2024).

8.4 Poor Infrastructure

Balochistan's economy and its ability to alleviate poverty is hampered by poor infrastructure. Poor infrastructure (roads, electricity, irrigation systems, digital connectivity, and public services) leaves rural communities disconnected and makes the business environment less attractive. Lack of infrastructure also hinders market access, education, healthcare, and job opportunities. The results indicate that there is a need to increase infrastructure investments, especially in less developed districts, to enhance regional connectivity, attract investments, and promote sustainable livelihoods (World Bank, 2024).

8.5 Low Human Capital

According to the results, low education, healthcare, technical skills and labour productivity are the major constraints to poverty reduction in Balochistan. Poor education results, lack of Technical and Vocational Education and Training (TVET) and poor health services lower employment opportunities and household income. Therefore, investments in quality education,

vocational training, healthcare, entrepreneurship, and digital skills are crucial for addressing the human capital gap and fostering inclusive and sustainable economic development (World Bank, 2024; UNDP, 2024).

8.6 Limited Industrialization

Limited industrialization is one of the key constraints mentioned by the thematic analysis for poverty alleviation in Balochistan. In spite of its rich mineral resources and strategic position, the province's industrial base is weak and value added production is limited. Low productivity and less employment opportunities are still the characteristics of the most of the economic activities in primary sectors. Also, limited infrastructure, energy deficits and weak private sector investment have limited the growth of industries. Enabling mineral based industries, agro-processing, SMEs and industrial zones can create jobs, diversify the economy, and lead to sustainable poverty reduction (World Bank, 2024; ADB, 2024).

8.7 Weak Agricultural Productivity

This study shows that low productivity of agricultural crops still adversely effects on the rural livelihood in Balochistan. Lack of water, outdated farming techniques, poor irrigation facilities, low extension services, and low market access have led to low agricultural production and household incomes. As a large share of the rural population is engaged in agriculture and livestock, augmenting productivity is necessary to lessen poverty. Climate-smart agriculture and water management, investments in modern farming technologies and agricultural value chains can contribute to bolstering food security and inclusive rural development (FAO, 2022; World Bank, 2024).

8.8 Digital Divide

Thematic analysis demonstrates that digital divide is an emerging development challenge to inclusive development in Balochistan. Access to online education, e-commerce, digital financial services and e-governance is limited by limited internet access, insufficient digital infrastructure and low digital literacy. Digital exclusion disproportionately impacts rural communities, especially women and youth. Broadband infrastructure, digital literacy and digital governance can boost the economy and enhance the efficacy of poverty reduction programmes (UNDP, 2024; OECD, 2023).

8.9. Security and Investment Challenges

The results indicate that security issues and inadequate investment remains a limitation for economic development in Balochistan. The periodic law and order events deter domestic and foreign investors, slow down development projects and diminish the role of the private sector. These conditions restrict the industrial development, job creation and infrastructure development. Security, investor confidence and policy continuity are key for attracting investment and ensuring sustainable economic opportunities that will help to achieve long-term poverty reduction (World Bank, 2024).

8.10 Policy Implementation Gaps

One of the most enduring gaps in poverty reduction is the lack of policy implementation, as found in the thematic analysis. There are several poverty alleviation programmes, but they are

poorly coordinated, lack monitoring, cannot be properly evaluated and have limited institutional capacity which affects their effectiveness. Many initiatives have failed to tackle the structural drivers of poverty and are fragmented. By bolstering planning, monitoring, institutional coordination, and accountability frameworks based on evidence, policy outcomes can be significantly enhanced, fostering inclusive and sustainable development in Balochistan (World Bank, 2024; UNDP, 2024).

Theme V

9. Tangible Benefits of CPEC Projects for Livelihoods in Balochistan

9.1. Employment and Household Income

CPEC projects have created direct and indirect employment opportunities in Balochistan through infrastructure construction, Gwadar Port development, transportation, logistics and related services. These activities have provided income opportunities for workers and generated additional demand for local transporters, suppliers, traders and service providers. In Gwadar and other project areas, CPEC-related economic activities have diversified livelihood opportunities beyond traditional agriculture, livestock and informal employment. Although local participation has remained concentrated largely in low-skilled and informal jobs, these employment opportunities have contributed to household incomes and local economic activity (Rauf & Achakzai, 2026). The livelihood benefits have therefore extended beyond workers directly employed by CPEC projects to businesses and households associated with construction, transportation, trade and supporting services. In this way, CPEC investment has expanded income-generating opportunities and contributed to livelihood diversification among communities connected with project activities.

9.2. Skills Development and Employability of Local Youth

CPEC has contributed to human-capital development in Balochistan through investment in technical and vocational education. The Pak-China Technical and Vocational Institute in Gwadar has provided local youth with market-oriented technical and vocational training linked to emerging economic activities (CPEC Secretariat, n.d.). Its programmes have strengthened skills relevant to port operations, logistics, construction, technical services, hospitality and other sectors associated with Gwadar's developing economy. This investment has been particularly important in Balochistan, where limited technical and vocational skills have historically restricted young people's access to productive employment. Although evidence shows that skills gaps continue to limit local participation in some skilled CPEC-related positions (Khan et al., 2026; Rauf & Achakzai, 2026), CPEC-related vocational education has expanded access to technical training and improved the employability of local youth. These skills have strengthened human capital and provided young people with better opportunities to participate in emerging economic sectors.

9.3. Improved Connectivity and Market Access

CPEC has significantly expanded transport connectivity in Balochistan through the development and improvement of road infrastructure connecting previously isolated areas with major economic centres and markets. Improved road networks have facilitated the movement of people, agricultural products, livestock, fisheries products and other goods across the

province. Better connectivity has reduced geographical isolation and improved access to markets, employment centres and public services for communities located along transport corridors. CPEC-related road infrastructure has also generated livelihood activities in freight transportation, passenger services, vehicle maintenance, roadside businesses, food services and local trade. For farmers, livestock owners, fishermen, traders and small businesses, improved connectivity has provided greater access to markets and commercial opportunities. Thus, CPEC's transport infrastructure has produced livelihood benefits beyond physical connectivity by supporting market integration, mobility, trade and income-generating activities in different parts of Balochistan.

9.4. Gwadar Port and Local Economic Activities

Gwadar Port and associated CPEC projects have expanded economic activities in Gwadar and strengthened the city's role as an emerging port and commercial centre. Port development, construction and related infrastructure have generated demand for transportation, logistics, accommodation, food services, retail activities and other supporting services. These activities have provided direct and indirect livelihood opportunities for workers, traders, transport operators and local service providers. The growing economic activity surrounding Gwadar has also diversified the local economy beyond its traditional dependence on fisheries and informal trade. Local households have gained additional sources of income through construction, transport, commerce and service-sector activities associated with the city's development. The livelihood benefits of Gwadar Port therefore extend beyond employment within the port itself. The wider economic activity generated around port development has contributed to income diversification, business activity and the gradual expansion of the local service economy.

9.5. Agriculture and Rural Livelihoods

CPEC-related agricultural cooperation has supported rural livelihoods through agricultural technology, equipment, demonstration activities and vocational training (CPEC Secretariat, n.d.). These initiatives have provided opportunities for farmers and rural communities to gain knowledge of improved agricultural practices and technologies. At the same time, CPEC-related transport connectivity has improved links between agricultural areas and larger markets, facilitating the movement and marketing of agricultural and livestock products. This has particular livelihood significance in Balochistan, where a substantial rural population depends on agriculture and livestock for household income. Agricultural cooperation and improved connectivity have also supported associated economic activities, including transportation, marketing and agricultural services. CPEC's contribution to rural livelihoods therefore extends beyond infrastructure investment and includes greater market connectivity, exposure to agricultural technology and improved opportunities for rural economic participation.

9.6. Fisheries and Coastal Livelihoods

CPEC-related development in Gwadar has influenced the livelihood environment of coastal communities, where fisheries remain an important source of employment and household income. Improvements in road and transport connectivity have strengthened links between coastal areas and larger domestic markets, facilitating the transportation and marketing of fish and seafood products. The expansion of economic activities around Gwadar has also generated additional livelihood opportunities in transportation, trade, storage, food services and other activities associated with the coastal economy. These developments have provided fishing households with opportunities to diversify their income beyond traditional fishing activities.

Improved connectivity has been particularly important for coastal producers because access to markets is essential for products that require timely transportation. CPEC-related infrastructure has therefore supported coastal livelihoods through better connectivity, expanded commercial activity and additional service-sector opportunities associated with Gwadar's economic development.

9.7. Small Businesses and Local Entrepreneurship

CPEC-related projects have stimulated demand for goods and services in areas experiencing infrastructure construction and economic activity. This demand has provided livelihood opportunities for small traders, transport operators, contractors, food providers, accommodation businesses, retailers and other local service providers. Construction activities and the development of Gwadar have generated markets for locally supplied goods and services, while improved road connectivity has enabled businesses to reach wider markets and obtain supplies more efficiently. These indirect livelihood benefits are important in Balochistan because small businesses and informal enterprises constitute significant sources of household income. CPEC-related economic activity has therefore supported local entrepreneurship not only through direct project-related opportunities but also through increased demand in surrounding local economies. The expansion of trade, transportation and services has contributed to livelihood diversification and provided additional income-generating opportunities for households and small businesses.

9.8. Social Infrastructure and Community Well-Being

CPEC projects have also provided social and human-development benefits in Balochistan, particularly in Gwadar. Investments in technical education and community-related facilities have complemented physical infrastructure development and strengthened the capabilities of local communities. The Pak-China Technical and Vocational Institute in Gwadar represents an important example of this connection between social investment and livelihood development, as it has provided technical and vocational training for local youth (CPEC Secretariat, n.d.). Such investment has expanded access to skills required by emerging economic activities and strengthened the capacity of young people to participate in the labour market. CPEC-related social development initiatives have therefore added a human-development dimension to infrastructure and economic investment. These interventions have contributed to local skills, employability and community well-being, demonstrating that the livelihood impact of CPEC extends beyond roads, ports and physical infrastructure to investment in people.

9.9. Livelihood Diversification and Poverty Reduction

Overall, CPEC projects have created several tangible pathways through which investment has supported livelihoods in Balochistan. Infrastructure projects have generated employment and economic activity; technical and vocational initiatives have provided skills to local youth; improved road connectivity has expanded market access; Gwadar Port development has stimulated transport, trade and service-sector activities; and agricultural cooperation has supported rural economic opportunities. These benefits have particular importance in a province where many households have traditionally depended on agriculture, livestock, fisheries, daily labour and informal economic activities. CPEC-related development has expanded the range of economic opportunities available in project areas and provided additional sources of household income. While the distribution and scale of these benefits vary across districts and communities, CPEC's livelihood contribution in Balochistan is visible

through employment creation, skills development, improved connectivity, market access, local business activity and diversification of household income. These tangible benefits represent important channels through which CPEC has contributed to poverty reduction and socioeconomic development in Balochistan.

9.10. Education, Scholarships and Human Capital Development

CPEC-related cooperation has provided educational and scholarship opportunities for students from Balochistan, contributing to human-capital development and longer-term livelihood improvement. Scholarships, educational exchanges, and technical and vocational training have enabled students and young people to acquire knowledge and skills relevant to emerging economic sectors. These opportunities strengthen employability, professional development and future earning potential. The Pak-China Technical and Vocational Institute in Gwadar has further connected education with practical skills development. Such educational benefits are particularly important in Balochistan, where limited access to quality education and technical training remains a major constraint on employment. Therefore, CPEC's educational and scholarship initiatives form an important part of its broader livelihood contribution by strengthening human capital, improving employment prospects and providing young people with pathways towards better and more sustainable incomes.

10. Theme VI: Comparative Policy Analysis

This section provides a comparative analysis of the Chinese poverty alleviation model and the poverty alleviation efforts in Balochistan based not on the socio-economic indicators alone, but also on governance, institutions and policy. The study reveals that the success of China was due to a holistic strategy involving political will, good government, infrastructure, modernization of agriculture, industrialization, human capital and digital transformation. By contrast, Balochistan is still plagued by weak institutions, poor governance, insufficient infrastructure and lack of industrial development, and human capital deficits. The comparison thus highlights gaps in the policies and what parts of the Chinese experience are feasible to be translated for Balochistan in its socio-economic and institutional setting.

Table 10.1 Comparative Policy Analysis: China and Balochistan

Theme	China	Balochistan	Policy Gap
Political commitment	Strong long-term national commitment supported by successive Five-Year Plans and clear poverty reduction targets	Development policies often affected by political changes and weak policy continuity	Large
Poverty targeting	Household-level databases and Targeted Poverty Alleviation (TPA) with customized interventions	Poverty targeting mainly through social protection programmes with limited livelihood integration	Large
Infrastructure	Extensive investment in roads, railways, electricity, irrigation, broadband and public services	Large infrastructure deficits, particularly in rural districts	Large

Agriculture	Modernized agriculture supported by technology, irrigation, mechanization and value chains	Predominantly traditional farming with low productivity and water shortages	Large
Industrialization	Diversified industrial economy with strong manufacturing and industrial clusters	Limited industrial base and low value addition	Large
TVET and Human Capital	Strong investment in education, vocational training and healthcare	Limited access to quality education, TVET and health services	Large
Digital Economy	Advanced digital infrastructure, e-governance and rural e-commerce	Emerging digital economy with significant digital divide	Large
Governance	Highly coordinated implementation with strong monitoring and accountability	Fragmented institutional coordination and implementation gaps	Large

10.1 Major Similarities

The thematic analysis identifies several important similarities between China and Balochistan despite their different political and economic systems. Both regions possess substantial natural resources, large rural populations, and significant regional disparities that have historically contributed to persistent poverty. Agriculture continues to play an important role in local livelihoods, while geographical remoteness has limited access to markets and public services. Both contexts also recognize infrastructure, education, employment generation, and economic diversification as central components of poverty reduction strategies. Furthermore, both governments have introduced targeted poverty alleviation programmes aimed at supporting vulnerable households. These common characteristics suggest that although institutional settings differ considerably, certain development principles—such as integrated planning, human capital development, and infrastructure investment—remain relevant across both contexts.

10.2 Major Differences

The comparative analysis reveals that the differences between China and Balochistan are substantially greater than their similarities. China's poverty reduction was supported by sustained political commitment, strong institutional capacity, centralized policy coordination, long-term development planning, and significant financial resources. Poverty alleviation was implemented through integrated interventions combining industrialization, agricultural modernization, infrastructure development, education, healthcare, digital technology, and effective governance. In contrast, Balochistan continues to experience fragmented governance, weak institutional coordination, limited fiscal capacity, poor infrastructure, low industrialization, and inadequate human capital development. Development programmes often operate independently without sufficient integration, monitoring, or policy continuity. These structural differences explain why poverty reduction outcomes in Balochistan have been considerably slower despite various government initiatives.

10.3 Transferable Lessons

The findings indicate that the most valuable lesson from China's experience is not policy replication but policy adaptation. Several components of China's anti-poverty model can be realistically adapted to Balochistan, including targeted poverty identification, integrated rural development, infrastructure investment, agricultural modernization, skills development, digital governance, evidence-based policymaking, and performance-oriented monitoring systems. However, elements closely linked to China's centralized political system—such as its administrative hierarchy and fiscal structure—are not directly transferable. Instead, Balochistan should adopt the underlying principles of long-term planning, institutional coordination, accountability, and inclusive development while aligning reforms with Pakistan's democratic and federal governance framework. The analysis therefore concludes that sustainable poverty reduction in Balochistan requires a locally adapted development model that combines China's successful policy lessons with the province's own socioeconomic realities, institutional capacities, and development priorities.

Theme VI

11. Proposed Policy Framework for Balochistan

11.1 Strengthen Political Commitment and Long-Term Development Planning

Sustainable poverty reduction in Balochistan requires unwavering political commitment supported by a long-term development vision. The provincial government should adopt a comprehensive poverty reduction strategy with clearly defined objectives, measurable targets, and dedicated financial resources. Development policies should remain consistent beyond political transitions to ensure continuity, institutional stability, and effective implementation. Integrating poverty reduction into provincial planning, budgeting, and sectoral policies will strengthen coordination, improve policy coherence, and ensure that inclusive development remains a central priority.

11.2 Strengthen Institutional Capacity and Governance Reforms

Effective institutions are essential for translating policies into tangible development outcomes. Institutional reforms should focus on improving administrative capacity, transparency, accountability, interdepartmental coordination, and public service delivery. Strengthening provincial, district, and local government institutions, supported by digital governance and performance-based management systems, will improve policy implementation and public trust. Efficient governance will also enhance resource utilization and reduce implementation gaps in poverty reduction programmes.

11.3 Establish a Targeted Poverty Identification System

Balochistan should establish a modern, province-wide poverty identification and management system based on reliable socioeconomic data. A comprehensive digital poverty database, supported by regular household surveys and geographic information systems (GIS), will enable accurate identification of vulnerable households and underserved regions. Evidence-based targeting will improve the effectiveness of development programmes, reduce duplication of resources, and ensure that assistance reaches those most in need.

11.4 Promote Integrated Rural Transformation

As the majority of poor households reside in rural areas, integrated rural development should become a provincial priority. Investments should focus on rural roads, irrigation systems, drinking water, electricity, healthcare facilities, schools, and market infrastructure. Strengthening local institutions and encouraging community participation in planning and implementation will improve service delivery, enhance agricultural productivity, and generate sustainable livelihood opportunities for rural communities.

11.5 Modernize Agriculture and Strengthen Livestock Value Chains

Agriculture and livestock remain the backbone of Balochistan's economy and require comprehensive modernization. Policies should promote climate-smart agriculture, efficient irrigation, improved seed varieties, mechanization, livestock breeding, veterinary services, storage facilities, agro-processing industries, and stronger market linkages. Developing agricultural and livestock value chains will increase productivity, enhance food security, create rural employment, and improve household incomes.

11.6 Accelerate Industrialization and Support Local Enterprises

Economic diversification is essential for reducing poverty and creating productive employment. The government should promote mineral-based industries, agro-processing, fisheries, tourism, renewable energy, and manufacturing through industrial clusters and Special Economic Zones. At the same time, greater financial and technical support should be provided to micro, small, and medium enterprises (MSMEs), enabling entrepreneurship, innovation, value addition, and private sector growth across the province.

11.7 Invest in Human Capital and Skills Development

Human capital development should form the foundation of long-term poverty reduction. Increased investment in quality education, healthcare, Technical and Vocational Education and Training (TVET), entrepreneurship education, digital literacy, and research institutions will improve labour productivity and employment opportunities. Particular emphasis should be placed on equipping youth and women with market-oriented skills required by emerging sectors such as mining, logistics, renewable energy, information technology, and modern agriculture.

11.8 Promote Women's Economic Empowerment and Digital Inclusion

Women should be fully integrated into the province's development agenda through improved access to education, vocational training, entrepreneurship support, finance, digital technologies, and productive employment. Expanding broadband infrastructure, digital literacy programmes, and digital financial services will reduce regional inequalities and create new economic opportunities, particularly for women and youth living in remote districts.

11.9 Strengthen Social Protection and Financial Inclusion

Social protection programmes should gradually evolve from short-term income support toward sustainable livelihood development. Cash assistance should be linked with skills development, employment generation, entrepreneurship, microfinance, and financial literacy initiatives. Expanding access to banking services, affordable credit, insurance, and digital financial systems will improve household resilience and promote long-term economic inclusion.

11.10 Maximize CPEC for Inclusive Local Development

CPEC should be utilized as a catalyst for broad-based socioeconomic transformation in Balochistan. Infrastructure projects should be complemented by industrial development, mineral value addition, logistics, fisheries, tourism, and SME promotion to maximize local employment and income generation. Provincial institutions should ensure that local communities actively participate in planning processes and receive equitable benefits from CPEC-related investments through transparent and inclusive development policies.

11.11 Promote Green and Climate-Resilient Development

Given the growing impacts of climate change, environmental sustainability should become an integral component of poverty reduction strategies. Investments should prioritize water conservation, renewable energy, climate-smart agriculture, sustainable mining practices, ecosystem restoration, and disaster risk management. Building climate resilience will protect vulnerable communities, strengthen livelihoods, and support sustainable economic growth across the province.

11.12 Strengthen Partnerships, Monitoring, and Policy Evaluation

Achieving sustainable poverty reduction requires strong collaboration among government institutions, the private sector, universities, civil society organizations, development partners, and local communities. A comprehensive monitoring and evaluation framework with measurable performance indicators should be established to regularly assess policy implementation and outcomes. Continuous evidence-based policy evaluation, transparency, and stakeholder participation will improve accountability, facilitate institutional learning, and ensure that poverty reduction programmes remain responsive to the evolving development needs of Balochistan.

11.13 Strengthen Data-Driven Policymaking

Poverty reduction policies should be based on reliable data rather than assumptions. The Government of Balochistan should establish an integrated provincial data system that regularly collects district-level information on multidimensional poverty, employment, education, health, agriculture, and climate vulnerability. Evidence-based planning will improve policy prioritization, resource allocation, monitoring, and evaluation while enabling timely policy adjustments.

11.14 Strengthen Policy Coordination Across Institutions

One of the major barriers identified in this study is fragmented governance. A provincial coordination mechanism should be established to improve collaboration among provincial departments, district administrations, local governments, federal institutions, CPEC authorities, and development partners. Better coordination will reduce duplication, improve implementation efficiency, and ensure that poverty reduction programmes complement one another.

11.15 Promote District-Specific Development Planning

Balochistan is highly diverse, and poverty varies considerably across districts. Therefore, a uniform development strategy is unlikely to be effective. District-level development plans should be prepared according to local socioeconomic conditions, resource endowments, climate risks, and comparative economic advantages. This localized approach will ensure more equitable and effective poverty reduction.

12. Conclusion

Qualitative document analysis, thematic analysis and comparative policy analysis methods were used in this study to analyse the anti-poverty model in China and discussed its policy implications for inclusive and sustainable development in Balochistan. The findings indicate that the achievements in eradicating extreme poverty in rural areas stemmed not only from any one intervention, but from a combination of interventions, namely robust political commitment, good governance, targeted poverty mapping, good infrastructure, agricultural mechanization, industrialization, people-oriented investment, social protection, digitization and monitoring and evaluation.

The study reveals that poverty in Balochistan is multidimensional with structural dimensions; it is influenced by weak governance and the low institutional capacity, inadequate infrastructure, low agricultural productivity, limited industrialization, human capital deficits, digital exclusion and water scarcity issues, and disparities between different regions. While programmes like BISP, Ehsaas, PSDP, and provincial programmes have played their role in poverty alleviation, their effectiveness in doing so has been hampered by scattered implementation, poor coordination, targeting issues, inadequate monitoring, and uneven institutional capacity.

Based on the comparative analysis, several aspects of China's experience are found to be potentially relevant for adoption to Balochistan, such as targeted poverty identification, infrastructure building in rural areas, modernizing agriculture, technical and vocational education, digital governance, institutional coordination, and evidence-based policymaking. This is not a system that can be replicated in the centralized political and administrative system in China. Therefore, adaptations of the policy are stressed over elaborations instead of just copying the policy because of unique socioeconomic, institutional, geographical, and political positions of Balochistan.

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