

Assisting the Development

A Study of China and Japan's Development Support to Pakistan

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Zhishen Zhang

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Dedication

To my mother who made everything possible for me

To Professor Ericson, Professor Williams and many other professors who helped
me so much in the last four years

To B.H. and other friends

Reader Approval

This thesis project, written by Zhishen Zhang, meets the required guidelines for partial fulfillment of the Bachelor of the Arts Degree in Asian Studies at Colorado College

Professor Joan Ericson

Signature: _____

Date: _____

Professor John Williams

Signature: _____

Date: _____

On my honor, I have not received any unauthorized assistance on this thesis. I
have fully upheld the HONOR CODE of Colorado College

ZHISHEN ZHANG

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List of Acronyms

BOIP – Board of Investment, Pakistan

CCB – Citizen Community Board

CHASNUPP – Chashma Nuclear Power Plant

CNEC –China Nuclear Engineering Corporation

CPEC –China-Pakistan Economic Corridor

DAC – Development Assistance Committee

FAGIA – Foreign Aid and Government-sponsored Investment Activities

FDI – Foreign Direct Investment

FY– Fiscal Year

GDP – Gross Domestic Production

GHA – Global Humanitarian Assistance

GNI – Gross National Income

IMF – International Monetary Fund

JICA – Japan International Cooperation Agency

JPY – Japanese Yen

KANUPP – Karachi Nuclear Power Plant

MDGs – Millennium Development Goals

MOFAJ – Ministry of Foreign Affairs, Japan

MOFP – Ministry of Finance, Pakistan

NEPRA – National Electric Power Regulatory Authority

ODA – Official Development Assistance

OECD – Organization for Economic Cooperation and Development

PAEC – Pakistan Atomic Energy Commission

PPP – Purchasing Power Parity

PRC – People’s Republic of China

SCAP – Supreme Commander of Allied Power

UN – United Nations

UN – United Nations Children’s Fund

WHO – World Health Organization

Introduction

Economist William Easterly depicted Pakistan direly in 2001: 85 percent of the people live on less than two dollars a day, and 31 percent on less than one dollar a day. In Gulvera, a village near Lahore, he noted that roads were “impossibly narrow”, “flocks of flies hummed everywhere”, some people had open sores, and the village lacked doctor, sewerage, educational institution for girls, and telephone as well as road connections (Easterly, pp.547-549).

That was when the Millennium Development Goals (MDGs) had just begun, with the international society aspiring to combat extreme poverty, hunger, infectious diseases, gender inequality, and so on during the first 15 years of the millennium.¹ While the program has made great progress, it is uneven, leaving around 60 percent of the last one billion of the world’s extremely poor population in just five countries (United Nations, 2015). In Pakistan, while the progress of the MDGs is obvious, the situation is still harsh. According to a World Bank analysis in 2014, 60 percent of the Pakistanis live on less than two dollars a day, while 21 percent on less than 1.25 dollar (*Pakistan Economic Survey 2013-14*, p. 232). To foster Pakistan’s poverty reduction and development in the long term, foreign efforts are indispensable.

This thesis studies China and Japan’s assistance to Pakistan, with an attempt to realize the pros and cons of both countries’ aid models from a recipient perspective, conjecture the best support model to Pakistan, and, if possible, provide a reference to other developing economies in looking for foreign aid. As two largest cooperators of Pakistan in Asia, China and Japan follow two different models of assistance: the first focuses more on the construction of hard in-

¹ <http://www.un.org/millenniumgoals/>

frastructure, and relies more on investment, and the latter is more soft infrastructure-centric.

The massive, developing Pakistan currently faces multiple challenges to its development: lack of power, security concerns, an incompetent and corrupt government, and so on. I contend that there is no “absolutely superior” ways of assistance between China and Japan, as the two countries essentially aim differently: China focuses mostly on boosting the nation’s current capacity and Japan focuses on the sustainability of Pakistan’s development.

During my internship at the Embassy of Pakistan in Tokyo last summer, the Ambassador assigned me a research topic on Japan’s official development assistance (ODA) policy in Bangladesh after the terrorist attack in Dhaka on July 1, 2016, which caused the death of seven personnel from the Japan International Cooperation Agency (JICA), the monistic (“一元的”) ODA agency of Japan.² A newcomer to the field of assistance, I immersed myself in resources I found in the embassy and online, mostly data and official documents from JICA, Japanese government and international organizations (i.e. OECD). Consequently, my project, as I reflected afterwards, was “official”, showing optimism that ODA projects, if carried out as planned, would absolutely benefit the recipient.

Much to my surprise then, the Ambassador was dissatisfied with my final briefing. “If it were truly promising, why are places like Africa still in the abyss today?” he questioned. In addition, he queried my opinion about China’s investment in Africa and other regions in the world, asking if China is the better helper. Disappointed, yet intrigued by the Ambassador’s words, I decided to continue studying the myth of assistance, intending to figure out the “better

² <https://www.jica.go.jp/about/index.html>

helper”.

The thesis contains the following sections: Chapter One deals with two general questions: “Why does assistance take place?”, and “what counts as a ‘good aid?’”. Chapter Two gives a brief account of Japan and China’s assistance history to Pakistan and describes the *status quo*. Chapter Three focuses on the economic situation of Pakistan, its challenging issues, and the role of foreign aid in its economy. Chapter Four studies the effectiveness of China and Japan’s assistance to Pakistan from two angles: the patterns and the fields of assistance. In studying each pattern or field, I present a summary of the two countries’ conditions as well as achievements, followed by case studies of recent/current assistance programs. In the end, I will give a summary, including the outlook and potential suggestions towards other recipient countries. Given limited time and sources, I mainly use official and scholarly reports in this study, with supplemental information from phone and email interviews. In order to minimize bias and preconception, I tend to concentrate on data and facts, while avoiding narrative and suggestive accounts as much as possible (with the exception of Chapter Two, in which I rely upon official accounts to present historical background).

Chapter 1: The Purpose and Problem of Aid

Why is aid given?

Proposed at the beginning of *Foreign Aid: Diplomacy, Development, Domestic Politics* (Lancaster, Ch.IX), this question seems to have definite answers: improving life expectancy, economic growth, employment, gender equality, and CO₂ emission, etc., according to the homepage of Organization for Economic Cooperation and Development (OECD). In 2016, it seems clear that aid was given, with a genuine wish, to promote the development of developing and undeveloped world, not only about economy, but also human rights, happiness, and sustainability.

Nevertheless, aid is not charity. The incentives to aid, however, are not as simple as what OECD's homepage suggests. As Lancaster states, aid, especially bilateral aid, has various, often conflicting, purposes. In Lancaster's account, the global trend of aid has been shifting during the past seven decades: from 1945 to the early 1970s, aid mainly served as the war-torn states' "emergency relief", and a method for both Western and Eastern Blocs to increase their global influence (Lancaster, pp.28-31); following the 1973 oil crisis, the focus shifted to the famine relief of many African countries (pp.35-36); since the demise of the Socialist Bloc, aid has become a tool to help the recipients on democratization, globalization, privatization, and reorganization (pp.45-47); and in the new century, collaborators have become more humanitarian-concerned, with Millennium Development Goals (MDGs) becoming the focus of many.

The purpose of aid also differs according to the cooperators. Following a historiographic account, Lancaster provides case studies of the bilateral aid programs of five collaborators: USA, Japan, France, Germany, and Denmark, to

show that each collaborator's own situation shapes the specific path they have taken. Nevertheless, as Lancaster suggests, all these distinct goals can eventually be categorized under one or more of the four major purposes: diplomatic, developmental, humanitarian relief, and commercial (pp.13-14).

However, Lancaster's discourse of aid is flawed in that it confines the discussion of aid to an examination of the collaborators only, ignoring the recipients who should have been the key participants of the process. The absence of the recipient leaves aid and developmental practices totally cooperator driven, which could potentially lead to a self-conceited, unrealistic cooperator's plan that eventually jeopardizes the recipient states. In fact, some scholars, such as Zambian economist Dambisa Moyo, have already argued that the aid in Africa has been a failure for this reason. According to Moyo, due to the negligence of cooperators, Sub-Saharan Africa has plummeted in almost all perspectives since 1970s, and nowadays remains incapable of sustainable economic growth, even though more than USD 1 trillion has flowed into the continent since 1945 (Moyo, pp.3-6 & 22).

In Stephen Browne's *Aid and Influence: Do Donors Help or Hinder* we also see the same argument. He states that development is "essentially a domestic matter" (Browne, p.10). That is, although the provision of aid is based on developmental grounds, in fact the forms that aid takes come from the cooperator's domestic ideologies and institutions, and from the particular bureaucratic imperatives of cooperator agencies. Such kinds of aid, while not ill-intentioned, often lacks reasonable long-term planning and "adequate market signals", thus heavily disrupting the supply and demand of the recipient (not surprisingly, Moyo shares the same critics on aid) (Browne, p.140).

While it sounds like the issue is solvable by promoting ideas such as participation and ownership of the recipient in the aid process, one problem is that its feasibility remains questionable, given that it is hard to shake the rooted, cooperator-driven nature of the current mode of aid. Indeed, if the aid policy is what Lancaster suggests, a mixture of self-interest and willingness of the cooperator, how can we expect that more participation of the recipient would make the cooperator's aid policy reflect recipient's real need and interests?

Browne wrestles with this problem. Through the book he offers various kinds of recommendations. Many of them are eminently sensible: improved borrower control over the types and forms of aid; better local knowledge on the part of aid cooperators; better aid coordination and reduced use of conditionality (Browne, pp.52-55). Nonetheless, these strategies sound like no more than a refined rhetoric of "ownership" and "participation".

So far we have seen two possible choices of improvement: one, popular among the traditional cooperators, focuses on the soft infrastructure of the recipient; the other one, common to the rising cooperators, weighs in with direct investment. For many traditional cooperators, when the Eastern Bloc collapsed during the early 1990s, the political imperative to support unconditionally, even the most corrupt, brutal governments, has faded. Given the futility of the traditional aid-centric model after four decades, many cooperators have shifted their goal towards a soft infrastructure overhaul: stabilization, adjustment of the economic structure, opening up of the market, and the promotion of transparent, uncorrupt, democratic governance (Moyo, pp.20-22).

On the other hand, both Moyo and Browne speak positively about the mode of aid of emerging cooperators like China. To them, the Chinese mode of aid

presents a new possibility: more Foreign Direct Investment (FDI) instead of ODA, more centering on the “hard” infrastructure instead of the “soft” one (that is, transparency, economic structure, social stability, etc.). As both authors suggest, this model not only provides the recipient with more investments, but also restores the supply and demand of the recipient and its independence from aid. It also instills capital into the recipient, and helps it to trade with other countries (ironically, before the recipient build up a healthy economy under the soft infrastructure-centric ODA, as both authors suggest).

Nevertheless, some critics worry about China’s increasing presence in Africa and other less developed regions. For one, since China is “investing” instead of “assisting”, it, by nature, looks for a return. For many countries plagued with instability and poverty, the price could be hefty. While China offers generous cooperation packages to countries like Angola (loans with 1.5% interest) that almost no other countries could compete, it comes with a price, as Angola mortgages domestic resources, most noticeably oil, for the Chinese offer.³ In addition, China is notorious for exporting Chinese labors along with investment packages, leaving little room for local employment growth. By 2016, around 1.03 million Chinese labors were dispatched around the world, with almost a half in Africa. In ZTE and Huawei, two telecommunication magnates with significant presence in China’s global investment business, the ratio of local to Chinese staff is roughly 50 to 50, while most pivotal departments (i.e. management, technical) are dominated by Chinese personnel. This mode of employment has stirred anti-Chinese sentiment in countries like Angola: While China and India were both helping Angola develop its railway during the 2000s, India employed

³ <http://www.cfr.org/china/china-africa/p9557>

only 1,500 Indian labors, mostly experts and supervisors, while China brought over 40,000 Chinese labors. The discontent of Angolans eventually led to the outbreak of anti-Chinese sentiments since 2007, forcing a number of Chinese companies to quit Angola (Chen, pp.1104-1106).

The effectiveness of both kinds of aid is still in debate nowadays. Yet, we have to bear in mind that rising economies like China have gone through a different, but successful and rather recent path of development. This new type of cooperation might be a reflection on their own experiences. In that case, I wish my case study on Japan and China's aid to Pakistan will provide an insight to this issue.

Chapter 2: Assistance to Pakistan

China

Described by both governments as “all-weather and time-tested friendship”⁴ (“长期、全天候的友好关系”⁵), the Sino-Pakistan relationship was officially established in May 1951. However, the relation between the two countries was lukewarm during the first decade, in that the two countries were in different blocs at the beginning of the Cold War, which led to natural suspicions. According to the annual reports from the Chinese Embassy in Pakistan during 1952-54, the Pakistan government rarely invited Chinese diplomats to their events, which was considered by the Embassy as “inevitable due to the Pakistani ruling class’ further commitment to the American Imperialists and increasing political reactionaryism”⁶ (Cheng, pp.10-11).

The deterioration of the Sino-Indian border dispute and the following war in 1962 became the turning point. While Pakistan was an important ally of US during the 1950s, Washington’s generous support of India in the Sino-Indian War led to the discontent of Pakistan, who was hostile to India after the Partition in 1947 mainly due to territorial disputes in Junagadh and Kashmir regions. This consequently boosted the Sino-Pakistan partnership. In 1963, the two governments agreed to settle their border disputes, as Pakistan ceded the Trans-Karakorum Tract to China. During the same year, China started to provide concessional loans to Pakistan, which marks the beginning of Beijing’s assistance to the Islamic Republic (Cheng, 2009). In February 1965, the two governments signed the Eco-

⁴ This translation comes from the official website of the Pakistan Embassy in Beijing.

⁵ The pronunciation is romanticized as “chang qi, quan tian hòu de you had guan xi”.

⁶ The original Chinese script is “巴基斯坦统治阶级进一步投靠美帝,政治上越来越反动的必然”.

conomic and Technical Cooperation Treaty, with China loaning 60 million US dollars to Pakistan, to be repaid in Pakistani goods over a period of 20 years (Copper, p. 61). China and Pakistan furthered their partnership following the two Indo-Pakistan Wars of 1965 and 1971: China publically supported Pakistan's confrontation with India, and extended its support (especially in the military field); Pakistan became a key figure in China's reestablishment of ties with the West, helping to facilitate the Nixon visit to China in 1972, as well as the introduction of the PRC to the UN. By the time that East Pakistan (broke away to become Bangladesh) in late 1971, China had already offered over \$500 million of aid to Pakistan, including a \$200 million interest-free loan offered in November 1970 (later extended to \$300.7 million), one of its largest aid to a non-Communist country (Copper, pp.63-65).

China's support to Pakistan has remained at a high point since then. In 1978, the Karakorum Highway, a 1300km road that connects Xinjiang, China and Gilgit-Baltistan, Pakistan, was completed after two decades of construction.⁷ It is the first paved road between Pakistan and China, enabling their overland trade and transport.

China is also the most important supporter of Pakistan's energy production projects. In 1999, the Chashma Nuclear Power Plant I, a 325-megawatt nuclear power plant, was completed with Chinese support. It is the first operating unit of the 5-unit, 2400-megawatt Chashma Nuclear Power Complex, which would help Pakistan relieve its acute energy deficit. Currently, Plant I and Plant II (completed in 2011) together contribute to 3% of Pakistan's total installed elec-

⁷ The Karakorum Highway was a joint construction between the two countries. China provided goods and equipments, and helped construction since 1968.

tricity capacity.⁸

Today, China is the largest supporter of Pakistan. From July 2015 to June 2016, the FDI inflow from China amounted to \$593.9 million, which is up 131.3% from the previous year and constitutes 46.3% of the total FDI to Pakistan during the fiscal year.⁹ In addition, China also provided \$66 billion of aid to Pakistan in the first decade of the 21st century, which accounted for 9% of China’s total aid to the world and 87% to South Asia during that time period (Wolf, p.37).

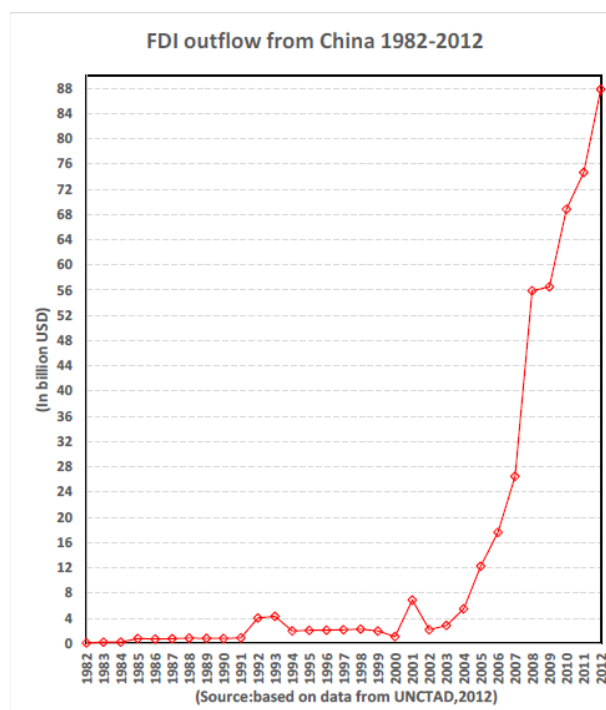


Figure 1. FDI Flow from China, 1982-2012 (Xue, p.7).

China’s policy towards foreign assistance could be characterized as mutualist and non-interventionist. In 1964, Chinese Premier Zhou Enlai proposed the Eight Principles of Foreign Aid, which then became the guide of China’s official assistance activities. It is noticeable that China, still a socialist planned economy at that time, chose to provide goods at “international market prices” (Article 6).

⁸ <http://tribune.com.pk/story/655573/pakistans-energy-security/>

⁹ <http://tribune.com.pk/story/1146075/2015-16-china-helps-fdi-pakistan-surges-38-8/>

This decision could be seen as a theoretical foundation that set China apart from the other supporters in the pattern of assistance:

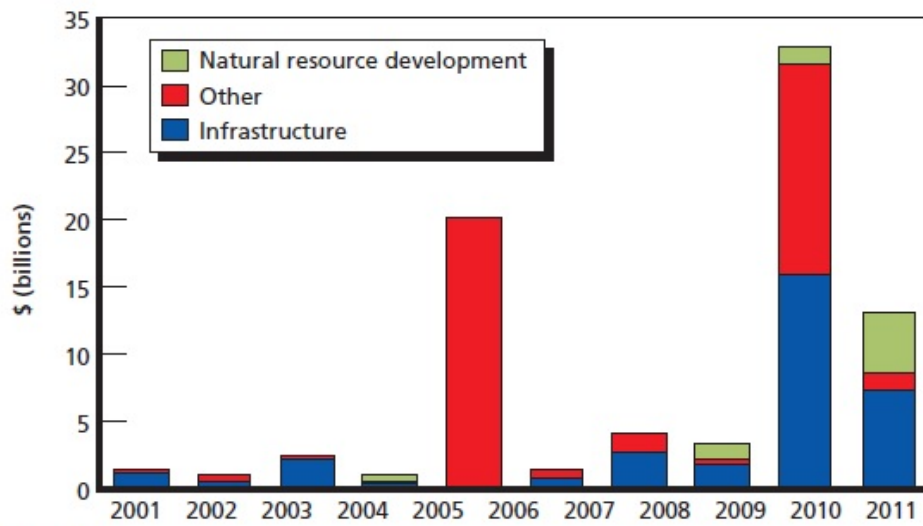
- “1. The Chinese Government always bases itself on the principle of equality and mutual benefit in providing aid to other countries. It never regards such aid as a kind of unilateral alms, but as something mutual.
2. The experts dispatched by China to help in construction in the recipient countries will have the same standard of living as the experts of the recipient country. The Chinese experts are not allowed to make any special demands or enjoy any special amenities.
3. China provides economic aid in the form of interest-free or low-interest loans and extends the time limit for the repayment when necessary so as to lighten the burden of the recipient countries as far as possible.
4. In providing aid to other countries, the purpose of the Chinese Government is not to make the recipient countries dependent on China but to help them embark step by step on the road of self-reliance and independent economic development.
5. The Chinese Government provides the best-quality equipment and material of its own manufacture at international market prices. If the equipment and material provided by the Chinese Government are not up to the agreed specifications and quality, the Chinese Government undertakes to replace them.
6. The Chinese Government provides the best-quality equipment and material of its own manufacture at international market prices. If the equipment and material provided by the Chinese Government are not up to the agreed specifications and quality, the Chinese Government undertakes to replace them.
7. In giving any particular technical assistance, the Chinese Government will see to it that the personnel of the recipient country fully master such technique.
8. The experts dispatched by China to help in construction in the recipient countries will have the same standard of living as the experts of the recipient country. The Chinese experts are not allowed to make any special demands or enjoy any special amenities.” (Zhou, pp.388-389)¹⁰

Compared to China’s assistance mode in general (Figure 3), China’s assistance in Pakistan is more infrastructure-related, but less about natural resource de-

¹⁰ The original version is in Chinese. A translated version can be found at: <https://digitalarchive.wilsoncenter.org/document/121560.pdf?v=7842ff83b1-fa6e84a7b0e483012dfe15>

velopment (Figure 2). This is because Pakistan does not possess rich natural wealth as Africa (Figure 5) or Latin America countries do, and its export to China mainly consists of agricultural products (e.g. Rice, cotton) and raw materials (Wolf, 38). Nevertheless, China’s assistance in natural resource development has had a major increase since 2009 (figure 3), due to funding pledges for several power plant projects in Pakistan (Wolf, p.38).

Annual Pledged Plus Delivered FAGIA Estimates to South Asia by Category, 2001-2011

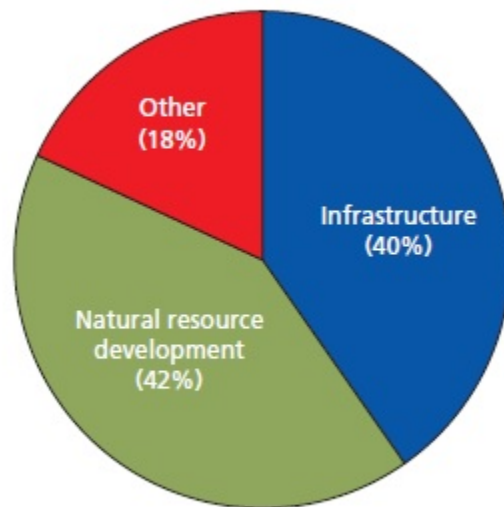


RAND RR118-5.8

Figure 2. Annual pledged plus delivered Foreign Aid and Government-sponsored Investment Activities (FAGIA) estimates to South Asia by category, 2001-2011 (Wolf, 39), where 87% flowed to Pakistan.¹¹

¹¹ “Other” in figure 2 includes, but is not limited to, trade and economic development, humanitarian assistance, technical assistance, debt relief and cancellation, housing projects, improvement in telecommunication, and factory constructions

Total FAGIA Shares by Category, Average 2001–2011



RAND RR118-4.3

Figure 3. China's total FAGIA shares by category, average 2001-2011 (Wolf, 22)

Japan

Japan and Pakistan shared a long history of cooperation, with Pakistan having a notable role in Japan's economic recovery during the first decade after World War II. While the bilateral trade was minimal due to the sanctions from Occupying Allied Powers (Malik, p.26; Sumiya, pp.205-207; Hamada, p.161), Pakistan became one of the first states to waive Japan's reparations unconditionally (Malik, p.38).

After its reintegration into the international community during the mid-1950s, Japan soon became one of the major cooperators in Asia. In 1954, Japan started to provide technical training to Pakistan and many other Asian countries in line with the Colombo Plan, and seven years later, Japan offered the first ODA loan to Pakistan.

Japan became the largest donor to Pakistan during the years of economic boom. From the late 1980s to the end of 20th century, Japan single-handedly

provided over 60% of the total ODA to Pakistan from the Development Assistance Committee (DAC) members. However, Japan suspended new ODA loans and grant aid to Pakistan following its nuclear test in 1998. It is yet debatable whether Japan's economic collapse in the 1990s impacted Japan's outflowing assistance, but this suspension certainly became a threshold of Japan's policy on assistance to Pakistan, shifting Japan's attention towards security and social stabilization. Even though Japan discontinued the suspension in 2001, its Ministry of Foreign Affairs (MOFAJ) announced three "priority goals" in supporting Pakistan four years later. According to the announcement, Japan's "uppermost goal" in Pakistan is to build a stable and sustainable society through economic growth. The three priorities are listed as follows:

1. Improvement of economic structure (経済基盤の改善), including focus on sustainable electricity supply and poverty reduction;
2. Ensuring human security and improvement of social infrastructure (人間の安全保障の確保と社会基盤の改善), such as improving literacy via projects in basic education sector, focusing on technical education via assistance to higher education sector, and development of water and sanitation, health service, and disaster management capabilities;
3. Balanced and stable regional development including the border region (国境地域などの安定・バランスの取れた発展), anti-terrorism, and social stabilization of the border region with Afghanistan.

Japan's assistance projects in Pakistan in recent years reflect such a focus. According to JICA, nearly two-thirds of Japan's ODA projects in Pakistan since 2001 are humanitarian, focusing on education, health, water, education and

poverty reduction. Among the ten largest projects (based on the budgets) conducted during 2012 and 2014, five of them are related to health and sanitation improvement, two are security projects, while the other three are related to electricity, education, and infrastructure construction.¹²

	Loan	Grant	Technical Assistance	Total
Construction & Private Sector	3	7	13	23
Humanitarian	3	22	13	38
Government		1	5	6
Total	6	30	25	61

Figure 4. Categorization of JICA's projects in Pakistan since 2001 (Data: JICA¹³). In that JICA viewed some projects as the combination of two categories, the number of total projects conducted is different from each part combined.

Currently the third largest OECD supporter to Pakistan, Japan provides loan as the main type of ODA to Pakistan. Accumulatively, Japan has provided JPY 98.1 billion loan so far, more than three times the total amount of grant and FDI. Meanwhile, grant is another significant type of outflow, with an average of JPY 575 million during 2010 and 2014 (MOFAJ).

Year	Loan	Grant	Technical Assistance
2010	19.70	4.80	2.50
2011	4.99	8.10	2.09
2012	-	6.07	1.94
2013	-	4.81	1.61
2014	5.00	4.94	1.60
Historical Total	980.99	259.49	53.29

Figure 5. Japan's ODA disbursements to Pakistan by fiscal year, 2010-2014 (Currency:

¹² <http://www.mofa.go.jp/files/000142558.pdf>

¹³ <https://www2.jica.go.jp/ja/oda/index.php>

billion JPY) (MOFAJ).¹⁴

However, FDI outflow to Pakistan remains at a relatively low level. During 2010 and 2015, Japan's total FDI outflow amounted to USD 185.8 million, standing respectively at 20.8%, 15.8%, 12.8%, and 10.3% of investments from Hong Kong, US, UK, and China.

Year	China	UK	USA	Hong Kong	UAE	Switzerland	Japan	Total
2010	47.4	207.1	238.1	125.6	284.2	110.5	<u>3.2</u>	1,634.8
2011	126.1	205.8	227.7	80.3	36.6	127.1	<u>29.7</u>	820.7
2012	90.6	633	227.1	242.6	<u>22.5</u>	149	30.1	1,456.5
2013	695.8	157	212.1	228.5	471	209.8	<u>30.1</u>	1,667.6
2014	255.3	174.3	209	83.4	216.4	<u>2.8</u>	71.1	851.2
2015	593.9	79.8	65.5	130.9	164.2	76	<u>21.6</u>	1,281.2
Total	1809.1	1457	1179.5	891.3	771	675.2	185.8	7712.1

Figure 5. Major FDI outflows to Pakistan, and total FDI Pakistan received by fiscal year, 2010-2015. (Currency: million USD) (BOIP).¹⁵ The largest investors each year are highlighted in bold, while the smallest are underlined.

In short, both China and Japan have been working with Pakistan over the past sixty years. As their current principles diverge, China prioritizes the infrastructure construction of Pakistan via large scale investments, while Japan claims to help Pakistan become a stable and sustainable country first, by mainly

¹⁴ <http://www.mofa.go.jp/mofaj/gaiko/oda/files/000142157.pdf>

¹⁵ <http://boi.gov.pk/ForeignInvestmentinPakistan.aspx>

providing technical assistance and grants to meet Pakistan's humanitarian and developmental needs.

Chapter 3: The Economy of Pakistan

Economic Overview

With a population over 195 million,¹⁶ Pakistan is the second largest economy in South Asia, and one of the largest in the world. In the fiscal year (FY) 2014-15, Pakistan had a nominal gross domestic production (GDP) of \$270 billion, and \$952 billion in terms of purchasing power parity (PPP).¹⁷

The economy of Pakistan has been constantly growing over the last 63 years. However, in the past few years, it has been hit by factors including the 2008 economic crisis, terrorism, and domestic insurgencies. While the country had enjoyed a growth around 9% in 2005, it slumped to a mere 0.36% in 2009, the worst record ever since 1953. Although the growth has recovered to 4%, it is still below the average of South Asia countries.

Currently, Pakistan has an inflation rate below four percent. Nevertheless, the economy of Pakistan was quite unstable in the past. Over the past decade, the inflation rate in Pakistan averaged over 10%, and reaching a forty-year high of 25% in 2008.¹⁸

¹⁶ <http://www.pwd.punjab.gov.pk/> (Oct 24, 2016)

¹⁷ <http://data.worldbank.org/country/pakistan>

¹⁸ *ibid.*

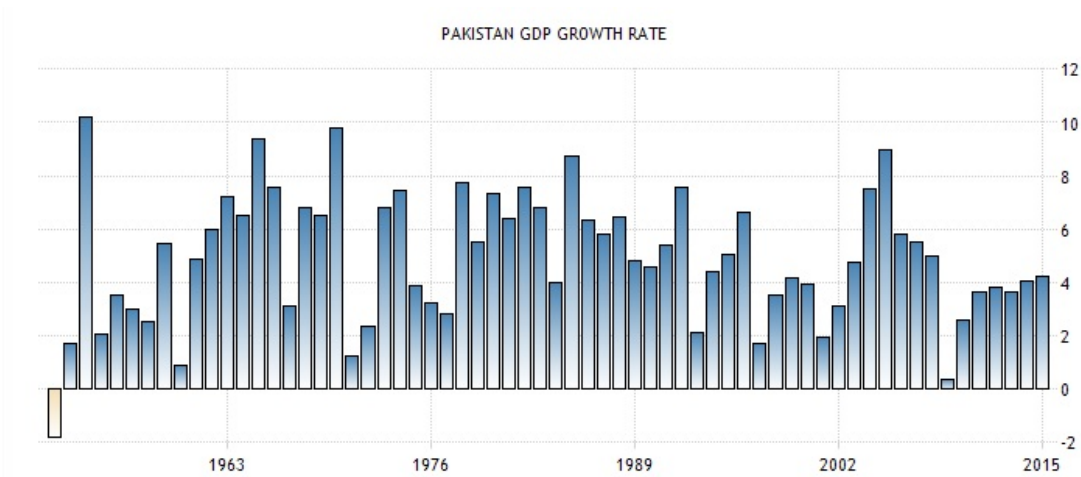


Figure 6. The nominal GDP growth rate (%) of Pakistan, 1952-2015. (Source: Trading Economics)

	2013	2014	2015e	2016f	2017f	2018f
South Asia, GDP	6.1	6.8	7.0	7.1	7.2	7.3
South Asia excluding India	4.9	5.4	5.3	5.3	5.5	5.4
Pakistan (factor cost)	3.7	4.0	4.2	4.5	4.8	5.1

Figure 7. Comparison of Pakistan's GDP growth rate to South Asia's GDP growth rate, 2013-2018 (e: estimate; f: forecast). (Source: Global Economic Prospects)



Figure 8. Inflation Rate (%) of Pakistan, 2006-2016. (Source: Trading Economics)

On the other hand, Pakistan is a lower-middle income economy, with a nominal per capita income around \$1,513 in FY 2015.¹⁹ The national poverty rate, although declined to less than a half of the rate in 2001, still remains at a high

¹⁹ <http://tribune.com.pk/story/889024/per-capita-income-a-pakistani-now-makes-1513-a-year/>

level of 29.5%.²⁰

As a semi-industrialized economy, Pakistan relies heavily on the services sector, comprising around 55% of GDP in 2015.²¹ In the same year, the agricultural sector accounted for about 25% of GDP, while the industrial sector (mostly cotton textile and apparel production) had a lesser share of 20%.²² Meanwhile, Pakistan's exports are mainly agricultural products (e.g. Cotton, rice, fruits, and animal products), textiles, and apparel. In 2014, these goods contributed to over 60% of Pakistan's total exports.²³

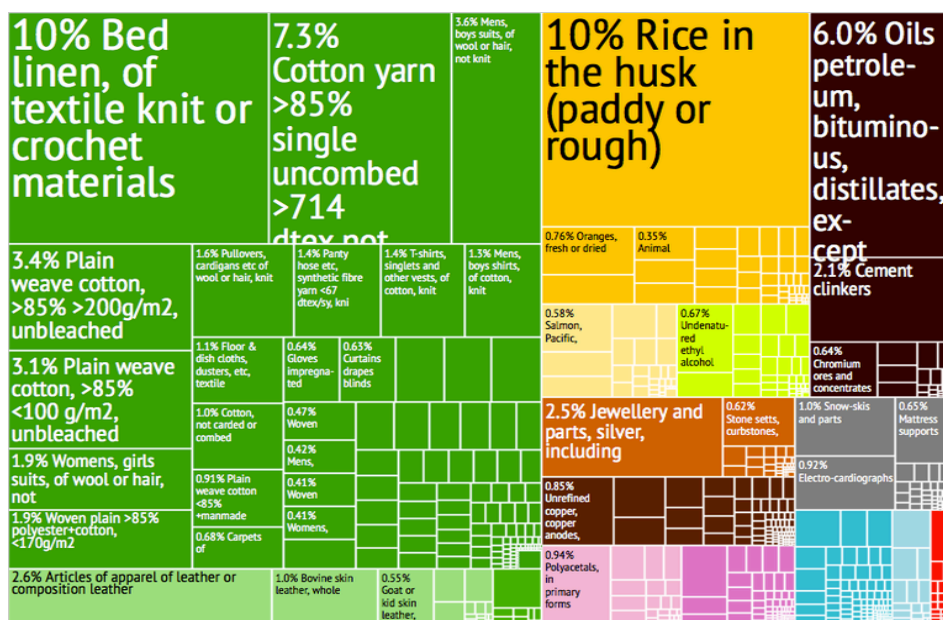


Figure 9. Composition of Pakistan's product exports in 2014. (Source: The Atlas of Economic Complexity)

In summary, even though Pakistan has been constantly growing during the past six decades, its overall development leaves much to be desired.

²⁰ <http://data.worldbank.org/country/pakistan>

²¹ Major areas of Pakistan's service sector are wholesale and retail trade, transport, storage, communication, finance, and insurance. (Source: The Pakistan Bureau of Statistics)

²² <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html>

²³ http://atlas.cid.harvard.edu/explore/tree_map/export/pak/all/show/2014/

Key Impediments to the Development of Pakistan

In *Pakistan's Enduring Challenges*, Christine Fair and Sarah Watson presented four major challenges Pakistan faces currently: security, political tension, lack of energy, and horrible taxation (Fair, pp.13-17). Since the foundation in 1947, the country has long been trapped in instability. It has seen over a dozen wars and skirmishes with India throughout the last seven decades. The Soviet-Afghan War in the 1980s brought insecurity the Pakistan-Afghanistan border, as well as the jihadist fighters. Moreover, since September 11, 2001, Pakistan has become one of the most terror-stricken nations in the world. During the first decade of 21st century, Pakistan lost around USD 68 billion directly or indirectly due to terrorism, and over 35,000 lives between September 11, 2001 and May 2011.²⁴

The external and internal security concerns also contribute to the instability of the national politics, leaving the government in exhaustion from negotiating with both foreign and sub-state powers for peace. In addition, Pakistan has suffered from serious energy shortages: the shortfall of power is 20% of the total capacity installed in Pakistan, and in peak season this rate soars beyond 30%; even though Pakistan has one of the largest natural gas reserves in South Asia, it still has a shortage of about two billion cubic feet per day, due to its incapability of exploring and utilizing the resource.²⁵ Moreover, other issues including high rate of illiteracy, polluted water, poor sanitary conditions, and a huge urban-rural gap are also factors to Pakistan's current woes.

²⁴ <http://www.nybooks.com/articles/2011/09/29/why-they-get-pakistan-wrong/>

²⁵ <http://www.bloomberg.com/news/articles/2012-04-05/the-secret-strength-of-pakistans-economy>
http://www.indexmundi.com/pakistan/natural_gas_production.html
<http://www.indexmundi.com/g/r.aspx?c=pk&v=98>

While Pakistan has been plagued by multiple problems, one central issue is the budgetary constraints. The undocumented economy is estimated to be 36% of Pakistan's overall economy, starving the states with no taxation²⁶. In fact, Pakistan has a capital investment to GDP ratio around 14-15% during 2009-2016, one of the lowest in the world²⁷ that leaves the country in shortage of one of the most important tools for development. In addition, the annual government expenditure only accounted for 9-11% of the national GDP during 2006 and 2014, which is significantly lower than a world average of 15%-16% during the same period.²⁸ Investments in many other areas, such as electricity²⁹ and education³⁰, are also weak and showing no signs of growth. The budgetary constraint deprives Pakistan's self-curability and exacerbates the challenges.

Therefore, when we look at the development projects to Pakistan, we also have to look at their economic viability in addition to the sectoral influences.

The Role of Assistance in the Economy of Pakistan

Pakistan is one of the largest ODA recipients in the world. Since 1960, it has received a total of USD 62 billion, which accounts for 2.2% of the total ODA from the OECD members during the period. In the year of 2014, a 2.6% of the total USD 137.2 billion had flowed into Pakistan, making it the fourth largest ODA re-

²⁶ <http://www.bloomberg.com/news/articles/2012-04-05/the-secret-strength-of-pakistans-economy>

²⁷ <http://data.worldbank.org/country/pakistan>

²⁸ *ibid.*

²⁹ <http://www.dawn.com/news/1275116>

³⁰ <http://www.dawn.com/news/1275116>
<https://www.thenews.com.pk/print/115831-No-improvement-witnessed-in-utilisation-of-education-budgets>

ipient that year (OECD).

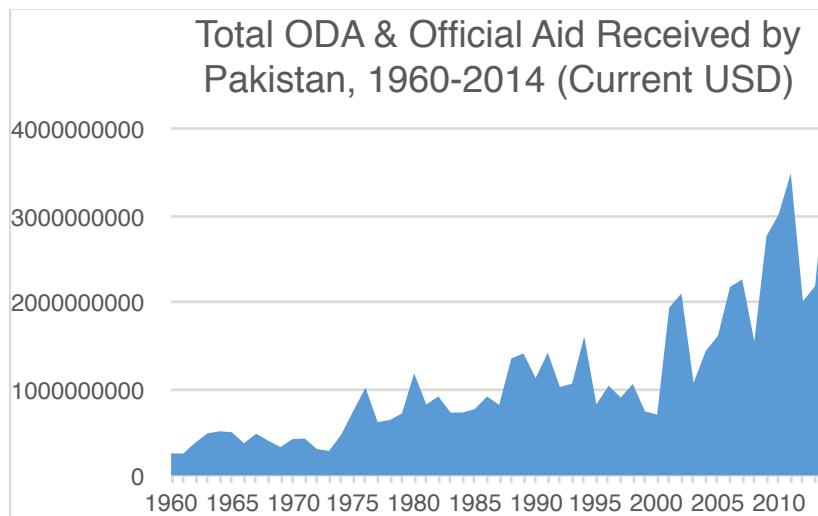


Figure 10. Total ODA & Official Aid received by Pakistan, 1960-2014. (Source: World Bank)

Meanwhile, Pakistan is becoming less dependent of ODA. While in 1963, ODA comprised 10.4% of Pakistan’s Gross National Income (GNI), but this ratio has fallen to 1.4% in 2014. Yet, the ratio is still higher than the average of either South Asian countries or lower-middle income countries.³¹

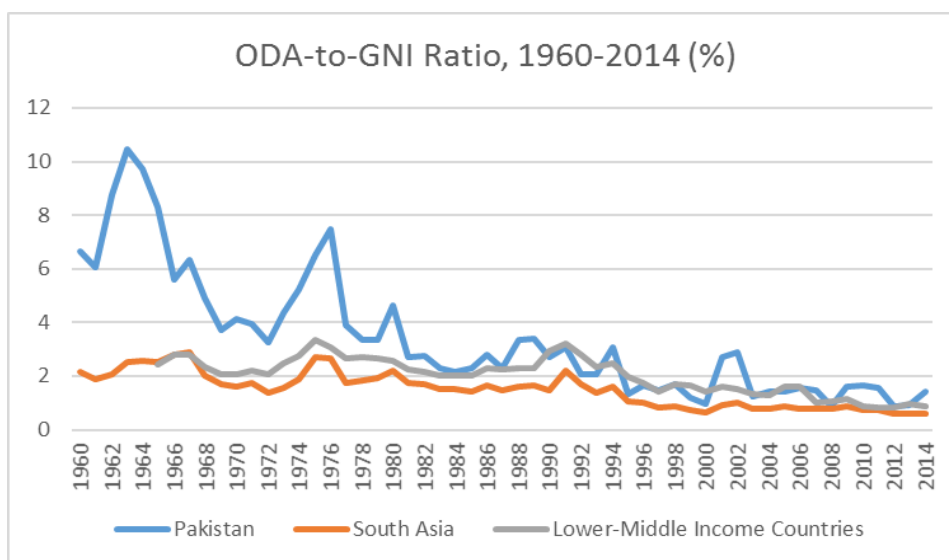


Figure 11. ODA-to-GNI ratio of Pakistan, South Asia, and lower-middle income countries, 1960-2014 (Source: World Bank)

According to the 2015-16 Pakistan Federal Budget Report, the ODA it received

³¹ <http://data.worldbank.org/country/pakistan>

nowadays has the following patterns:

1. Most ODA to Pakistan has been offered as loans: It shares 95.6% of the total ODA in 2014, while the rest 4.4% being grants;
2. The ODA is heavily focused on projects and programs.³² Over 85% of the ODA to Pakistan in 2014 can be categorized as plan resources;³³
3. Funding assistance accounts for 35.7% of the total plan ODA in the year of 2014, while commodity and other forms of assistance³⁴ respectively comprises 26.9% and 36.5%;
4. Sectors with most ODA inflow are: electricity, road construction, disaster relief, sanitation and health improvement, and governance improvement (*Estimate of Foreign Assistance*).

On the other hand, the net FDI inflow into Pakistan reached to USD 1.02 billion³⁵ during the first three quarters of FY 2016, a 5.4% percent growth from the same period last year.³⁶ The major FDI inflows are from China, US, UAE, Hong Kong, and UK. Main recipient sectors include power, oil and gas exploration, financial business, tobacco, communications, beverages, chemicals, personal services, electronics, construction, petroleum refining and transportation.³⁷

However, some researchers questioned about Pakistan's capacity to pay the

³² Project aid is the aid given for a specific purpose (e.g. Building materials for a new school), while program aid is aid given for a specific sector (e.g. Funding in the state education sector).

³³ Plan resources is related to expenditures on centrally sponsored programs and flagship schemes, while "non-plan" refers to all other expenditure (e.g. Defense expenditure, subsidies, interest payments, and salaries)

³⁴ Other forms of assistance include food aid, technical assistance, research projects, etc.

³⁵ The FDI inflow amounts to USD 1.76 billion, and the outflow is USD 0.74 billion.

³⁶ July 2015 - April 2016.

³⁷ http://finance.gov.pk/survey_1516.html

increasing loans. According to Khurram Abbas, researcher at the Islamabad Policy Research Institute, Pakistan’s foreign borrowing from 2011 has doubled the volume of total foreign debt, which now stands at two thirds of its national GDP. Plus, the debt to revenue ratio is already above an alarming 270 percent, and is increasing annually. Although he admits that there is no sign of the advent of a debt trap in Pakistan, he states that it is mainly due to the increase in the export earnings. The revenue collection, which Abbas deems as the major source of debt payment, has not been improved thus far.³⁸

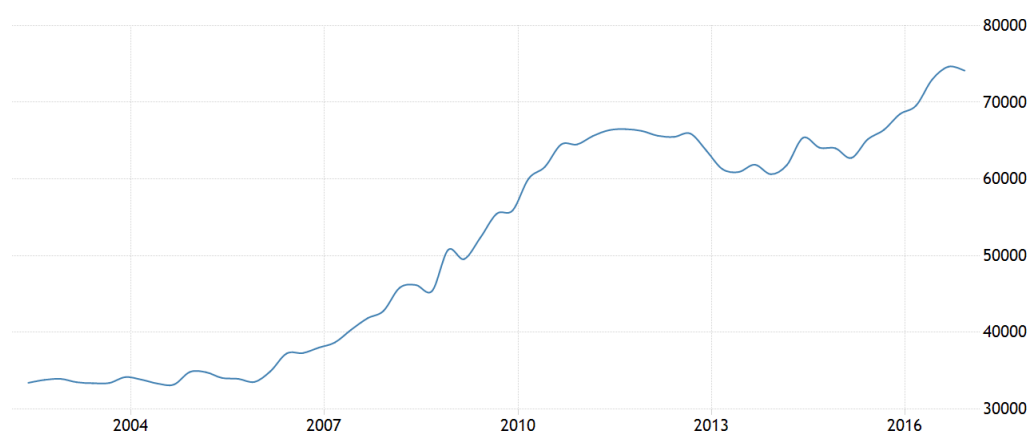


Figure 12. Pakistan’s total external debt, 2002-Jan 2017. (Sources: State Bank of Pakistan, www.tradingeconomics.com³⁹)

³⁸ <http://www.ipripak.org/national-debt-security-implications/>

³⁹ <http://www.tradingeconomics.com/pakistan/external-debt>

Chapter 4: Comparing the Assistance

Each country has their own principles of assistance, yet only the outcomes may testify their effectiveness. In this chapter, I concentrate on the effectiveness of Japan and China’s development assistance projects in Pakistan, with case study as the main methodology.

Complicated in their nature, assistance projects differ from one another by focus and scale. Each factor determines the outcome of the projects, while shaped by the other two. Hence, it needs great caution to prevent the study from being too general, but not making it an apple and orange comparison with too much details.

Construction & Private Sector – Loan	Construction & Private Sector – Grant	Construction & Private Sector – Technical Assistance
Humanitarian – Loan	Humanitarian – Grant	Humanitarian – Technical Assistance
Governance – Loan	Governance – Grant	Governance – Technical Assistance

Figure 13. A two-way system that examines the impact of assistance. The scale of aid, while not appearing in this chart, could be considered proportional to the outcomes, and thus can be overlooked with an awareness of the scalar differences.

Given the unquantifiability and complexity of the topic, I would dissect it by fields, as a comparison of projects with the same focus provides the best intuitive grasp of the outcome. Although there can be an indefinite number of fields based on the criteria of analysis, I would generalize everything into three sections: The first relates to (infrastructural) constructions and business assistance; the second concerns all humanitarian needs, including but not limited to basic food, water, hygiene, shelter, security, education and human rights; the third consists of projects that deals with governance, corruption, transparency and other management aspects.

On the other hand, the outcomes are separated into direct and indirect ones. Direct outcomes are those ready aspects, such as the realization of the expectations, direct employments and short-term, local economic impacts. Indirect outcomes denote factors such as financial stress of the recipient (to pay the loan), boost on indirect employments, and sustainability.

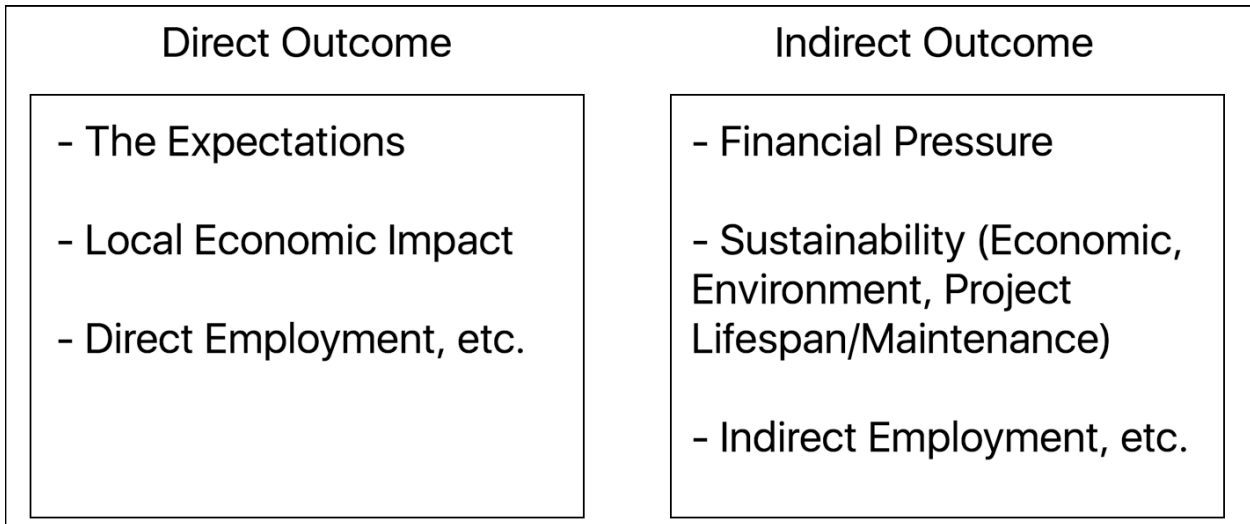


Figure 14. Examples of direct and indirect outcomes.

Construction • Private Sector

China

In recent years, China has shown increasing commitment to new construction projects within Pakistan. As the \$46 billion China-Pakistan Economic Corridor (CPEC) deal, signed in April 2015, prescribes, China would help Pakistan explore the potential gas reserve (\$2 billion), improve the connectivity with the construction of 4 major highways (\$11 billion), including an 1,100km one that connects the two largest Pakistan metropolis, Karachi and Lahore, and most importantly, increase its power capacity by building over 10 major power plants (\$33

billion), including nuclear, coal, hydro, wind as well as solar plants (Rifaat, pp.2-6).⁴⁰

In 2015, Pakistan's total installed electricity capacity stood at 23,928 Megawatts (MWe), with a mere 5.8% (1,322 MWe) as nuclear power (Private Power & Infrastructure Board). In hopes of resolving the constant power shortage (mentioned in Chapter 3), the Pakistan Atomic Energy Commission (PAEC) set out a mid-term plan to lift the country's nuclear power capacity to 8,800 MWe by 2030.

China has the essential role in Pakistan's development of nuclear power, providing both reactors and funds to the three major nuclear power plant projects in the Islamic Republic: CHASNUPP, KANUPP, and the future Muzaffargarh & Anmadpur East project. To the \$860 million CHASNUPP-2 and the \$2.37 billion CHASNUPP-3 and -4 Projects, China funded 40 and 82 percent via 20-year low interest loans (World Nuclear Association). In addition, as a pivotal part of CPEC, a loan package of \$6.5 billion is offered for civilian nuclear energy projects in 2014 (Syed).

⁴⁰ The initial CPEC deal was \$46 billion, but was increased to \$51 billion later.

Nuclear Plant	Capacity (MWe)	Construction Start	Commercial Operation Start	Planned Close	Location
Karachi Nuclear Power Plant-1 (KANUPP-1)	125	Aug 1966	Dec 1972	2019	Paradise Point, Karachi, Sindh Province
CHASNUPP-1	300	Aug 1993	June 2000	2040	Chashma, Punjab Province
CHASNUPP-2	300	Dec 2005	May 2011	2051	Chashma, Punjab Province
CHASNUPP-3	340	May 2011	Dec 2016	2056	Chashma, Punjab Province
CHASNUPP-4	1000	Dec 2011	Oct 2017	N/A	Chashma, Punjab Province
CHASNUPP-5	1000	Mar 2013	N/A	N/A	Chashma, Punjab Province
KANUPP-2	1161	Aug 2015	late 2021	N/A	Paradise Point, Karachi, Sindh Province
KANUPP-3	1161	May 2016	late 2022	N/A	Paradise Point, Karachi, Sindh Province
Muzaffargarh & Anmadpur East	3*1100	N/A (Negotiation finished in 2014)	N/A	N/A	Muzaffargarh & Ahmadpur East, Punjab Province

Fig 15. Operational and in-construction nuclear power plants in Pakistan (Based on information from World Nuclear Association, Fox News, and Syed)

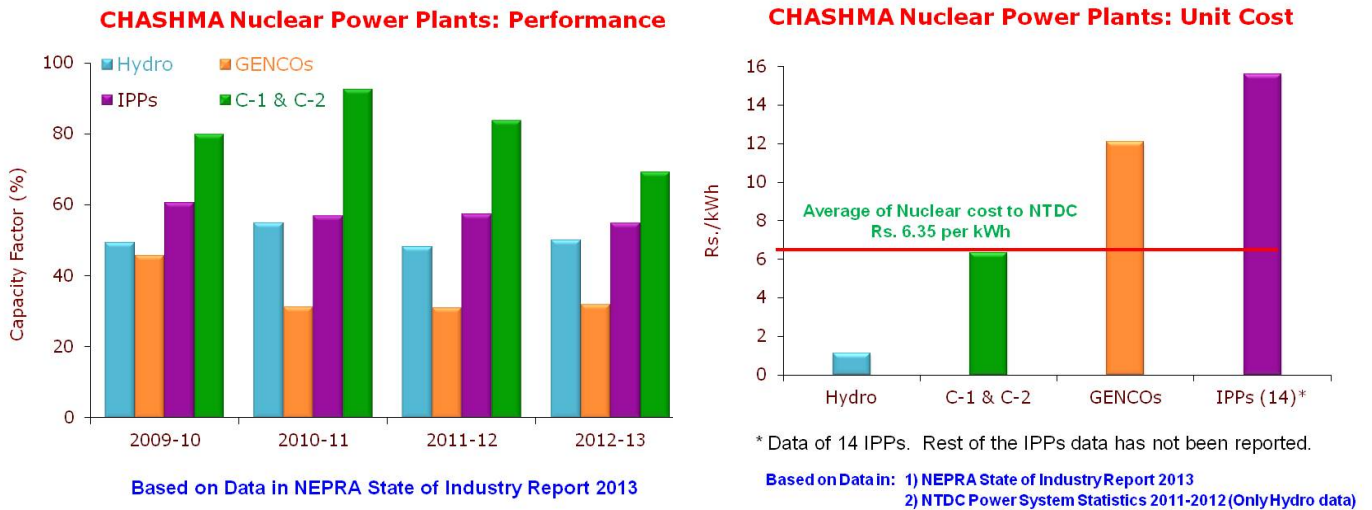


Figure 16. Left: Capacity factor⁴¹ of CHASNUPP-1, -2, and other types of power production, 2009-2013; right: Unit power production cost (Rs./kWh) of CHASNUPP-1, -2, and other types of power production. (Source: PAEC)⁴²

According to the performance of CHASNUPP-1 and -2 thus far, Pakistan’s blueprint of the nuclear power, though grand, seems reasonable: The two nuclear power plants produce power at 80 percent of their full capacity, more efficient than all other plants in Pakistan; plus, their average unit production cost has been the second lowest nationwide, only above hydropower production.

Although the package appears generous, China seemed not eager to cooperate with local companies during construction. According to the state-owned China Nuclear Engineering Corporation (CNEC), two of its subsidiaries contracted for the construction of CHASNUPP and KANUPP plants: Chinese Nuclear Industry Huaxing Construction Company as the sole constructor and Chinese Nuclear Industry Fifth Construction Company as the only installer of reactors. Yet, CPEC’s expectations of creating 700,000 direct jobs by 2030, and over 10,000 for KANUPP-2 and -3 projects alone (Tribune, Mar 19 2015) were not ungrounded,

⁴¹ Capacity factor: the ratio of a power plant’s actual output over a period of time, to its potential output, if possible, at full capacity.

⁴² <http://www.paec.gov.pk/Parameters/>

since all power plants are owned and operated by PAEC (Tribune, July 16 2013). Moreover, in a phone interview, CNEC personnel confirmed that both Pakistani and Chinese workers were hired for the construction, with Chinese workers taking over the majority of management and supervising positions, although detailed information, such as Pakistani employees by proportion and sectors, the wage and welfare difference of Pakistan and Chinese employees, were unrevealed for “confidentiality reasons”.

On the other hand, two Nuclear Engineering Training centers, known as KIN-POE (Karachi Institute of Power Engineering) and CHASCENT (CHASNUPP Center of Nuclear Training), are established onsite to train local nuclear power plant operators and engineers. Although both institutions are both established and run by PAEC, China participated in the training, providing certain simulation equipments and experts for the institutions.⁴³

Despite the great effort in expanding nuclear capacity, factors like the mismanagement and miscalculation of budget have cast uncertainty to this project. According to Mia Zian and A.H. Nayyar, the reason that the cost of CHASNUPP-1 remains unpublished is due to the variation of budget, floating from \$600 million at the beginning of construction, to over \$1 billion during the construction (Mian, 1999).

As the data above demonstrate, China has been pushing extensive nuclear power plant constructions in Pakistan, and given the performance of operating plants, the project is indeed positive to Pakistan’s power production improve-

⁴³ (In Chinese) <https://www.snerdi.com.cn/communicationdetail.aspx?id=fa7d6ef6-63df-403e-ab2f-86857073e6ee>

⁴³ (In Chinese) https://www.iaea.org/inis/collection/NCLCollectionStore/_Public/33/017/33017110.pdf

ment. Although the employment pattern seems similar to precedents of other Chinese corporations in Africa (mentioned in Chapter 1), China appears to hold little monopoly on technologies and is willing to assist in training local core technicians.

Nevertheless, considering Pakistan's external debt problem, this spectacular construction plan and other CPEC projects, might bring a massive financial burden to Pakistan's government in the future. Although China does not look for Pakistan's natural resources (as explained in Chapter 2), such a burden could potentially weaken Pakistan's position in the Sino-Pakistan interaction, as well as its independence in global affairs. In addition, China's negligence in so-called "internal affairs", and consequently in the transparency of operations, can result in the waste of money and resources, reducing the construction efficiency, and potentially providing ground for corruption.

Japan

Compared to China's projects, Japan's construction in Pakistan tends to be less grandiose: From 2010 to 2014, Japan's total ODA expenditure in Pakistan had been less than \$60 million (Figure 5), and the most expensive project, the power sector reform program, only had a budget of less than \$5 million.⁴⁴ The difference in budget reflects on the two countries' assistance characteristics. For China, the astronomical amount of funding leads to construction of more complexes, while many of Japan's construction projects in Pakistan are enhancement, improvement, or renewal of the existing infrastructures. Since the

⁴⁴ <http://www.mofa.go.jp/mofaj/gaiko/oda/files/000142157.pdf>

construction of Kohat Tunnel between 1999 and 2002, Japan has yet to help construct any new infrastructure.

As Figure 4 shows, JICA, the sole official ODA institution of Japan, conducts projects in Pakistan with little loan, but mostly grant and technical assistance. JICA's main foci on Pakistan's infrastructure and private sector, according to their documentation, are agricultural and rural development, power and transportation improvement⁴⁵.

While the agricultural and rural development is JICA's top commitments, composing more than one half of its projects in Pakistan since 2010 (footnote 32), power capacity improvement, as well, fits into Japan's commitment to improve Pakistan's economic structure (mentioned in Chapter 2), thus ought not to be taken lightly. In fact, the power project analyzed below is characteristic, with many of its features prevalent in JICA's other projects in Pakistan.

In February 2010, JICA agreed to introduce solar power to Islamabad, Pakistan, by granting a set of solar electricity generators to the country's capital, Islamabad. For the severe power deficiency of Pakistan, solar energy does not appear to be the ideal solution, in that it is one of the lesser efficient means of power generation.⁴⁶ Nonetheless, there are two reasons for Japan's seemingly inefficient choice. First, Japan has been strongly promoting sustainable energy since the 2000s. Policies including the 2005 national environmental policy, the 2012 national climate change policy, as well as the 2013 national electricity policy all emphasized the importance of sustainable energy development. Pakistan's urban

⁴⁵ https://www2.jica.go.jp/ja/oda/index.php?anken=&area1=アジア&country1=パキスタン&area2=&country2=&area3=&country3=&field1=&field2=&field3=&start_from=2000&start_to=&search=検索&p=1

⁴⁶ <https://www.eurelectric.org/Download/Download.aspx?DocumentID=13549>

air pollution, mostly contributed by fuel emissions and soil/road dust, is severe enough to endanger the development and human health (Sánchez-Triana et al., 2014, pp.43-47). As Pakistan's largest source of greenhouse gas, traditional fossil fuel power produces over 50% of the national carbon dioxide emission in 2008,⁴⁷ and contributes to two thirds of Pakistan's power capacity. Even though adding more fossil fuel power plants might be a potential solution in the short term, it would hit Pakistan severely in the future (NEPRA, 2015, p.15). On the other hand, Pakistan has yet to sign the nonproliferation treaty. As a steadfast proponent of nonproliferation, Japan, understandably, avoids supporting Pakistan's development of nuclear power (mentioned in Chapter 2).⁴⁸

Scholars like Moyo have suggested that any sudden, large inflow of foreign capital could potentially lead to the phenomenon called Dutch Disease, where the domestic currency becomes stronger compared to other foreign currencies, making the nation's exports more expensive while foreign imports cheaper, therefore weakening local industries and strangles the nation's industry eventually (Moyo, pp.109-110). However, Japan's assistance has been limited in capital scale. According to JICA's report, the project has a budget of only 480 million JPY (roughly \$4 million), all covered by Japan⁴⁹. Besides, the majority of grants are equipment for production, rather than capital or goods, thus minimizing Pakistan's possibility of Dutch Disease.

Noticeably, JICA's projects often orient towards local communities, which might also be a result of the constrained budget. Besides this solar plant project

⁴⁷ https://www2.jica.go.jp/ja/evaluation/pdf/2009_0961250_1_s.pdf

⁴⁸ <http://disarmament.un.org/treaties/t/npt>

⁴⁹ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2009_0961250_1_s.pdf

(which only aims to provide electricity to part of Islamabad⁵⁰), the tendency of localization is also shown in several other projects. For instance, in the 2010-2019 dairy development project in Sindh Province, JICA's final goal is to increase the income of only 7,300 households owning less than 5 live stocks within 5 of 24 districts of Sindh Province with proper training.⁵¹

With the limited scale of operation, technical assistance turns out to be a very handy method: with export of technology and training, JICA could promote its plan to the locals, and then to the whole nation through them. According to JICA's in the pre-evaluation, the purpose of the project is to "raise Pakistan people's awareness of renewable energy" ("再生可能エネルギーに関する意識啓発が行う").⁵² Hence, the project also embodies Japan's commitment to long-term, sustainable development.

According to JICA's final report, the total cost in the end amounted to 466 million JPY, less than the budget of 480 million JPY. The outcome, since the completion of the project in March 2012, exceeded the projection, as the power generation, CO₂ reduction and electricity cost figures in 2013 all surpassed JICA's estimation for 2014. A drop of all figures in 2014, as JICA explained, is due to the incompatibility between the system and Islamabad Electricity Supply Company's (IESCO) network, where the system had to stop running for three months for maintenance. Even so, the result of 2014 was almost on par with the initial estimation.⁵³

⁵⁰ *ibid.*

⁵¹ (In Japanese) <http://libopac.jica.go.jp/images/report/12128641.pdf>

⁵² (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2009_0961250_1_s.pdf

⁵³ https://www2.jica.go.jp/ja/evaluation/pdf/2014_0961250_4_f.pdf

	Projection of 2014	Actual (2012)	Actual (2013)	Actual (2014)
Power Generation (MWh/yr)	315	204	380	304
CO₂ Reduction (MWh/yr)	153	99	185	148
Reduction in Electricity Cost (Million PKR)	1.77	1.15	2.13	1.71

Figure 17. Effect of the Project for Introduction of Clean Energy by Solar Electricity Generation System. (Source: JICA's final report on the project)

Humanitarian

From 2004 to 2013, Pakistan had received \$7.0 billion of humanitarian assistance, only behind Sudan and the Palestinian Territory (GHA Report, 2015, p. 53). This influx is mainly hazard-led, including a magnitude 7.6 earthquake at Muzaffarabad that caused 78,000 deaths and a flood in 2010 that affected over 20 million people (p.15). Notwithstanding, given that the focus of this thesis is on the development assistance, I look at only assistance aiming to improve people's living standards and rights.

According to the documents on the website of the Chinese Embassy in Islamabad, China's humanitarian assistance to Pakistan is mostly donations for disaster relief, but not so much about basic living standards improvement. The three cases of humanitarian situation improvement are all about disease control, with two being drug donations and one via doctor/expert dispatch in limited scales.⁵⁴

In comparison, Japan is more committed to humanitarian assistance to Pakistan: Since 2010, Japan has spent 1 billion JPY (around \$8.5 million) to up-

⁵⁴ (In Chinese) <http://pk.chineseembassy.org/chn/zbgx/default.htm>

(In Chinese) http://www.gov.cn/zhengce/2014-07/10/content_2715467.htm

grade the sewage and drainage system in Gujranwala,⁵⁵ 1.4 billion JPY (around \$12 million) to improve the Child Health Institute in Karachi,⁵⁶ 1.8 billion JPY (around \$15 million) to upgrade the primary girl schools in the rural area of Sindh province,⁵⁷ and 25.2 billion JPY (around \$210 billion) to eradicate polio⁵⁸.

As JICA's largest program in Pakistan in the last few years, the Polio Eradication Project reflects Polio's rampancy in Pakistan: In 2016, 21 of the 42 polio cases reported were found in Pakistan,⁵⁹ with 20 being wild cases (that is, infected by poliovirus encountered in the nature, rather than vaccine-led).

To eradicate polio at the early stage, JICA offers large scale vaccination to Pakistani children, especially those under 5. In the first phase of the project, conducted between 2011 and 2013, JICA supplied 165 million doses of vaccine to Pakistan under a budget of 9.5 billion JPY, including 4.99 billion JPY as loan.⁶⁰ In the second phase, from 2016 to 2018, 273 million doses of vaccine estimated at the cost of 15.8 billion JPY, will be provided, with a loan deal of 6.3 billion JPY.⁶¹

⁵⁵ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2014_1460490_1_s.pdf

⁵⁶ (In Japanese) <https://www.jica.go.jp/oda/project/1560680/index.html>

⁵⁷(In Japanese) https://www2.jica.go.jp/ja/evaluation/index.php?ankenNo=1360640&schemes=&evalType=&start_from=&start_to=&list=search

⁵⁸ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2011_PK-P63_1_s.pdf

(In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2016_PK-P64_1_s.pdf

⁵⁹ <http://polioeradication.org/polio-today/polio-now/this-week/>

⁶⁰ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2011_PK-P63_1_s.pdf

⁶¹ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2016_PK-P64_1_s.pdf

PROVINCE	2010	2011	2012	2013	2014	2015	2016	2017
PUNJAB	7	9	2	7	5	2	0	1
SINDH	27	33	4	10	30	12	8	0
KPK	24	23	27	11	68	17	8	0
FATA	74	59	20	65	179	16	2	0
BALUCHISTAN	12	73	4	0	25	7	2	0
GILGIT-BALTISTAN	0	1	1	0	0	0	0	1
AZAD JAMMU & KASHMIR	0	0	0	0	0	0	0	0
TOTAL	144	198	58	93	306	54	20	2

Figure 18. Polio Cases Reported in Pakistan, 2010-Apr 2017. (Source:EndPolio Pakistan⁶²)

According to JICA's report, in 2010, the year before the project was conducted, there were 144 reported cases of polio, 29,495,200 children taking the vaccination shot, and an average of 92% of local health department storage with polio vaccine in stock 3 days ahead of every polio campaign. Between Jan and June 2013, the final six months of the first phase, these three figures were respectively 0, 28,800,000, and 100%.⁶³ EndPolio Pakistan's data also shows a drop of reported polio cases during the project (Figure 18). However, according to their data, there was also an outbreak in the first 18 months after the termination of the project, suggesting that JICA's goal of completely exterminating polio in Pakistan by the end of 2018 might not be feasible.⁶⁴

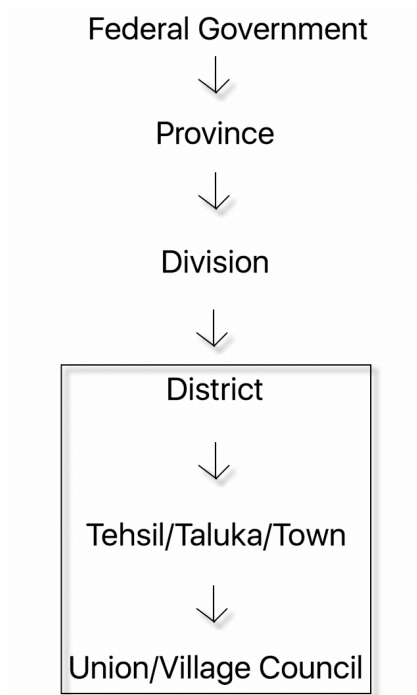
Governance

Thus far, China has not been engaged in any governance cooperation with Pa-

⁶² <http://www.endpolio.com.pk/polioin-pakistan/polio-cases-in-provinces>

⁶³ https://www2.jica.go.jp/ja/evaluation/pdf/2011_PK-P63_1_s.pdf

⁶⁴ https://www2.jica.go.jp/ja/evaluation/pdf/2016_PK-P64_1_s.pdf



kistan government. This is understandable, given that Chinese government has long taken non-interventionism as its foreign policy, as well as self-protection against foreign criticisms on issues such as human rights.⁶⁵ Violating the policy also put the sovereignty under the risk of criticism.

Meanwhile, China has close ties with Pakistan on the military level, exporting and cooperating with Pakistan in developing new munitions. From 1980 to 2000, the two countries had co-developed several combat jet models. Between 2009 and 2013, China had helped Pakistan build 4 F-22P Frigate Docks.⁶⁶ As China’s Foreign Minister Yang Jiechi stated in 2010, the military

Figure 19. The current central-to-local government system in Pakistan. The last three tiers in the square are local government bodies.

cooperation between the two countries is for “dealing with the terrorists”.⁶⁷

⁶⁵ http://afe.easia.columbia.edu/special/china_1950_forpol_principles.htm

⁶⁶ <http://pk.chineseembassy.org/eng/zbgx/t583844.htm>

⁶⁷ http://zeenews.india.com/news/south-asia/china-offers-pakistan-military-aid-to-fight-terrorism_439060.html

Yet, some scholars argue that the cooperation is essentially a part of the Sino-India competition, as well as a part of the India-Pakistan conflict (Kaplan, 2009; Ganguly, 2015, pp.134-146).

Also helping Pakistan fight against terrorism, Japan granted three sets of X-Ray scanners worth \$15 million to Port Karachi and Port Bin Qasim in 2015⁶⁸. Besides, Japan had also worked to help improve the public administration of local governments in Punjab during 2004 and 2007. For Pakistan, the Local Government Ordinance in 2001 removed the urban-rural divide and established local government at three levels (Figure 19).⁶⁹ Within the local government, a nonprofit institution called Citizen Community Board (CCB) was created by the Ordinance to enable elements in the society to participate in community work and development related activities (Chohon, pp.9-10). Although the change seemed to give local government more power and freedom to develop their own region, the practice was in chaos due to the failure in transition, confusion regarding the role of the local government, and the lack of competent personnel.⁷⁰

JICA sent a research team of 11 to Punjab Province, with a 270 million JPY budget (only 226 million spent in the end) totally covered by Japan. According to the final report in 2007, the group helped the CCB of Hafizabad District hire and train officials and form the Citizen Community Board Improvement Plan. During the final year of the project, the Hafizabad CCB registered 100 projects, made proposals for 53 with 13 passed in the local council, and finished 12, which is higher than the average of other CCBs in the province. In addition, the 12%

⁶⁸ (In Japanese) <http://libopac.jica.go.jp/images/report/12128641.pdf>

⁶⁹ http://www.pk.undp.org/content/pakistan/en/home/library/hiv_aids/development-advocate-pakistan/local-government-acts-2013-and-province-local-government-relation.html

⁷⁰ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2004_0602535_1_s.pdf

completion rate is also higher than the national average of 7.7%.⁷¹ In a 2010 review, JICA personnel reconfirmed the success of the project. Until 2009, the Hafizabad CCB had 50 funded projects, with 37 completed, making the District stand out in the whole Province (320 registered projects, 16 completions without Hafizabad).⁷² Yet, the reviewer also pointed out that, due to the lack of budget, transportation and awareness of project monitoring, Hafizabad was not capable of implementing a more efficient cycle management model on the projects. Also, following the 2008 general election, the new government had changed the 2001 Ordinance, suggesting an unclear future of the CCB system.⁷³

However, the current power dynamics in Pakistan has cast doubt on China and Japan's efforts. The Pakistani army has already had three successful coup attempts since 1947, making the country constantly waver between a parliamentary republic and a military oligarchy. The last attempt, which took place in 2007, resulted in the declaration of a 6-week State of Emergency by the President Pervez Musharraf, a delay of the President re-election⁷⁴, as well as severe economic impacts (A large fall in the stock market, withdrawal of foreign investment, and freezing of assistance project). Japan's focus on only the government's administrative capacity and efficiency will not help change Pakistan's political vulnerability. Hence, until the political situation stabilizes, both China and Japan's effort in the field is vulnerable, and consequently questionable.

Conclusion

While in the sections above I did not look into every single project, we can

⁷¹ (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2006_0602535_3_s.pdf

⁷² (In Japanese) https://www2.jica.go.jp/ja/evaluation/pdf/2009_0602535_4_f.pdf

⁷³ Ibid.

⁷⁴ <http://www.cnn.com/2007/WORLD/asiapcf/11/03/pakistan.emergency/index.html>

still see certain patterns. China's assistance has been centered on grand, national-level constructions and cooperation with the government, while Japan works more with the local community. China provides a great amount of loans for construction, while Japan offers more technical assistance in general. What China is doing now might effectively boost Pakistan's development (in fact, CPEC is projected to add another 2 to 2.5 percent of Pakistan's annual economic growth⁷⁵ until 2030), while Japan concerns itself in the sustainability (environment as well as the development in long-term), and maximizing efficiency under current capacity.

These two paths are also reflections of each country's own success. China's economic achievement in the last four decades is inseparable from its extensive openness to foreign investment, and the near-obsession with infrastructure constructions (Brandt, 2008, p.12; Banerjee et al., 2012), while Japan is a democratic, more developed society looking for a way to keep its developmental momentum. In theory, these two methods could be complementary at large. We have seen countries like Nauru (once among the economies with highest income, but almost solely depended on phosphate excavation before 1990s) struggling after the depletion of resources (Gowdy, 1999); yet simply promoting sustainability will have little effect on the development.

However, this is only an idealization, given that there are several factors that might introduce uncertainties. As already mentioned in the previous chapter, large amounts of loan will increase the financial burden of the recipient state's government, and a surge in foreign currency might lead to Dutch Disease. Pa-

⁷⁵<https://www.wsj.com/articles/big-chinese-pakistani-project-tries-to-overcome-jihadists-droughts-and-doubts-1460274228>

kistan could be prone to such issues. Other than Pakistani government's subsistent external debt issue (mentioned in Chapters 3 and 4), the export number is also alarming: As the number from last fiscal year suggests, Pakistan's export has already dropped by 12% from the previous year (Nakhoda, 2016).

Yet, some readers might concern about my approach to the governance assistance, questioning that I was only looking at construction and private sector cooperations, but neglect the potential corruption, transparency, and other issues in the government. Nevertheless, the construction and private sector are directly related to socio-economic development. Moreover, as I mentioned in the previous chapter, the current power dynamics in Pakistan has called Japan and China's governance cooperation into question. Thus, the significance of a due and just government at present has to be subject to further inquiry as well.

While Lancaster suggests that there is always a "political logic to the evolution of aids' purposes" (Lancaster, Ch.VIII), and the Sino-Pakistan relation could be considered as one of the classic cases of assistance serving the purpose of alliance, for any country that wishes to duplicate the Sino-Pakistan relation in its interaction with another country, it is also questionable whether they could afford deals as expensive as those from China to Pakistan, this introduces the question that whether China's alliance with Pakistan has affected their scale of cooperation. If so, the duplicability of China's cooperation with Pakistan could be in question.

Despite all these questions, this thesis should be helpful to countries looking for foreign assistance and investment, as it examines the pros and cons of two possible collaborators from various facets, and posed potential risks worth concern. For people interested in the topic, this thesis leaves many questions to in-

investigate, including, but not limited to, the balance between inflow of money and a healthy domestic economy, and consistent development in a politically unstable society.

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