Chinese influence on environmental policies: A case study of Pakistan and the Belt and Road Initiative

Meinardi, Cecilia

Chinese influence on environmental policies:

A case study of Pakistan and the Belt and Road Initiative

Universiteit Leiden

Author: Cecilia Meinardi

Student number: s2480093

BSc: International Relations and Organizations

BAP Politics of Authoritarian Regimes

Supervisor: Dr. Kevin Koehler

Date: 30-05-2022

Word count: 7652

Table of contents

1. Introduction 4

2. Literature review 5

3. Theoretical framework 7

4. Research design 9

4.1 Research design and case selection 9

4.2 Data selection and method of analysis 10

4.3 Conceptualization of variables 11

5. The Belt and Road Initiative: An overview 12

5.1 The Belt and Road Initiative in Pakistan 13

5.2 Environmental policy in Pakistan: a brief overview 13

6. Presentation of results 14

6.1 Pakistan's energy sector and the BRI 14

6.2 Did a diffusion of green policies actually happen? 16

7. Conclusion 20

Bibliography 22

“China is a sleeping lion. Let her sleep, for when she wakes, she will shake the world”

– Napoleon Bonaparte

1. Introduction

In recent years, the topic of authoritarian regimes and their influence has gained relevance in both the academic and public spheres. The increased number of autocracies – and the importance of states such as Russia in the international domain – has rendered the study of autocratic regimes and their survival a fundamental subject of analysis in academia. In particular, their degree of linkage and influence on other countries – and other autocracies especially – has been explored in depth to understand if autocratic regimes as powerful as Russia and China can influence other autocracies' national policies (Kneuer & Demmelhuber, 2016; Rotberg, 2009).

On the other hand, China's recent efforts and successes in the formulation and implementation of environmental policies – and its pledge to become even more sustainable in the foreseeable future – have been perceived by academia as clashing with its authoritarian nature and its history as one of the major greenhouse gas emitters in the world (Huang, 2016; Larsen, Pitt, Grant & Houser, 2021). However, political unrest within China and the damage to China's international prestige – both caused by the country's degree of pollution– led the government to implement stricter environmental regulations (Li & Shapiro). These regulations aimed at improving the control over the population as well as China's international image (ibid.).

In this regard, China is portraying itself as a norm-setter for environmental policies, promoting its image as a 'green power' to be emulated through projects such as the 'Green' Belt and Road Initiative and its investments in environmental projects overseas (Li & Shapiro, 2020). Thus, an examination of China's influence on environmental policies around the world would bear interesting results, to test if the Chinese international efforts in terms of 'going green' (Eyraud, Wane, Zhang & Clements, 2011) are in line with its national ones. Building from this, the present paper aims to investigate the Chinese influence on other countries' environmental policies, to understand whether China shapes the latter. Therefore, this paper aims to answer the following research question: *how does Chinese linkage to other countries impact their environmental policies?*

In order to provide an in-depth answer to the abovementioned research question, the present paper will employ a single case study of a country subject to Chinese influence, analyzing the latter's approach towards environmental policies. The chosen country for this case study is Pakistan, and the findings of this analysis are that diffusion of environmental norms happened from China to Pakistan. These findings enable then the drawing of the ensuing conclusion, namely that Chinese linkage has an influence on other countries' environmental policies. This conclusion has relevant implications for the field of autocratic linkage and autocratic norm diffusion, and for society as a whole in the fight against climate change.

The following sections will – in turn – explain the previous literature on the topic of linkage and leverage and the theoretical framework that will be employed to analyze China's influence on other countries' environmental policies. This will lead to the formulation of a hypothesis that will be empirically tested in a case study. Then, the paper will provide a section on the methodology and on the justification of the case study employed and an in-depth analysis to test the hypothesis. A presentation and discussion of the results will follow in order to provide an answer to the research question. The concluding section will summarize the findings and highlight the implications and limitations of the present research.

2. Literature review

The concepts of linkage and leverage have emerged from the literature concerning regime change and the international factors leading to democratization. In particular, the theory of linkage to the West and leverage that Western states can have on foreign governments has been employed to explain democratization patterns (Levitsky & Way, 2006). The theory posits that the higher leverage and linkage, the higher the likelihood of democratization if the domestic conditions are favourable. Leverage is defined as governments' degree of vulnerability to Western pressure and linkage as the density of economic, political and other ties between a given country and the West (ibid.). Moreover, linkage has been proven to be the most influential factor between the two in terms of undermining authoritarian rule and leading to democratization (Levitsky & Way, 2010). This relationship can be explained by the fact that linkage to the West and its leverage raise the international costs of repression and strengthen local democratic actors (ibid.).

However, recent research showed that Western assistance and its impact on democratization has been modest, and could instead inadvertently enhance autocracies' survival (Börzel, 2015; Grimm, 2015). Resulting from this, questions about the longevity and stability of authoritarian regimes started arising, leading scholars to investigate international factors that could strengthen an autocracy. In this scenario, the effect of international linkage and leverage has been re-examined, exploring their impact on autocracies' survival by taking into consideration the ties to other authoritarian regimes (Tansey, Koehler & Schmotz, 2017). The authors introduce the concept of autocratic linkages – measured as the amount of trade, migration, diplomatic ties and geographic proximity to other autocracies – to explain the international dimension of autocratic regimes' survival. According to their research, autocratic linkages have been growing at a greater rate than democratic ones. They further demonstrate that the stronger the autocratic linkage, the higher the possibility for an authoritarian regime to survive longer (ibid.). Moreover, their study of Saudi Arabia's influence on countries

experiencing the Arab Spring in 2011 demonstrates that Saudi Arabia was indeed able to influence domestic policies in countries that were dealing with repressing the various national Arab Spring movements. The influence of 'ties to the West' against 'ties to the Rest' (Tansey et al., 2017) was empirically tested in Venezuela, and the findings showed that both resulted in a strengthening of Maduro's autocratic regime, although the West's linkage had as an objective the strengthening of democratization efforts (Gratius, 2022).

In line with this argument, recent research delves into autocracies' use of foreign policy to further influence other autocratic regimes and ensure their survival (Kneuer & Demmelhuber, 2016). This trend has been examined in the case of influence by powerful authoritarian states such as Russia and China. In fact, several scholars speculated that China's increasing ties to African states will lead to fewer democratization efforts in these countries and a decrease in the national concerns for human rights (Keenan, 2009; Lagerkvist, 2009). Building from this line of argument, Bader (2015a) shows that countries' export dependence on China is a statistically significant factor in stabilizing their authoritarian regime. Furthermore, Chinese economic cooperation is more likely to have a stabilizing effect on party-based authoritarian regimes and on regimes that have small winning coalitions (Bader, 2015c; Bader, 2015d).

Another important effect of authoritarian linkage is authoritarian diffusion of ideas, practices and structure (Ambrosio, 2010). Diffusion refers to the process of inherent interdependency of policy choices between states (Elkins & Simmons, 2005), defined as the transfer among countries of an idea, behaviour, policy or institution (Koesel & Bunce, 2013). It is dependent on several factors: geographical proximity, linkages, great power prestige, membership in international organizations and reference groups of countries adopting the same norm (Ambrosio, 2010). Moreover, further research shows that norm diffusion between autocracies happens because of pragmatic interests rather than ideological reasons (Bank, 2017). However, in the literature concerning the modes of authoritarian diffusion, there is no consensus on the level of intentionality behind the process. On the one hand, some scholars argue that diffusion is distinguished by a lack of intentionality by the prior adopter (Elkins & Simmons, 2005). This kind of diffusion happens – for instance – in cases in which a particular actor's example is able to shape regional or global norms and policies (Kneuer & Demmelhuber, 2016). On the other hand, different scholars define diffusion as including active coercion – both covert and open – such as outright imposition and carrots-and-sticks conditionality (Di Maggio & Powell, 1983; Graham, Shipan & Volden, 2013). This was the case for the diffusion

of communist systems in Eastern Europe due to the Soviet Union's not-so-subtle coercive efforts (Applebaum, 2012).

In regards to the influence of (authoritarian) diffusion on policies, its impact on policy convergence was examined by an empirical study on Russia and Armenia. The study concludes that Armenia was influenced by Russian norms, especially in regards to ideas and practices aimed at restricting LGBTQ+ rights and at further repressing civil society at large (Roberts & Ziemer, 2018). Policy transfer normally happens through both authoritarian diffusion and 'authoritarian learning' (Hall & Ambrosio, 2017), due to prior success or failure of these policies elsewhere, as was the case for the repression strategies adopted during the Arab Spring (Heydemann & Leenders, 2011). Furthermore, the literature on policy diffusion – both within democracies and authoritarian regimes – has proven the effectiveness of this process for the spread of policies related to gender equality (True & Mintrom, 2001) or environmental standards (Prakash & Potoski, 2006).

3. Theoretical framework

The topic of environmental standards and policies in authoritarian regimes has been extensively researched, especially due to the worsening of the climate crisis and the role that autocracies can play in its mitigation. In this scenario, the particular approach that autocratic regimes adopt when regulating environmental and climate-related policies led to the formulation of the theory of 'authoritarian environmentalism' (Gilley, 2012). The theory is in direct opposition to those of democratic and neoliberal environmentalism, both of which stress the importance of public participation and the respect of individual freedoms in the policy-shaping process (Lo, 2015).

Authoritarian environmentalism has been employed to explain how autocracies govern the environment, and it is the standard explanation for authoritarian environmental governance. The theory's main claim is that those authoritarian regimes interested in improving environmental outcomes concentrate authority in a few executive agencies, and thus public participation remains confined in the hands of scientific and technocratic elites, systematically excluding business actors that would oppose environmental action (Gilley, 2012). Thus, in autocracies, the push for environmental policies is both top-down and fully centralized, leaving no space for the initiative of non-governmental actors. This is possible because authoritarian regimes are effectively able to restrict individual freedoms and they are non-participatory regimes (Lo, 2015). Due to the regime's authoritarian nature, the environmental policy outputs that result include a rapid and coherent

response and the imposition of some limits to individual freedom in order to push towards increased sustainability (Gilley, 2012). Although the theory was empirically tested in different autocratic regimes – for instance, Burma and Iran (Doyle & Simpson, 2006) – the example that is most commonly used to illustrate the theory is the Chinese case. China is often described as the perfect example of authoritarian environmentalism, due to the extremely centralized nature of its single-party regime (Gilley, 2012).

Nevertheless, the Chinese approach to environmental policies can only be partly explained by authoritarian environmentalism, as the theory would suggest that authoritarianism is merely a means to achieve the goal of sustainability. However, what the evidence suggests - derived from the examination of Chinese environmental policies - is that the relationship between authoritarianism and environmental policies in China is actually inverted. Environmental policies constitute the means for the Chinese government to achieve increased authoritarianism and further strengthen the control of the state – and the Chinese Communist Party (CCP) – on individual freedoms. Thus, a more accurate term to describe the Chinese case would be 'environmental authoritarianism' (Li & Shapiro, 2020). The theory of environmental authoritarianism – or coercive environmentalism – highlights how the Chinese state – in the name of ecological wellbeing – exploits environmental policies as a political tool, in order to reach greater authoritarian durability and resilience. The extreme levels of pollution that the country was experiencing started to provoke political unrest among its citizens and damage China's international image as a 'superpower-in-the-making', leading the CCP to enshrine 'ecological civilization' as the official political philosophy within the Chinese Constitution. This paradigm shift was motivated by the purpose of strengthening and intensifying the hold of the CCP – and thus the state – on the discontent population and to improve its international reputation (ibid.).

On the one hand, the CCP is exploiting the rhetoric of ecological civilization to further strengthen its authoritarian rule nationally. For instance, it adopted policies such as the one-child family policy – abolished in July 2021 – which was implemented to curb population growth for environmental reasons. However, the policy constitutes a façade for the state to further infringe upon individual liberties and exercise control over its population (Li & Shapiro, 2020). On the other hand, China is adopting the strategy of portraying itself as a 'green power' also on the global stage. Through its pledges to reach carbon neutrality by 2060, through initiatives such as the 'Green' Belt and Road and the exercise of soft power, China is aiming at asserting its place as the leader in world environmental governance (Jiang et al., 2018). In its effort to do so, China is portraying itself as the green development model that countries should follow, in an attempt to strengthen its power (Li & Shapiro,

2020). Furthermore, China is extremely concerned about its international reputation, to the point of organizing mass "blue sky" campaigns to achieve cleaner air and skies in preparation for events that have a high international profile, such as the 2008 Olympics or the 2016 G20. To achieve this result, factories were temporarily shut down, construction projects were suspended and technological techniques such as cloud seeding were employed to cleanse the skies and promote the international image of a 'clean' and green great power (ibid.).

Following the main argument of environmental authoritarianism, it is possible to formulate a hypothesis regarding Chinese influence on other autocracies' environmental policies. The theory posits that environmental regulation is a medium in the hands of the Chinese government to achieve increased authoritarianism nationally, and exercise its soft power and impose itself as the role model for environmental policies internationally. Therefore, building from this and from the literature that analyzes the phenomenon of authoritarian linkage and leverage and how the former contributes to authoritarian norm diffusion, it can be hypothesized that this would be the case also for China in relation to environmental policies. As China possesses linkages with other autocracies and exercises a certain degree of influence over them, the country would be able to diffuse its norms and practices to other authoritarian regimes. While this could also happen to democratic states, the focus of the present research is solely on the linkages and diffusion between two autocracies. As the previous paragraphs illustrate, China's achievements in the environmental field are instrumental in the construction of its international prestige and the exercise of its soft power. Thus, it is possible to assume that China's approach and efforts towards environmental policies would diffuse to other autocratic regimes, through the exercise of Chinese influence due to its numerous linkages to other autocracies. A country that would be subject to this influence would therefore show a pattern of formulating and implementing environmental policies modelled on the Chinese example due to Chinese linkage to the country. Following from this, the present paper aims to test the following hypothesis: *Chinese linkage leads to a country adopting environmental policies modelled on the Chinese example.*

4. Research design

4.1 Research design and case selection

In order to conduct an appropriate analysis, there is the necessity to explain the methodology that will be adopted to provide an answer to the research question. As this paper is testing the effect of Chinese linkage on other autocracies' environmental policies, the most suitable research design is that of a qualitative case study. A case study allows for an in-depth and detailed analysis of the causal

mechanisms at play (Gerring, 2004). Thus, it would allow me to analyze the extent of Chinese influence on another country's environmental policy, and to understand if it actually is Chinese linkages that shape another autocracy's environmental policies. The specific instance of Chinese linkage that will be tested is that of the Belt and Road Initiative (BRI) instituted by the Chinese government. The reason for this choice is that the BRI is officially defined by the CCP as a 'green' global project (World Wildlife Fund [WWF], 2018), with the covert objective of strengthening Chinese soft power in the international domain (Li & Shapiro, 2020). It therefore constitutes an interesting case for the scope of this research.

However, as the BRI is a project that currently encompasses more than one hundred countries (Sacks, 2021), this present paper will examine only one state that is a BRI signatory. In regards to the selection of the country to be analyzed, the choice made is that of the Islamic Republic of Pakistan. The reasons behind this choice are multiple: the country is a member of the BRI (Yu, 2017) and is classified by the Freedom House 2022 Rankings as 'partly free' and a competitive authoritarian regime (Freedom House, 2022). Although on paper it is a federal Islamic republic, in practice elections are not free and fair and civil liberties - such as freedom of expression - are not respected (ibid). This would allow the research to test the theory of linkage between autocracies. Moreover, Pakistan possesses diplomatic and economic ties (the BRI) to China and is in its geographical proximity, criteria that Tansey et al. (2017) identify as necessary for autocratic linkage. Section 5 will examine more in depth the BRI and especially the initiative in Pakistan.

4.2 Data selection and method of analysis

Regarding the method that will be employed to explore this case, given the aim of the research, the most suitable method of analysis is process tracing. This specific method entails tracing the events that constitute a process, thus enabling the researcher to identify the underlying causal mechanisms (Halperin & Heath, 2020). In the specific instance of the BRI and its impact – as a tool of Chinese influence – on Pakistan's environmental policies, process tracing allows the research to understand whether a change in Pakistan's environmental policies happened after the country joined the BRI. If that were the case, process tracing can shed light on the causal mechanisms behind the change, to comprehend if it is Chinese linkages – in the shape of the BRI – that led to it or some other unrelated factor.

In terms of data selection, this paper will employ primary and secondary sources regarding environmental policies in Pakistan before and after the country joined the BRI. The aim is to comprehend whether Chinese linkages present due to the BRI do actually have an impact on Pakistan's environmental policies. Thus, the sources analyzed are newspaper articles by Xinhua News

Agency and China Daily – the Chinese state-owned official press agencies - reporting how the BRI collaboration is proceeding and what it entails in practice in terms of environmental policies.
Moreover, the sources analyzed to examine other sectors of Pakistani's environmental policy are official reports from the United Nations Development Agency (UNDP), the WWF-Pakistan and the Asian Development Bank, as well as Pakistani news reporting.

4.3 Conceptualization of variables

Before analyzing the case, it is necessary to conceptualise the variables employed in the research question.
Regarding the independent variable, Chinese linkage, a conceptualization needs to be made, in order to conduct an appropriate analysis. According to Levitsky and Way (2006), linkages are defined as the density of economic, political, organizational, communication and social ties between particular countries. However, this definition specifically refers to linkages to the West rather than focusing on linkages between autocracies. A more suitable conceptualization, given the scope of the present research, would be the one provided by Tansey et al. (2017), who define autocratic linkage as 'cross-border ties between autocratic regimes' (p. 1227). The authors focus their research on four aspects of these cross-border ties: trade, migration, diplomatic ties and geographic proximity between autocracies. Building from this conceptualization, the present paper defines linkage between autocratic countries as economic and diplomatic ties between them and geographic proximity between the two countries.

In regards to the dependent variable, environmental policies are defined as the laws, regulations and any other policy mechanisms designed by a government or organization for addressing environmental issues (Eccleston & March, 2011). Environmental issues include the protection of wildlife, the management of air and water pollution, the management of natural resources and waste, the maintenance of biodiversity and the effective management of ecosystems (ibid.). As the definition of environmental policies comprehends a range of environmental issues, this paper will concentrate its focus on environmental policies related to the development of renewable energy. These include resources derived from hydropower, biomass, wind energy, solar energy and geothermal energy, shifting away from fossil fuels such as oil and coal (Shen & Luo, 2015). This is the case because energy policies in general - and renewable energy policies in particular - are one of the main objectives of the BRI (Li & Shapiro, 2020).

5. The Belt and Road Initiative: An overview

Before analyzing the case of Pakistan, it is necessary to provide background information on the BRI, on how the BRI is being developed in Pakistan and on the general state of affairs of Pakistani environmental policies. This is because the BRI constitutes the example of Chinese linkage that will be tested in this paper.

The BRI was launched in 2013 by President Xi Jinping, and it constitutes a trade, development and political initiative that initially focused on the revival of the old Silk Road economic corridor on land ('the belt', from Central Asia to Europe) and the establishment of a new maritime route ('the road', around South Asia, Africa and the Middle East) (Dunford & Liu, 2019; Li & Shapiro, 2020). However, in the past years, the initiative has expanded, involving at the present moment 143 countries (Belt and Road Portal, n.d.). The BRI projects that range from building infrastructure (roads, ports and power plants) to anti-poverty programs and the installation in partner countries of Confucius Institutes to promote Chinese culture and increase its international prestige (Li & Shapiro, 2020). The initiative rests primarily on bilateral agreements signed by China and the participant countries (ibid.).

The program became a call for a model of sustainable international economic and political development, with China as a leader in this regard (Dunford & Liu, 2019). President Xi even claimed that the 'green' BRI represents the globalization of China's 'ecological civilization' efforts, painting it as the natural next step for the country (Xi, 2019). The main focus of the program – according to the CCP and Chinese investment banks – is to create a 'green' model of (economic) development, framing the initiative as a 'win-win' partnership for both China and the signatory states (ibid.). The BRI is proposed as an alternative model of development against the West's hegemony in international economic and financial institutions (National Development and Reform Commission [NDRC] et al., 2017). However, due to the lending of large sums of money to developing countries to build infrastructure, China positions itself as the true winner of the partnership. In fact, if the partner country is able to repay the loans, China does not lose anything. But if countries are unable to return them, China gains de facto ownership of the infrastructure projects it financed (Li & Shapiro, 2020). In this way, China increases its influence and its ties to the BRI members.

Furthermore, the BRI and its model of 'green developmentalism' (Li & Shapiro, 2020) received support and praise from the United Nations Environment Program (UNEP), which signed a Memorandum of Understanding with China to cooperate for the achievement of a sustainable Belt and Road (UNEP, 2018). The United Nations defined the BRI as being in line with the 2030

Sustainable Development Goals, providing powerful international legitimacy to the project (Li & Shapiro, 2020). Overall, the BRI constitutes the tool for China to assert internationally its model of green development – and, covertly, of coercive environmentalism – and to exercise its soft power (ibid.). As the program stresses the importance of environmental goals, and is framed as crucial for the creation of sustainable infrastructure such as renewable energy power plants, it represents the most suitable case for answering the present paper's research question.

5.1 The Belt and Road Initiative in Pakistan

Before analyzing the specific impact of the BRI in Pakistan, it is necessary to provide context on the country and its relation to the program. Pakistan officially joined the Initiative in 2013, with China investing approximately 200 million USD in projects in the country in 2014 (Belt and Road Portal, n.d.). The main BRI program for Pakistan is the China-Pakistan Economic Corridor (CPEC), which would link China to the coastal Pakistan sites on the Indian Ocean through various infrastructure projects, including a deep-sea port (Menhas, Mahmood, Tanchangya, Safdar, & Hussain, 2019). Moreover, it would also connect – through the Gwadar deep-sea port – China to the Middle East, a major source of energy security due to its oil production (Rhaman & Shurong, 2017). Pakistan constitutes a fundamental partner in the Initiative, as it allows China to gain access to energy resources located in Pakistan and other neighbouring countries, both through gas and oil pipelines and the construction of renewable energy power plants (Du, 2016). The CPEC has been selected as the leading project of the BRI, as it would shorten the time for oil and gas to reach the Chinese regions and it would reduce the greenhouse gas emissions produced for transporting them (Rhaman & Shurong, 2017). Furthermore, the CPEC project constitutes a secure way for Pakistan to increase its socio-economic development, as China is its main trading partner in the energy and technology sectors (ibid.). Therefore, the BRI is considered by both governments as being mutually beneficial, in particular regarding the CPEC and the economic benefits that the project can bring.

5.2 Environmental policy in Pakistan: a brief overview

In regard to Pakistan's environmental policies, some remarks need to be made. The country has committed to achieve the 2030 Sustainable Development Goals by the United Nations, thus aiming to improve environmental protection and outcomes in the process (United Nations Development Agency [UNDP], 2020). Pakistan's progress has been noteworthy, in particular concerning Goal 13 on Climate Change, as the country is considered one of the most vulnerable to experiencing the effects of climate change (ibid.). In this regard, Pakistan instituted a Ministry on Climate Change in 2017, intending to guide the country towards more sustainable development and alleviating the negative

externalities provoked by climate change (Ministry of Climate Change, n.d.). The Ministry oversees the formulation of the National Climate Change Policy, which sets the guidelines and objectives regarding the environment. The National Climate Change Policy gets updated every five years in collaboration with the UNDP and other governmental agencies (Ministry of Climate Change, 2022). The main policy areas of concern are climate change adaptation, which includes, among different aspects, the protection of water resources and agriculture, and climate change mitigation, which is mostly concerned with energy generation and conservation (ibid.). Although the country has not yet achieved its goals, the efforts and commitments made by the Pakistani government in that direction are noteworthy, considering that until recently the Pakistani government had not put environmental concerns on the governmental agenda (UNDP, 2020).

6. Presentation of results

As mentioned beforehand, this paper will analyze Pakistan's BRI projects, to understand if they influenced the country's environmental policy in sectors not related to the BRI. The analysis will proceed as follows. First, an analysis of BRI projects and Chinese investments in the CPEC and the energy sector will be conducted: Pakistan joining the BRI is the antecedent moment from which the outcome will result. Second, other sectors of Pakistani environmental policies will be examined, to comprehend if the changes in the BRI sector diffused to other, non-related environmental sectors through the practice of norm diffusion: this is the outcome of the process. A discussion of the findings will follow, providing an answer to the paper's research question.

6.1 Pakistan's energy sector and the BRI

As mentioned beforehand, the main BRI project in Pakistan is the CPEC. In regard to this specific initiative, several joint agreements between the two countries were signed starting in 2013. In these agreements, the two parties emphasized the importance of the CPEC and the rapid progress made especially in the energy sector, considered the most relevant collaboration in the Corridor (Cao, 2018; Wang, 2020; Yu, 2022). Pakistan perceives the CPEC as crucial to its development strategy. To oversee its implementation, a Joint Cooperation Committee was established between the two countries in 2013, with annual meetings to discuss the progress made (Zhou, 2021). Both countries are committed to making the CPEC a green project, claiming that all the projects under the CPEC framework do embody the green concept (Misbah & Wang, 2021). An example is the expansion of the Gwadar deep-sea port in Pakistan, where the two countries aim to build a low-carbon circular industry zone, in accordance with China's efforts to reach carbon neutrality nationally by 2060 (Yu, 2022).

Hydropower

Cooperation and collaboration in the energy sector are the main focus of the CPEC. According to Chinese news agencies, a relevant portion of Chinese investment in the Corridor is going towards helping Pakistan move from fuel-based technology towards a greener one (Hyatt, 2019). One of the leading investments in the field is that of renewable energy and hydropower plants in particular, due to Pakistan's potential and China's leading expertise in hydroelectricity generation (Zheng, 2019). Pakistan has an enormous hydropower potential, that is however not exploited due to the absence of adequate water storage capacity. Due to this, the country is experiencing water shortages. Under the framework of the CPEC, China is promoting the construction of a series of hydropower stations. These include the Karot station on the Jhelum river and the Suki Kinari station on the Khunar river. The implementation agreement for the construction of the two stations was signed in 2016, and both projects are currently under construction and expected to be completed at the latest by the end of 2022 (ibid.). Moreover, Chinese companies are financing the construction of dams on the Pakistani territory to further improve the country's energy sector, which at the moment is unable to meet Pakistan's increasing energy requirements (ibid.). The Karot hydropower station in particular is China's first overseas hydropower program that will employ its own techniques and standards. Moreover, under the direction of the same Chinese company – the China Three Gorges Corporation – the world's biggest hydroelectric power project has been under construction since April 2015 (Zheng, 2019). This is expected to produce every year an energy sum equivalent to 10% of the country's total energy output from hydropower stations in 2017 (ibid.). Other Chinese state-owned companies are involved in the construction of hydropower projects, with the latest agreement for the construction of a new hydropower plant signed in July 2020 (Wang, 2020).

Other renewable energy projects

The CPEC promotes other renewable energy projects in addition to hydropower plants. The same company involved in the construction of the hydropower stations – China Three Gorges Corporation – currently has five clean energy projects in Pakistan, involving wind and solar power (Zheng, 2019). Pakistani Energy Minister, Hammad Azhar, said that Pakistan aims to achieve the target of 30% renewable energy in the national power generation grid by 2030 and that the CPEC will play a vital role in achieving this goal, due to its contribution to renewable energy projects (Misbah, 2021). The first of these projects to be launched was the construction of the world's largest solar power plant, the Quaid-e-Azam Solar Park, started in 2013 by the Chinese company Zonergy (Butt, 2015). A second initiative is the launch of the Jhimpir wind power plant in 2017, funded by the China Oriental

Group Company. The wind power plant constitutes the largest wind power project in the CPEC (Li, 2017). Another of the renewable energy projects is a sustainable water project in Quetta, in which five solar-powered tube wells were provided in 2019 by the Chinese Embassy to provide clean water to the population and ease the water shortage (Cao, 2019). Several other solar-powered projects have been started due to Chinese investment in different parts of Pakistan (ibid.). In the same year, the Chinese Ministry of Ecology and the Environment donated 4,000 solar energy systems to the Gwadar region (Li, 2019). Furthermore, during the 76th session of the United Nations General Assembly in September 2021, President Xi Jinping declared that China would stop building coal-fired power plants overseas, in order to curb global warming (Yang, 2021). The Chinese President claimed that the decision was taken in accordance with the Chinese national commitment to achieve carbon neutrality by 2060, and China aims to invest more in renewable energy projects overseas, to achieve a greener Belt and Road Initiative. According to the Chinese government, China moving away from coal and towards cleaner energy sources will encourage countries cooperating with China to do the same (ibid.). This decision will further increase Chinese investments in the renewable energy sector overseas, both in Pakistan and in other countries that signed the BRI.

6.2 Did a diffusion of green policies actually happen?

After having examined the Pakistani's energy sector under the CPEC framework – and thus the BRI –, this paper will in turn present other sectors of Pakistani's environmental policy in order to understand if the phenomenon of norm diffusion between the energy sector and other ones – unrelated to the BRI and Chinese influence - actually happened. For this reason, the policies and environmental projects examined all started after 2013, when Pakistan joined the BRI, which is the antecedent moment for the analysis process. Moreover, all the policies taken into consideration in this section are specific green norms that diffused between China and Pakistan, as the Chinese influence in their formulation is clearly stated by the Pakistani government.

Thus, the following sections will describe the water management project 'Recharge Pakistan' and the 'Carbon Neutral Pakistan' project in the sector of greenhouse gases emissions. In describing the projects, their relation to China will be thoroughly explained. A discussion of the conclusions that can be drawn from the analysis will follow.

Pakistan's water sector and the 'Recharge Pakistan' project

As mentioned before, Pakistan is one of the most vulnerable countries to climate change. According to a 2015 IMF report, Pakistan ranks as the fifth most vulnerable country to experience the negative effects of climate change (UNDP, 2020). For this reason, the Pakistani government inserted the fight

against climate change as one of its main governmental objectives (ibid.). Moreover, Pakistan's (former) Prime Minister Imran Khan declared that Pakistan could learn from China in addressing the fight against climate change, highlighting how Chinese expertise in the field could be valuable for his country (Wang, 2021). One of the sectors that Pakistani environmental policies are focusing the most on is the water management one, due to the severity of water shortages that the country faces (Zheng, 2019).

The main project promoted by the Pakistani government concerning water management is the 'Recharge Pakistan' project proposed by the Federal Ministry of Climate Change, the Federal Flood Commission and WWF-Pakistan in 2020 (The Nation, 2020). The project, officially called 'Recharge Pakistan: Building Pakistan's resilience to climate change through ecosystem-based adaptation for integrated flood risk management' has a thirty years vision for its completion (ibid.). It aims to achieve a 'better management and utilization of flood waters to restore and recharge groundwater' (UNDP, 2020, p. 5). The Pakistani government stated that the project is being developed by copying the Chinese flood management model, which proved to be successful in containing floods. The Chinese strategy consists in working with nature rather than against it (Naeem, 2013). The project will thus require technical assistance from the People's Republic of China, which has the expertise to effectively tackle the flood management issue (ibid.).

The program consists of three phases, each of which spans ten years, and the end goal is that – by 2050 – ecosystem-based adaptation will be a contributor towards achieving climate resilience, water and food security and sustainable livelihoods (The Nation, 2020). In practice, the project entails transforming the Indus River basin – subject to floods and droughts – through climate-resilient agriculture and water management (UNDP, 2020). This will be achieved by increasing resilience among the most vulnerable farmers and strengthening government's capacity in supporting the adaptation of the communities (ibid.). The increase in water storage under the framework of 'Recharge Pakistan' will be done through wetlands, floodplains and hill-torrents management to promote a shift towards employing ecosystem-based adaptation in other areas of the fight against climate change (WWF, n.d.).

The greenhouse gas emissions sector and the project 'Carbon Neutral Pakistan'

In 2015, during the Conference of the Parties in Paris (COP21), Pakistan submitted its intended nationally determined contribution to global mitigation efforts to the United Nations Framework Convention on Climate Change (UNFCCC) (Chaudhry, 2017). The intended nationally determined contributions indicate the climate actions that countries intend to take post-2020 to limit the global

temperature increase to 1.5°C - 2°C by curbing their greenhouse gas emissions (ibid.). The COP21 resulted in the formulation and adoption of the Paris Agreement, a milestone in the fight against global warming and reducing global CO_2 emissions. The Agreement entered into force on the 4th of November 2016, after at least 55 parties – accounting in total for at least 55% of the total global greenhouse gases emissions – agreed to ratify, accept, approve or access the Agreement. Pakistan ratified nationally the Paris Agreement on 11 November 2016, with the objective of reducing up to 20% of its 2030 projected greenhouse gas emissions (ibid.).

The most notable project that the Pakistani government has undertaken for reducing its emissions is the 'Carbon Neutral Pakistan' project. The project was initiated by the government in June 2015, relying on technical assistance from China (Chaudry, 2017). As China launched its own national initiative to reach carbon neutrality, the country's assistance is considered crucial for the success of the project (ibid.). The initiative aims to set up a local carbon emissions market in order to cut greenhouse gas emissions and attract foreign investments to the country. China's assistance is focused on the internal adjustments of carbon emissions and on building a system of carbon credits, by helping Pakistan set a viable carbon pricing formula (Saeed, 2015). 'Carbon Neutral Pakistan' has the objective of helping the industrial and other sectors to sell and buy carbon credits locally, creating a carbon credits trading scheme that could later trade with the Chinese carbon market by buying and selling carbon credits between the two countries (Chaudry, 2017). The Pakistani government expects that the creation of these carbon markets will initiate competition in the country for the development of greener technology, as industries and other departments will be forced to adopt greener techniques to cut their carbon emissions (Saeed, 2015).

Discussion

In order to draw conclusions and provide an answer to the present paper's research question, it is necessary to discuss the results presented in the previous sections.

Regarding the BRI, the CPEC and its impact on the Pakistani energy sector, the results show that China is financing and investing mostly in renewable energy projects. Under the CPEC framework, Chinese investments are concentrated in improving Pakistan's energy sector, particularly renewable energy. Although the Chinese investments are in the construction of hydropower, solar and wind power facilities, most of their efforts are focused on building hydropower plants, due to Pakistan's potential in this sector. Projects such as the Karot hydropower station and the Three Gorges Dam are the flagships of the Chinese and CPEC renewable energy initiatives in Pakistan. Moreover, although

China has previously invested in coal-fired power plants abroad, President Xi Jinping and the official Chinese authorities pledged in 2021 to stop financing the construction of coal power plants overseas (Yang, 2021). This choice further remarks China's interest in investing instead in renewable energy and greener projects. Overall, what can be concluded on the CPEC and BRI projects is that their focus is – at least on paper – on improving environmental outcomes and policies of the signatory states. This is in line with the Chinese national strategy of pledging to fight climate change and portraying itself as a norm-setter for environmental policies.

In regards to other sectors of Pakistan's environmental policy – namely the water management and the emissions sectors – some remarks can be made. The policies taken under consideration were all launched after 2013, when Pakistan became a signatory of the BRI. This was done purposely to test if the BRI membership – and thus, Chinese influence – actually has an impact on Pakistan's environmental policies. What the results showed is that Pakistan launched both the 'Recharge Pakistan' and the 'Carbon Neutral Pakistan' projects in the years after 2013, the antecedent movement chosen for the analysis. Both projects explicitly rely on Chinese technical assistance and on the model previously created by the People's Republic of China in order to guarantee their success. Pakistan's reliance on Chinese expertise on these specific environmental projects further strengthens the declaration made by Pakistani Prime Minister Imran Khan about Pakistan's necessity to fight against climate change and to do so by learning from China and Chinese expertise in the matter (Wang, 2021). The existence of these projects shows that the Prime Minister's declarations were followed by practical projects in which Pakistan employed Chinese assistance to implement them.

What the analysis of the sectors highlights is that China did indeed have an influence on Pakistan's environmental policies, or at least in their environmental-norm setting. The analysis proves that the phenomenon of norm-diffusion happened between China and Pakistan in the context of environmental policies. This can be seen because the two environmental projects examined were launched after the country became a signatory of the BRI and China started investing in the CPEC energy sector initiative, especially in those related to renewable energy. Moreover, according to the sources taken into consideration in the previous sections, Pakistan will follow the Chinese examples, implementing environmental norms that were already a reality in China. This clearly indicates that norm-diffusion happened between the countries in the context of the two initiatives 'Recharge Pakistan' and 'Carbon Neutral Pakistan'. Although the Pakistani improvements in the field of water management could be ascribed to their extreme vulnerability to the negative effects of climate change, this factor alone does not constitute a sufficient explanation for the projects they recently launched

with the assistance of China. Thus, what is possible to conclude from the analysis of the results presented in the previous sections is that Pakistan changed its approach in regard to environmental policies due to the Chinese linkages exercised through the BRI. Environmental norms diffused between the two autocratic states, resulting in Pakistan implementing new environmental policies.

To conclude, the data suggest that Chinese linkage does actually have an impact on the formulation of Pakistani's environmental policies. Moreover, norm-diffusion of environmental norms was proven to have happened in the context of Pakistan and China, due to the influence that China exercises through the BRI and its investments in renewable energy projects under the CPEC framework.

7. Conclusion

In conclusion, when considering the research question – namely, how Chinese linkage impacts other countries' environmental policies – the analysis shows that Chinese linkage impacted Pakistan's formulation of environmental policies. The Pakistani government explicitly stated that the state considered China as a model for the development of their environmental projects, demonstrating that norm-diffusion occurred between these two autocracies. This not only provides an answer to the research question, but also supports the paper's hypothesis. Pakistan demonstrates to have adopted environmental policies that were modelled on the Chinese example, by launching the two projects 'Recharge Pakistan' and 'Carbon Neutral Pakistan'. What is evinced from this research is that the diffusion concerns green norms from China to Pakistan through the BRI, while conclusions cannot be drawn on whether Pakistan is implementing them according to the tenets of authoritarian environmentalism. This can be ascribed to the scope of the present research, which focuses on how Pakistan formulated and adopted green norms modelled on the Chinese example rather than on how Pakistan later actually implemented them.

These conclusions have relevant academic implications, as they prove that authoritarian linkage can have an influence on environmental norm-setting, allowing academics to move further in the field of study of autocratic linkages. Furthermore, the findings have societal implications as well, related to the role authoritarian countries can have in the fight against climate change. What this research shows is that China has the power to influence the rhetoric and the norms related to climate change in another autocratic state. The increased attention paid to environmental issues and the rhetorical commitments made by autocratic governments in this regard led to a paradigm shift in which dealing with climate change became a priority – at least on paper – also for autocratic states. Autocracies could become an asset in the fight against climate change, a scenario that has positive implications for the whole world.

However, the present research is not exempt from limitations. Firstly, the sources examined to report on the CPEC projects under the BRI framework are all derived from official Chinese newspapers, which are controlled by the state and the CCP. Since the sources taken into consideration cannot be defined as impartial and unbiased, the results obtained from them may be skewed. Secondly, the project 'Recharge Pakistan' was proposed by the Ministry of Climate Change, the Flood Commission and WWF-Pakistan (The Nation, 2020). The participation of a non-governmental organization such as WWF in the formulation of the project may be a confounding factor in the research, as the proposal of the project could be due to their influence instead than the Chinese one.

In view of these limitations, future research should attempt to (1) conduct a similar study on Chinese influence on environmental policies by employing unbiased international sources and (2) take into account confounding factors that could lead to the formulation of green policies rather than Chinese influence. Moreover, a quantitative study including all the BRI signatory countries would lead to results that could be applicable to a wider pool of countries.

Bibliography

Abubakar, S. M. (2018, September 14). Pakistan's water woes: Assessing the national water policy. *Tribune.* Retrieved from: https://tribune.com.pk/story/1795801/pakistans-water-woes-assessing-national-water-policy

Ambrosio, T. (2010). Constructing a framework of authoritarian diffusion: Concepts, dynamics, and future research. *International Studies Perspectives, 11*(4), 375-392.

Applebaum, A. (2012). *Iron curtain: The crushing of Eastern Europe 1944-56*. Penguin UK.

Bader, J. (2015a). China, autocratic patron? An empirical investigation of China as a factor in autocratic survival. *International Studies Quarterly, 59*(1), 23-33.

Bader, J. (2015c). Propping up dictators? Economic cooperation from China and its impact on authoritarian persistence in party and non-party regimes. *European Journal of Political Research, 54*(4), 655-672.

Bader, J. (2015d). The political economy of external exploitation: A comparative investigation of China's foreign relations. *Democratization, 22*(1), 1-21.

Bank, A. (2017). The study of authoritarian diffusion and cooperation: Comparative lessons on interests versus ideology, nowadays and in history. *Democratization, 24*(7), 1345-1357.

Belt and Road Portal (n.d.). *Country Profiles: Pakistan*. Retrieved from: https://eng.yidaiyilu.gov.cn/info/iList.jsp?cat_id=10076

Börzel, T. A. (2015). The noble west and the dirty rest? Western democracy promoters and illiberal regional powers. *Democratization, 22*(3), 519-535.

Butt, R. (2015, July 26). Chinese solar power firm eases energy crisis in Pakistan. *The Telegraph.* Retrieved from: https://web.archive.org/web/20151222084031/http://www.telegraph.co.uk/sponsored/china-watch/business/11763374/china-solar-power-firm-eases-pakistan-energy-crisis.html

Cao, J. (2018, November 06). Full text of China-Pakistan joint statement. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/zchj/sbwj/70841.htm

Cao, J. (2019, July 23). Chinese-funded water project to help ease water shortage in Quetta, Pakistan. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/97771.htm

Chaudhry, Q. U. Z. (2017). *Climate change profile of Pakistan*. Asian Development Bank: Metro Manila, Philippines.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review,* 147-160.

Du, M. M. (2016). China's "One Belt, One Road" initiative: Context, focus, institutions, and implications. *The Chinese Journal of Global Governance*, *2*(1), 30-43.

Dunford, M., & Liu, W. (2019). Chinese perspectives on the Belt and Road Initiative. *Cambridge Journal of Regions, Economy and Society*, *12*(1), 145-167.

Eccleston, C. H., & March, F. (2011). *Global environmental policy: Concepts, principles, and practice*. CRC Press.

Elkins, Z., & Simmons, B. (2005). On waves, clusters, and diffusion: A conceptual framework. *The Annals of the American Academy of Political and Social Science*, *598*(1), 33-51.

Eyraud, L., Wane, M. A., Zhang, M. C., & Clements, M. B. J. (2011). *Who's going green and why? Trends and determinants of green investment*. International Monetary Fund.

Freedom House (2022). *Global Freedom Scores.* Retrieved from: https://freedomhouse.org/countries/freedom-world/scores

Gerring, J. (2004). What is a case study and what is it good for?. *American Political Science Review*, *98*(2), 341-354.

Gilley, B. (2012). Authoritarian environmentalism and China's response to climate change. *Environmental politics*, *21*(2), 287-307.

Graham, E. R., Shipan, C. R., & Volden, C. (2013). The diffusion of policy diffusion research in political science. *British Journal of Political Science*, *43*(3), 673-701.

Gratius, S. (2022). The West against the Rest? Democracy versus autocracy promotion in Venezuela. *Bulletin of Latin American Research*, *41*(1), 141-158.

Grimm, S. (2015). European democracy promotion in crisis: Conflicts of objectives, neglected external–domestic interactions and the authoritarian backlash. *Global Policy*, *6*, 73-82.

Hall, S. G., & Ambrosio, T. (2017). Authoritarian learning: A conceptual overview. *East European Politics*, *33*(2), 143-161.

Halperin, S., & Heath, O. (2020). *Political research: Methods and practical skills*. Oxford University Press, USA.

Heydemann, S., & Leenders, R. (2011). Authoritarian learning and authoritarian resilience: Regime responses to the 'Arab Awakening'. *Globalizations*, *8*(5), 647-653.

Huang, Y. (2016). Understanding China's Belt & Road initiative: Motivation, framework and assessment. *China Economic Review*, *40*, 314-321.

Hyatt, D. (2019, June 20). Time to build dams in Pakistan. *China.org.* Retrieved from: https://eng.yidaiyilu.gov.cn/ghsl/wksl/94355.htm

Jiang, H., Qingdan, Y., Liping, L., Bing, Z., Yuanyuan L., & Xinhao, H. (2018). From participants to leaders: Review of China's environmental protection development. *Ziguangge, 11,* 49-50.

Keenan, P. J. (2009). Curse or cure: China, Africa, and the effects of unconditional wealth. *Berkeley Journal of International Law*, *27,* 84.

Kneuer, M., & Demmelhuber, T. (2016). Gravity centres of authoritarian rule: A conceptual approach. *Democratization*, *23*(5), 775-796.

Koesel, K. J., & Bunce, V. J. (2013). Diffusion-proofing: Russian and Chinese responses to waves of popular mobilizations against authoritarian rulers. *Perspectives on Politics*, *11*(3), 753-768.

Lagerkvist, J. (2009). Chinese eyes on Africa: Authoritarian flexibility versus democratic governance. *Journal of Contemporary African Studies*, *27*(2), 119-134.

Larsen, K., Pitt, H., Grant, L. & Houser, T. (2021). China's greenhouse gas emissions exceeded the developed world for the first time in 2019. The Rhodium Group. Retrieved from: https://rhg.com/research/chinas-emissions-surpass-developed-countries/

Levitsky, S., & Way, L. A. (2006). Linkage versus leverage: Rethinking the international dimension of regime change. *Comparative Politics*, 379-400.

Levitsky, S., & Way, L. A. (2010). *Competitive authoritarianism: Hybrid regimes after the Cold War*. Cambridge University Press.

Li, H. (2019, November 15). Development of green industry transforms Pakistan's Gwadar port into 'green pearl'. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/109797.htm

Li, Y. (2017, September 04). Wind power plant launched in Pakistan. *The Belt and Road Portal.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/26100.htm

Li, Y., & Shapiro, J. (2020). *China goes green: Coercive environmentalism for a troubled planet.* John Wiley & Son

Lo, K. (2015). How authoritarian is the environmental governance of China? *Environmental Science & Policy*, *54*, 152-159.

Menhas, R., Mahmood, S., Tanchangya, P., Safdar, M. N., & Hussain, S. (2019). Sustainable development under Belt and Road Initiative: A case study of China-Pakistan economic corridor's socio-economic impact on Pakistan. *Sustainability*, *11*(21), 6143.

Ministry of Climate Change (n.d.). *Policies.* Government of Pakistan. Retrieved from: http://www.mocc.gov.pk/

Ministry of Climate Change. (2022, March 18). *National Climate Change Policy.* Government of Pakistan. Retrieved from: http://www.mocc.gov.pk/policies

Misbah, S. M. (2021, September 13). Green economic corridor contributes to Pakistan's sustainable development. *Xinhuanet.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/186930.htm

Misbah, S. M., & Wang, H. (2021, December 09). China, Pakistan work hand in hand for green CPEC. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/205704.htm

Naeem, W. (2013, October 20). Flood management: Better coordination, central agency needed. *The Express Tribune.* Retrieved from: https://tribune.com.pk/story/620093/%3Cfont%20style=

National Development and Reform Commission, Ministry of Science and Technology, Ministry of Industry and Information Technology, Ministry of Finance, Ministry of Land and Resources, Ministry of Environmental Protection, Ministry of Housing and Urban-Rural Development, Ministry of Transportation, Ministry of Commerce, State-owned Assets Supervision and Administration Commission, General Bureau of Taxation, General Administration of Quality Supervision, Inspection and Quarantine, & National Energy Administration. (2017). *Notice on printing and distributing the 'Opinions on accelerating the use of natural gas'.*

Prakash, A., & Potoski, M. (2006). Racing to the bottom? Trade, environmental governance, and ISO 14001. *American Journal of Political Science*, *50*(2), 350-364.

Rahman, S. U., & Shurong, Z. (2017). Analysis of Chinese economic and national security interests in China-Pakistan Economic Corridor (CPEC) under the framework of One Belt One Road (OBOR) initiative. *Arts and Social Sciences Journal*, *8*(4), 1-7.

Roberts, S., & Ziemer, U. (2018). Explaining the pattern of Russian authoritarian diffusion in Armenia. *East European Politics*, *34*(2), 152-172.

Rotberg, R. I. (Ed.). (2009). *China into Africa: Trade, aid, and influence*. Brookings Institution Press.

Sacks, D. (2021, March 24). Countries in China's Belt and Road initiative: Who's in and who's out. *Council on Foreign Relations.* Retrieved from: https://www.cfr.org/blog/countries-chinas-belt-and-road-initiative-whos-and-whos-out

Saeed, A. (2015, June 29). Pakistan to set up carbon markets to cut emissions, lure investment. *Climate Home News.* Retrieved from: https://climatechangenews.com/2015/06/29/pakistan-to-set-up-carbon-markets-to-cut-emissions-lure-investment/

Shen, J., & Luo, C. (2015). Overall review of renewable energy subsidy policies in China: Contradictions of intentions and effects. *Renewable and Sustainable Energy Reviews*, *41*, 1478-1488.

Tansey, O., Koehler, K., & Schmotz, A. (2017). Ties to the rest: Autocratic linkages and regime survival. *Comparative Political Studies*, *50*(9), 1221-1254.

The Nation. (2020, December 11). 'Recharge Pakistan' launched to enhance climate resilience and water security. *The Nation.* Retrieved from: https://nation.com.pk/2020/12/11/recharge-pakistan-launched-to-enhance-climate-resilience-and-water-security/

True, J., & Mintrom, M. (2001). Transnational networks and policy diffusion: The case of gender mainstreaming. *International Studies Quarterly*, *45*(1), 27-57.

United Nations Environment Program (2018). *Green Belt and Road strategy.* UNEP. Retrieved from: https://wedocs.unep.org/handle/20.500.11822/25364

United Nations Development Program (2020). Environmental protection in Pakistan. *Development Advocate Pakistan, 7*(2), 1-34.

Wang, L. (2020, March 18). Full text of China-Pakistan joint statement. *Xinhua Net.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/120339.htm

Wang, Y. (2020, July 07). Agreement signed in Pakistan for hydropower project under CPEC. *Xinhua Net.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/136041.htm

Wang, Y. (2021, June 04). Pakistan to learn from China's experience in addressing climate change: PM. *Xinhua Net.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/175787.htm

World Wildlife Fund. (n.d.). *Recharge Pakistan.* Retrieved from: https://www.wwfpak.org/our_work_/recharge_pakistan_/

World Wildlife Fund. (2018). *Greening the Belt and Road Initiative: WWF's recommendations for the finance sector*. WWF.

Xi, J. (2019). Together envision green life, together build a beautiful home: Speech at the opening ceremony of the International Horticultural Exhibition 2019, Beijing, China.

Yang, Q. (2021, September 23). China's pledge to stop coal-fired projects overseas 'a great economic sacrifice': Nation determines to curb global warming. *Global Times*. Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/188187.htm

Yu, H. (2017). China's Belt and Road Initiative and its implications for Southeast Asia. *Asia Policy*, *24*(1), 117-122.

Yu, H. (2022, February 07). Full text: Joint statement between the People's Republic of China and the Islamic Republic of Pakistan. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/220178.htm

Zheng, X. (2019, May 09). Chinese company to complete Pakistan hydropower project in 2021. *China Daily.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/89509.htm

Zhou, G. (2021, December 30). CPEC serves as flagship of development strategy of Pakistan: Minister. *Xinhua News Agency.* Retrieved from: https://eng.yidaiyilu.gov.cn/qwyw/rdxw/210940.htm