

POLITICAL PARTICIPATION AND ECONOMIC DISPARITIES IN PUNJAB



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CERTIFICATE

This is to certify that this thesis entitled: “**Political Participation and Economic Disparities in Punjab**” submitted by Mr. Muhammad Waqas is accepted in its present form by the Department of Economics, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree of **Master of Philosophy in Economics**.

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Abstract

Variations exist in the economic performances of the districts of Punjab. Indicators such as Human Development Index (HDI), District Deprivation Index, and Asset Index Score vary significantly across the districts of Punjab. These economic disparities are explained by variations in the level of political awareness in these districts. Using 2013 data for HDI, political participation, and other variables such as urbanization, industrialization, and road network, the study aims to evaluate a relationship between HDI and the political participation, particularly. It is expected that higher political awareness and the resulting political participation of districts result in greater share of public resources allocated to them and vice versa. Political participation is measured by voter turnout and the number of candidates contesting the elections. The study is based on qualitative research methodology to draw its results. Eventually, it is argued that district disparities can be reduced by increasing the level of political awareness among the masses.

Keywords: political awareness, political participation, HDI, district disparities, Punjab

Chapter No. 1

Introduction

From the times of ancient philosophers to recent political scientists and economists, it remains almost unquestionable that “*democracy serves as a mechanism for redistribution*”.

Inequality is a form of injustice or to be more precise, it highlights the underlying injustices of a society. Those injustices could be in areas of politics, economy, or culture. Economic inequality can be defined as the differences in resource distributions/living standards of the citizens of a society. It also refers to the variations/inequalities in economic opportunities available in various geographic regions of a country.

Income inequality can be defined as the difference in incomes or consumptions of different segments of the society. The value everyone owns/consumes is equal to what they contribute to others. One way of measuring inequality could be the real purchasing power of the people of a region. Everyone wants and has the potential to contribute/earn value, but they are limited by the constraints in terms of natural resources and the socio-economic & cultural institutions prevailing in their region.

Social cohesion in the society can be affected and resulted into rivalry in case of disparities across regions. Therefore, it is crucial to understand disparities in development across various regions. For instance as argued by Pervaiz & Chaudhary (2010) that when disparities across regions if increases it will produce distrust and rivalry and consequently pose threats to economic wellbeing of the region. A similar kind of argument is also available in Azfar (1973) that disparity among regions in Pakistan has created an ill-mindset particularly in those marginalized parts where socio-economic indicators are unspeakable.

Public good provision is usually high in democratic regimes because the support of a wide cross-section of the society is essential for democratic stability. Public goods in the form of more education, better health facilities, infrastructural development and other opportunities for job creation are higher in elected government compared to other form of political regimes. Further, as democratic regime is featured by more competitiveness because of its multiparty election system thus political competition among various political parties incentivize the structure to provide more of these public goods.

According to Acemoglu and Robinson (2005) political equality that is equal participation in politics is mostly linked with democracies compared to dictatorship where political power is usually concentrated in one single hand and hence political inequality. Political equality has been manifested through the right of every citizen to vote in election. However, monarchies such as Arabian countries or dictatorship such as North Korea have not yet delivered the basic political right to their respective citizens. State policies and public demands are more accompanied in democracies relative to dictatorships.

With democratization, political participation from the marginalized portion of the society can lead towards political instability particularly when there are large disparities among regions. Social welfare provision to this under-targeted section of the society can avoid such instability. As discussed earlier authoritarian regimes performance with regard to social welfare provision is not satisfactory while democratic structure is more prone to afford these provisions.

Historical Inequality in Pakistan

GINI index is a standard measure of inequality. It represents the deviations in incomes, for individuals and households, from the perfect distribution of income. Higher the value of GINI coefficient, higher the inequality, and vice versa (Glossary of Statistical Terms, 2006).

Income inequality among households in Pakistan has varied across the years. It was the lowest in 1996 (33.1%) and the highest in 2015 (33.5%). This index measures the differences in income levels of various households.

Punjab is the largest province of Pakistan in terms of its population. It is a house to 110 million people approximately, more than 50% of the total population of Pakistan. The province consists of 9 divisions comprising 36 districts and can be broadly categorized into three regions: upper, central, and southern regions. Southern Punjab is the least developed region of Punjab province. One indication of the unequal development can be witnessed from the fact that thousands of people internally migrate from southern Punjab to upper and central Punjab regions in search of work opportunities. They work in the factories as laborer.

Problem statement

Disparities not only exist among the provinces but also within the provinces. Inter-district analyses of economic indicators show that wide differences in economic wellbeing exist among the districts. These differences have also varied over the course of time. Some districts have improved in their economic indicators while others have deteriorated.

Spatial distribution of districts based on economic outcomes represents the regional disparities vividly. Javaid et al. (2014) constructed asset scores of tehsils and districts of Punjab using data from MICS 2007-08 and MICS 2010-11. Building on the methodology proposed by Filmer & Pritchett (2001), they used 30 household indicators related to ownership of land, cattle, consumer goods, transportation means, quality of house, and quality of public services availed (see Annex II).

Apart from conventional measures of economic prosperity such as Gross Domestic Product (GDP), the modern economic theory has incorporated the Human Development Index (HDI) to measure the multidimensional wellbeing of citizens. According to Pakistan Human Development Index Report (2017), human development is, “expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices”

There are wide disparities among the districts of Punjab. Different studies and data sets have been constituted so far and in all those studies, the ranking of the districts remain almost the same. Lahore has the highest score on HDI index of 0.86 while Rajanpur district has the lowest score of 0.48 in 2013. HDI index considers three factors namely education, health, and livelihood. Living in the same province, there exist huge variations in the quality of life. The study aims to investigate the reasons behind these variations.

Research questions

From the above discussion, following are the research questions to be discussed in the study.

- What are the dynamics of HDI across the districts of Punjab?
- How district level HDI has been calculated?
- What are the explanatory factors of the variations in HDIs of the districts?

Research objectives

The key objectives of the study are as follows:

- To evaluate the extent of disparities in terms of HDI among the districts.
- To ascertain root causes of these disparities.
- Recommend action-based policies to mitigate the prevailing inequalities among the districts and regions of Punjab.

Significance of the study

Disparities have been persisted since long among the districts of Punjab. The upper and central regions of Punjab have done well economically due to the concentration of commercial and industrial activities. The southern side Punjab, primarily a water scarce and loess fertile region, has suffered from low quality of life. The study intends to further investigate the underlying causes of these differences. It will help to devise policies to mitigate the economic gap among various districts of Punjab.

The province loses a significant portion of GDP due to under investments in human development in many districts. Every human being is born with a great hidden potential and it is imperative to let that potential grow. However, unequal opportunities to nurture that potential lead to unequal outcomes in the society. Inequality hinders the growth rate of an economy. Investments in underinvested could yield much more than in already haves of the society. This is very similar to the law of increasing returns. Marginal returns of investments in poor could yield results at an increasing rate because they have much potential to be exploited. Equal, equitable, and just societies prosper more with sustainability.

Chapter No. 2

Review of Literature

In Pakistan, inequality has been studied at national as well as provincial and district levels. Scholars have used various measures of inequality such as Gini Index of household consumption, polarization indices, deprivation index for districts, and the human development index for provinces and districts. Since 1991, UNDP is regularly publishing national, provincial, and district level measures of HDI. Similarly, previous researchers have identified many causes and consequences of inequality. Burki, Memon, & Mir (2015) identified multiple inequalities and inequality traps in Pakistan. Using district level asset scores compiled by Javaid, Hameed, & Usaid Awan (2014), they highlighted that the Southern Punjab districts were the most deprived.

Determinants of economic wellbeing

Economic wellbeing is a broad term which cannot be exactly defined. Its definitions and therefore the measures of economic wellbeing are contested (Todaro, 1977, 1995); Ravallion M. &, 1999). That is perhaps one of the reasons that we have been unable to arrive at the what development is and what economic wellbeing is. A very relevant example of this is the per capita Gross Domestic Product. The measure is considered very much appropriate in academic and policy circles yet there have been studies that have found it to be a less reliable measure since it ignores how effective the consumption is, it also ignore longevity of life and quality of life and since it is an average therefore it carries with it all the problems that are associated with the averages.

Discussion is possible on the relative merits and demerits of different measures of economic wellbeing. However, this discussion does reflect the level of debate on the issues of measures and concepts of economic wellbeing. It is due to this reason that in this study we have defined economic wellbeing as human development. This definition is supported by the works of Fukuda-Parr (2003), Miletzki (2017), and Ranis (2006).

Special and unique benefit or advantage of democracy is that it provides a peaceful power transferring mechanism which is not available in any other form of regime (Przeworski, Alvarez, Cheibub, & Limongi, 2000). It provides chances for ne incumbent to replace the existing by attracting more voters in the next election. The crux is the competition between political parties which is visible during election days in any democratic country. What is the best out of this competition among political parties is nothing but more provision of social services? In other words, higher competition among parties will reduce disparities among regions in the country. For instance, McGuire (2013) argued that democratic regimes and better health outcomes are positively related with each other.

Major developed countries are democratic and are more concerned towards satisfying their public demands compared to under developed part of the world. There is a reason for that because developed part of the world can afford such high demand but it is difficult in younger democracies mostly in developing countries (Røttingen, et al., 2014). Financial constraints are enormous in developing countries, source of public financing to achieve Universal health Coverage is becoming difficult and which is one reason why developing countries are lack behind. Consequently, Social development is low in developing countries compared to developed countries because as discussed by Moreno-Serra & Smith (2012) that public financing is a key for better health outcomes.

The significance of public health and education is obvious because of its role in alleviating the roots of poverty in the society. With free provision of these services' certain heads of expenditure for poor will be cut down and improve outcomes as highlighted by the Millennium Development Goals. According to Kumar (2015) this pattern of lower investment in social development cannot be changed unless such development outcomes turn into political and electoral demands on the part of marginalized section of the society. Until recently, human development was not a key as far as political manifestos of various political parties are

concerned (Savedoff, Ferranti, Smith, & others, 2012).

Average turnout in elections has a significant relationship on redistributive policies of the state (Pontusson & Rueda, 2010). A cross-national study of lower quantile voter turnout and the resulting state redistribution of income has a significant negative relationship for national as well as individual and household levels (Mahler, Jesuit, & Paradowski, 2014). Iversen & Soskice (2006) conclude that in majoritarian democracies, the middle class supports the rich in elections because they are the ones who often win majority seats, resulting in lower redistributions. When lower and middle income voters do not vote, it becomes easier for politicians to maintain inequality (Boix, 2003).

There is positive relationship between social infrastructure and human development. We can easily find in literature about the linkages between both. Kusharjanto and Kim (2011) studied about the relationship between infrastructure and HDI in Indonesia. By using the panel data from 2002-2005, they find out that improving infrastructure significantly improve the overall HDI in any economy. They also conclude that electricity, clean water, proper sewage system, clean roads, basic medical facilities and number of classrooms per student also increase the total HDI. They conclude the results by saying that for every 1% increase in clean water, the HDI increases by 0.2%.

Rural Kerala and West Bengal showed significant differences in accessibility and utilization of healthcare services. These differences were marked by differences in political awareness of the People of two regions. Rural Kerala outperformed West Bengal in caste movements, peasant organizations, and the literacy rates, the three determinants of political awareness. As compared to West Bengal, the higher degree of caste and peasant injustices gave rise to organized activism in Rural Kerala.

Rural Kerala focused more on primary education across the region, including the female education. Education in West Bengal, mainly the higher level, was confined to the city centers, depriving the masses of even primary level of education. The presence of activist groups in Rural Kerala attracted left wing political parties while the politics in West Bengal was restricted to industrialized city center. The differences in these three elements of political awareness gave rise to differences in healthcare services and their utilization in the two regions (Nag, 1989).

More studies were also taken to find the linkage between infrastructure and human development in different states. In pursuit of maintaining and achieving high human development, infrastructure plays an important role in any economy. Mohanty, Nayak, and Chatterjee (2016) examines the role of infrastructure on human development by discussing the spatial disparities in infrastructure. They took 30 regions of Odisha and carried out their research by measuring the differences of infrastructure facilities and the total human development over that region.

Various factors can explain disparities and human development across regions. According to many economist these factors are, industrialization, social infrastructure such as health and education, to some it is remittances and population density can explain the variation in human development across regions as well as across countries. For instance, Prabhu (1999) has argued that social development and human development are positively related. That is, social infrastructure if provided properly can increase social development and ultimately human development. Study results were obtained through panel analysis over the period of 1960 to 1995 in Indian Maharashtra state. Further, they argued that it was government expenditure on social infrastructure that matter for social development and helpful in reducing disparity.

Human development and economic growth and social infrastructure such as education

and health are interlinked with each other as claimed by Pillai (2008). Kerala State of India was his study local and he claimed that the State of Kerala topped in human development ranking through India. Consistent with general perception, social infrastructure has positive association with human development in Kerala State. Thus he established an association between social infrastructure and economic development. Cross sectional analysis of Chin and Chou (2004) has also revealed association between social infrastructure such as education and health and economic development.

Developing countries, according to these researchers invest less on social infrastructure such as education and health therefore are less developed. Countries associated with high expenditure on social infrastructure recorded higher economic development compared to the rest of the countries. Similarly, Adeyemi, et al. (2006) has discussed the significance of public expenditure for social and human development. According to the researcher, human development is likely to be high as public expenditure is high.

Industrialization can also best explain disparities in development outcomes across various regions. For instance, Chelliah and Shanmugam (2000) have argued that it was industrialization moderated by agricultural productivity that explains disparities in development outcomes in various districts of Tamil Nadu in India. Further, Jamal and Khan (2002) associated social development and human development with economic growth particularly for Pakistan. Their study findings revealed that social and human development matter for economic growth and there is two-way causation between these variables in Pakistan. In other words, economic growth can also promote social and human development as it was the case with developed part of the world. Similarly, social and human development can also increase economic growth.

Remittances are also important for economic development especially for countries whose industrial base is relatively weak. For instance, Iqbal and Sattar (2005) have found a

positive association between remittances and economic development. Their time series analysis over the period of 1972 to 2003 has revealed statistically significant positive association between remittances and economic development in Pakistan. Their conclusion as such those remittances must be considered as important source to contribute to economic development. Similarly, remittances can also be helpful in poverty reduction and redistribution. As discussed by Adams (2006) that remittances are an important contributor in poverty reduction.

In 2005 UNDP has reported facts on industrialization and human development in Kenya. Various human development indicators such as productivity in agriculture, education, and income and skill formation have been studied with regard to education. In all of specification, the report concluded that industrialization is statistically significant association with all indicators of human development in Kenya. Certain challenges have also been highlighted in this report regarding industrialization and human development in Kenya. These challenges are rampant urbanization, poor health of workers in industries, and environmental deterioration. These challenges can be easily overcome through the provision of supportive human development policies which can tackle poverty through industrialization.

Industrialization has played an enormous role in promoting economic development across the world. As Hawash (2007) analyzed the role of industrialization in Egypt to see its impact on economic development. The author has found statistically significant relationship between the industrialization and economic development and suggested that the pace of industrialization should be increased. In the same way Szirmai (2009) insisted upon the glory of industrialization that it can only promote not destroy mankind life however ignoring the familiar objection of environmental scientists. According to the author, in all of its instances, industrialization has increased per capita income and standard of living across the globe. Manufacturing has been the major contributor according to their study results. Specifically, a

correlation of 0.79 has been found between per capita income and industrialization.

The role of remittances can also be not avoided especially dealing with social and economic development. For instance Castaldo and Reilly (2007) have investigated the role of remittances in Albania as this country is one of the major receivers of remittances. Study results are consistent with past literature and showed that the major portion of remittances is allocated for human capital in Albania as compared to food expenditures. Their study concluded that remittances are a major contributor to both human and economic development. Similarly, Fayissa and Nsiah (2010) have examined aggregated remittances and economic growth via using a panel study over the period of 1980-2004 in African countries. Their results are consistent with past literature and found statistically significant positive association between remittances and economic growth particularly for African countries.

Remittances often flow towards poor countries as in their home country did not provide job opportunities because of low industrial base. Considering this view, Adenutsi (2010) has investigated a long run relationship between remittances and human development in poor countries. Most of his selected countries are Sub-Saharan African countries. To establish long run relationship between remittances and human development he opted for a long panel analysis over the period of 1987-2007. According to his conclusion, remittances are crucial for human development in selected countries and contributed much to their respective economic growth.

Many more such studies focusing on the role of remittances on human development have been conducted (Yang, 2011, Kibikyo & Omar, 2012, Hassan, Mehmood and Hassan, 2013). However, all of these studies have aided to the role of remittances in promoting both social and human development. It has reduced poverty, increased per capita income and produced more opportunities for human development.

Population density can also explain disparities across various regions. For instance,

Knudsen, et al. (2008) have shown that with low population density a society can enhance its creativity and innovation which be helpful in promoting human capital of a society. Similarly, Keskinen (2008) have chosen two study locales namely Tonle Sap and Mekong Delta, to explore the relationship between population density and economic development. Tonle Sap is a part of Cambodia and has lo population density whereas Mekong has higher population density and more developed compared to Tonle Sap. Study results shows that population density has highly linked with economic development in both areas.

Different studies indicated that population density, social infrastructure, remittances and industrialization had significant relationship with development from different perspectives Mossialos, Dixon, Figueras, & Kutzin (2002) and Van Doorslaer, Masseria, & others (2004) argue that continuous changes in the economy, technological change and political dynamics will challenge equitable access to education and healthcare. So, the process of political engagement and debate over development indicators will never end. Therefore, in a country like Pakistan with poor loving condition political engagement and debate over human development is quite inevitable.

Different studies indicated that population density, social infrastructure, remittances and industrialization had significant relationship with development from different perspectives. The results conclude that there are close linkages between both the variables. The prevalence of electricity, schools, hospitals, postal services in many regions prove that human development is higher in those regions as compared to the regions that are less developed. They recommend that the state need to improve all the regions and provide basic infrastructure to increase the living standards of people living there and hence boosting the overall HDI.

Determinants of political participation

Political awareness is measured by the proportion of registered voters exercising their right to vote. Another measure of political awareness could be the number of candidates

representing a certain political party versus the candidates contesting elections independently. Candidates contesting elections from the platform of a political party, institutionalization of political process showered higher level of political awareness. According to the words of Nag (1989), “political awareness is the consciousness of people regarding their deprivation of civil rights as well as the consciousness that an effective means for achieving their rights is through group action, particularly through sustained movement, agitation, confrontation, strike or rebellion against appropriate agencies”.

According to some other scholars such as Rosenstone & Hansen, (1993), Dahl (1971) and Pateman (1971), the relationship between inequality and turnout is from economic inequality towards voting turnout. They concluded that greater inequality results in low political participation. People with less economic resources feel less relevant in donations-based campaigns and resort to apathy and lower turnout in elections. Solt (2004) investigated the relationship between economic inequality and political engagement. He found that economic power is convertible to political power and an increase in inequality results in concentrated political power of the rich, making the poor indifferent to political process.

Eventually, the literature provides a two-way causation of economic inequality and political power. Mahler (2002) extensively studied the regional distributions of income and voter turnout in 20 developed countries and their 340 regions. A significant two-way relationship was discovered between income inequality and voter turnout.

Finding and explaining about the voter’s turnout has been in the literature over the past 30 years. Jackman (1987) talked about the political institutions and voter’s turnout in industrial democratic states. He focused mainly on the western democracies. He found out that two institutions, proportional representation and compulsory voting are the main elements that increase the electoral turnout in any democratic state. Moreover, his results conclude that the variables that affect voter’s turnout include electoral disproportionality,

compulsory voting, unicameralism, competitive districts and multipartism.

The voter's turnout is measured mainly by the population size of that state. If the population size is smaller and the citizens are closely linked, then there are more chances of greater voter's turnout and vice versa. In the theoretical literature, there are consensus of higher rate of voter's turnout in the situations where the countries are smaller, there is closer relationship between the citizens and representatives and the choices are homogenous. (Power, 2007). The population size highly impacts the electoral turnout by the citizens living in the state and hence increase the chances of improvement in HDI.

With the increase in population size, the social gap increases in the society hence increasing inequalities among the citizens living in the same country. Moreover, due to the increase in the population size and inequality, the living standard of people also decreases and vary according to the income of people. Zin (2005) estimates the trends of income inequality in eight East and South Asian countries. He found out that income equality increases during the crisis and downfall period of that country. Moreover, income equality in most of the countries increases due to their newly adopted industrialization policies and in the industrializing economies. (Krongkaew, 1994)

With the addition in literature about voter's turnout in small and large economies, Blais (2008) carried out his research and concluded that though the size of any economy determines the voter's turnout, but there are two more factors that increase the voter's turnout in any specific state. The two factors include the close relation between the administration and people, and emphasis on compulsory voting. He concluded his results by saying that the voter turnout is lower in poor countries and higher in small countries because people are closely linked with each other and the authorities can directly convey their messages to the people.

Moreover, in small countries the imposition of compulsory voting on every individual

also increases the voter's turnout and hence increase the competition among the political parties. The democratic party adopted by the people, will work for the people and hence improve the standard of living, quality of products and reduce the income inequality in the economy. By doing so, the democratic party can further increase the total Human Development Index and help the people achieve their goals and give them equal rights.

Recently, the east European countries have discovered a huge decline in their elections due to voter's low turnout. Kostadinova and Tatiana in their article discussed about the electoral dynamics in the post-communist Europe. Fifteen different countries were selected, and data has been taken from over four consecutive elections. The results were obtained by using multivariate regression and the results conclude that the industrialized democracies emphasize on two major factors i.e. institution and socioeconomic factors. The post-communist settings in any country should add a dynamic component to measure the temporal changes generated through a transitional process. If the settings include disparity in people groups, electoral system type, sequence of elections and economic development, it would be much easier to estimate the temporal changes happening after the elections.

Lucas (1993) and Kim (1995) highlighted the role industrialization in economic development. The former study is conducted in South Korea which argued that it is industrialization of late 1980's which increased economic growth in the first stage and ultimately paved the ways for economic development. Per capita income has been remarkable increase since then and it is solely contributed by industrialization. Threat of foreign intervention particularly from North Korea has incentivized the Southern part to improve its military industry base to counter regional enemies. Consequently, high industrialization led to economic growth and ultimately economic development.

There is a statistically significant positive association between social infrastructure and economic development. It means when greater portion of the population get access to education and health facilities will improve their social as well as economic development (Mera, 1973, Hardy 1980, Antle 1983, Eberts , 1986). According to these studies social infrastructure in the form of more education and better health facilities can increase economic opportunities. Similarly, it is investment on human capital in Romer (1986) while it is specialization in Krugman (1991) that matter for economic growth. In other words, investment on human capital can increase specialization and paves the way for economic development.

A detail investigation has been provided by Ravallion (1991) regarding public spending on social services such as health facilities, educational opportunities and other infrastructural projects and economic development. Education and health have been used as indicators of human development. This analysis was conducted particularly developing countries and the researcher has concluded that public spending on social provision is crucial for human development.

Later Anand and Ravallion (1993) have also analyzed private income and provision of public services for human development in less developed part of the world. As discussed earlier and consistent with literature, their study findings concluded that indeed human development is affected by both private income and public provision of social services. One can find a popular recommendation in this analysis that developing countries now should focus on developmental expenditure instead of non-developmental expenditure. In other words, developing countries should consider developmental outcomes while designing policies.

Population growth is another factor that has contributed to economic growth in various parts of the world. For instance, Tiffen (1995) has identified correlation between population growth, population density and economic growth in Kenya using a panel analysis over the

period of 1993 to 1990. The author found a stable long run positive relationship between both population growth and economic growth, and population density and economic growth in Kenya. Their results can be interpreted as, in Kenya over the time, an increase in population growth has increase economic growth. Similar kinds of arguments are available in Becker, et al. (1999), according to which population density can influence productivity as well as can enhanced technical innovation. Productivity of workers in highly populated areas is much higher than the other way around.

Constitutional development in Pakistan has offered each citizen the right to vote in general election. Among the many rules, one is obvious and that is single person can cast single vote to only candidate and non to others. Winning of an election depends on the number of votes casted for each candidate. Government both at provincial and federal level can be determined by the number of seats. Strong elected government when a single party secured 67 percent of the seats or two-third majority of seats. The other form is known as coalition government particularly came into power in younger democracies.

Five year is the specified normal period for an elected government to rule the country unless some major electorates move towards opposition. Vote of no confidence in case favored the opposition parties then elected government will be dissolved constitutionally. The same procedure is for provincial assemblies. Thus, it can be said that due to the existence of multi-party system in Pakistan different kinds of ideologies have been practiced through provincial and national assemblies. Some notables are PPP nationalization policy and PMLN privatization policy.

Both provincial and national assembly members can have influential power in their respective constituencies. Because as enlisted by Mirza (2012) that from budget policy to allocation they can influence their constituencies. Members of both provincial and national assembly can allocate development funds for their respective constituencies. For instance, during Musharraf era, social development has tremendously reduce poverty in south Punjab

and all this become possible due to chief minister of Punjab. Previously, development policies were biased towards central Punjab. Consequently, project allocations through NA and PA members is not being competitive rather controversial.

Secondly, after the 18th Amendment to the Constitution some more subjects have entered into the domain of provinces previously held by federal. Around 17 federal ministries have been aided to provinces with further major responsibilities. According to Pakistan Institute of Legislative Development and Transparency (2010) these responsibilities are “health, education, transfer of poverty, tourism and local development, unemployment insurance, industry, agriculture and rural development, planning”, welfare broadly speaking.

Similarly, Biraderi is basic unit of association after family. It influences individual choices, acts as social backing, and is a strong base for collective action. Biraderi plays an important role in determining the voting behavior of its members. It has been a significant factor in the electoral politics of Punjab since the colonial era. Muslim League won the 1946 elections in Punjab with the help of Biraderies. After the popular socialist movement in Pakistan in 1970s, role of Biraderies was replaced with that of classes, only to be resumed later in 1980s. In the absence of political parties during dictatorship rule in 1980s, issues of national interest such as foreign policy and economic plans were replaced with local issues. Biraderies are more influential in rural rather than urban, and local rather than national elections. Political structure in rural Punjab is vertical in nature with people having clientele relations with political patrons. Ideology based politics is rare in rural Punjab (Anwar, 2016).

Punjab’s political culture is dominated by feudalistic values. Since Punjab is an agrarian province of Pakistan with vast plain lands, feudalism is a normal outcome in such circumstances. People who owned land, the primary mean of production of the province, amassed not only wealth but political power as well. In a closely-knit cast system prevailing in the rural areas of the province, acquiring political power became a status symbol and an integral culture of the feudal. These feudal electable did everything in their capacity to remain in power.

During the process, they surpassed any political loyalties, ideology, and even the democracy. Since colonial times, they have turned in their loyalties in the favor of those in power center.

Theoretical Framework

Political power and economic power are interconvertible to each other. The argument about development inequality is straightforward. State policies determine the distribution of economic resources and the resulting development outcomes. Political power and the economic institutions shape the economic policies of the state. Therefore, political power is a strong determinant of resource distribution in an economy. Groups executing higher political power tend to receive due share of the pie.

Political awareness of the people, political coalitions, and political activism constitute the collective political power of a group or region. This, in turn, influences the allocation of resources to increase or decrease economic inequality. Regions with higher political power will receive higher share of the resources as compared to regions with low political power.

Political power and economic power are inter-convertible to each other. The argument about development inequality is straightforward. State policies determine the distribution of economic resources and the resulting development outcomes. Political power and the economic institutions shape the economic policies of the state. Therefore, political power is a strong determinant of resource distribution in an economy. Groups executing higher political power tend to receive due share of the pie. Political awareness of the people, political coalitions, and political activism constitute the collective political power of a group or region. This, in turn, influences the allocation of resources to increase or decrease economic inequality.

Regions with higher political power will receive higher share of the resources as compared to regions with low political power. In other words, political awareness of the people, political parties and political activism if high in any region implies higher socioeconomic development.

In countries like Pakistan, socio-economic conditions of a wide cross-section of the

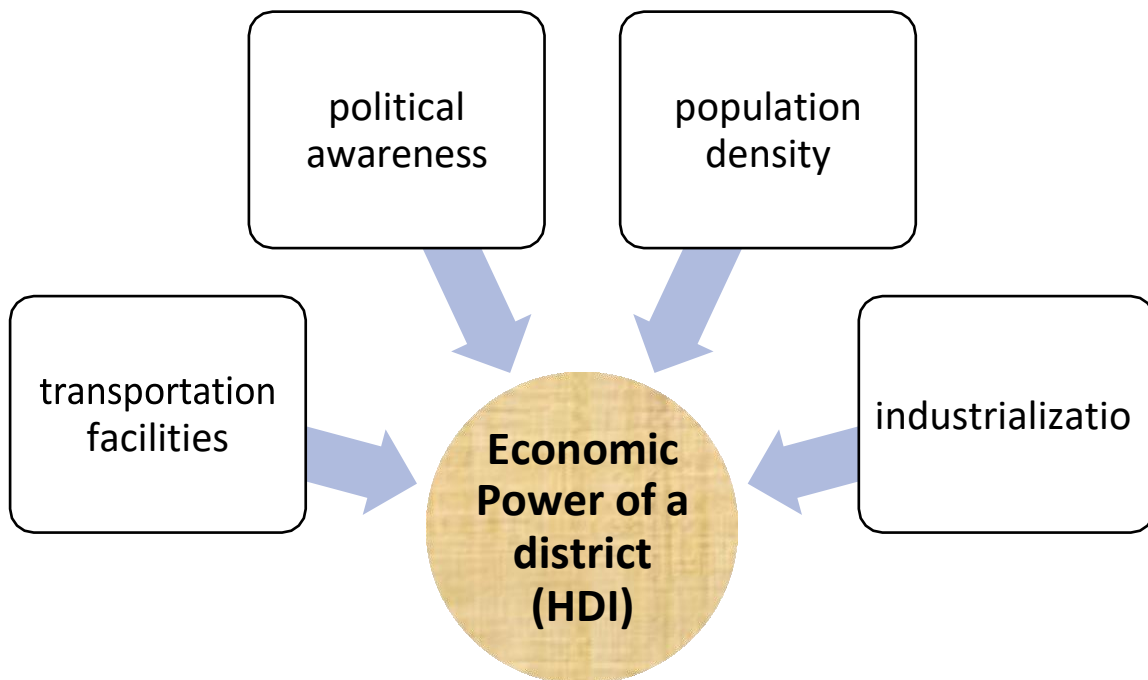
society are not satisfactory. It is commonly assumed that democracy upholds accountability and delivers basic public services for a wide a cross-section of the society. In this regard Downs (1957) argued that political competition in democratic set up is high and the provision of public services to a wide cross-section of society is possible. Further, Polo (1998) has analyzed the role of political competition among political parties. As per the researcher, political rents to the leaders are low in democratic regime because numerous interest groups take advantage of high political competition.

Political competition among political parties must be considered as economic competition between different producers. It has been argued in Stigler (1972) that competition in political market is the same as competition in other economic markets. As economic growth and high per capita income are associated with economic competition, it must be the case with political competition. Similarly, Lipset (1959) and Barro (2010) further highlighted the role of political competition. Firstly, political competition among different political parties leads to choose pro-growth policies and secondly reduces political rents of ruling party. In simple words, political competition and development outcomes are interrelated.

On the other hand, some of the researchers have realized few negative outcomes associated with high political competition. In this regard, Bardhan & Yang (2004) argued that high political competition in some cases increases the behavior of political rent seeking on the part of ruling party. Such phenomenon usually occurs when existing ruler face a real challenger in the upcoming election and increases the probability of being overthrown from the ruling position. Consequently, high political competition in such cases increases corruption and rent seeking. Similarly, Acemoglu & Robinson (2005) have introduced the “Pork-Barrel” policy which means in certain cases existing government pursues targeted polices which benefits only a portion of the whole population. As per the researchers, high political competition and “Pork-Barrel” policies are associated.

In context to Pakistan, the role political competition in social development has been analyzed by many scholars. They are of the view that, public good provision such as education, health, poverty alleviation programs and other infrastructural projects aiming at upholding the marginalized section are associated with high political competition between different ethnic groups (Chaudhry & Mazhar, 2018: Kosec, et all, 2018) . In this study, researcher will identify crucial socio-economic and political factors that have contributed to variation in disparities among various districts of Punjab.

Many studies found that political participation is dependent upon economic well-being. It is since a higher level of inequality leads to demobilization and disaffection of the voters of low-income groups. A more egalitarian distribution of income results in higher voting turnout from all the strata of society because people become more engaged to political process.



The relationship between economic inequality and political participation seems to be mutually reinforcing. There is huge body of literature which supports the two-way relationship. Rosenstein and Hansen, (1993) is excellent example. Low political participation leads to higher inequality, which in turns leads to lower political engagement and so on.

Political awareness is a representation of the fact that to what extent people care about their rights and speak up against the injustices. In societies where political awareness is higher tending to be more just and the public office holders are more accountable (Nicholson, 2003; Mondak, 1995). This results in uniform availability of public services, meritocracy, transparency, and justice.

In such societies, there is a high probability of lower economic inequality. On the other hand, in politically less aware and less active societies, injustice prevails, rights are compromised, and public office holders become corrupt due to lack of accountability. A very large number of political parties and candidates taking part in the elections may also make it uncertain which parties would form the coalition government, thus reducing the political power and the potential economic empowerment of the district.

Effective magnitude represents the number of constituencies in each district. The number of constituencies varies across the districts of Punjab. Districts with higher population have more constituencies and vice versa. The collective political power of a district is higher with more constituencies in the legislature. Heavily populated and big districts are expected to have higher power and a higher share of resources. Due to this reason, all the big hospitals and universities are found in upper and central Punjab regions which are more urbanized with greater number of constituencies.

Political competition is the number of candidates per constituency. Political parties nominate their candidates and sometimes independent candidates also choose to participate in the elections. Higher number of candidates show that people of the constituency are more

politicized and there is high competition in the constituency (Mahler 2002). A very large number of candidates may be damaging because the political power will be much divided.

Economic growth is indirectly linked with democracy. Consensus has been developed among many scholars in this regard. For instance, scholars such as North (1990), Acemoglu and Robinson (2012) have developed a consensus that from the very heart of democracy the emergence of inclusive institutions determines economic growth. This channel between economic growth and democracy is mediated by the favorable intuitions. So the focus of these scholars is on the indirect impact of democracy on economic growth. In the same way, Alfano and Baraldi (2016) argued that democracy secure provision of property rights, free markets, good governance, accountability are the key contribution of democracies in relation to economic growth.

Population density is the number of people per 1000km². Population concentration increases the incidence of specialization (Marshall, 1890). Figured out that population density increases specialization and agricultural productivity (Miyashita, 1986). Similarly, Krugman (1991) found that population agglomeration increases economic activity, specialization, and the division of labor.

Colonial institutions such as police, judiciary, and civil administration has been interfered in by the political elite. Since the political elite of Punjab has been feudal, they are the ones who controlled these state institutions to further their powers. The voters of Punjab, especially of the rural areas, has been bound to vote for their feudal since they expected protection from them against any encounter with the state institutions. Patron-client relationship was established in Punjab, especially the rural areas. In such circumstances, the development outcomes of the districts having majority rural populations remained poor. Therefore, urbanization is positively linked with the development indicators of the districts. In urban areas, dependence on political elites was less and the state institutions were less

influenced by the elites. The educated, urban class vowed for their rights.

Social infrastructure has a significant relationship with economic development. Many scholars found that social infrastructure is strongly positively linked with economic development (Mera, 1973; Hardy, 1980; Antle, 1983; Eberts, 1986). Investment in human capital is one of the most effective way towards fast economic growth (Romer, 1986). Ravallion (1991) studied the relationship between public provision of social services such as education, health, and infrastructure and their impact on human development. He found that public spending and provision of these social services positively affected the human development in developing countries. Pillai (2008) studied the Indian state of Kerala and found a strong relationship between social infrastructure and HDI. Human development is an established determinant of economics development.

Higher the level of industrialization, higher the economic development. Industrialization is strongly linked to economic development than agriculture and mining (Hirschman & Lindblom, 1962). Furthermore, Papanek (1967) found that industrial development promoted economic growth in Pakistan. Industrialization especially the manufacturing has a very strong linkage with economic development. Industrialization allows for economies of scale. He calculated a positive correlation of 0.79 between industrialization and income per capita (Szirmai, 2009).

Some studies have devoted to assess the role of electoral competition on developmental outcomes. For instance, Choudhary, Mazhar, & Khan (2018) analyzed voting turnouts and its impact on literacy rate both male and female, services delivery satisfaction and general perception regarding household economic condition. By taking data for all districts in Pakistan from 2008 and 2013 general election, they have investigated these relationships between variables through employing OLS. Study results illustrates that higher turnout has been observed in districts characterized by higher literacy rate. Districts with higher

economic expectations also have shown higher turnout in general election. Similarly, their study results also shows that satisfaction level of household also positively associated with higher turnout. That is, more household satisfaction is associated with higher turnout in most of districts.

Resultantly, following are the hypotheses for the study:

Ho: Higher level of political competition does not result in a higher level of Human Development Index (HDI) of a district in Punjab.

Ho: Higher level of voter turnout does not result in a higher level of Human Development Index (HDI) of a district in Punjab.

Ho: Higher level of urbanization and industrialization does not result in a higher level of Human Development Index (HDI) of a district in Punjab.

Broadly speaking, in the words of Schlozman, Verba, & Brady (2012), this is a study of political voice and the resulting democratic accountability in terms of providing politicians incentives to act.

Chapter No. 3 **Research Methodology and Data Description**

Political power is essentially a social phenomenon. It is the coalition of individual political preferences which defines the political power of a constituency, district, region, province, or the country. In order to establish a region wise relationship between political power and economic inequality, we need district wise data of political participation and ownership of economic resources.

Method of analysis

The study relies on qualitative research methods. Since it is a preliminary study on the subject matter, we have tried to explore the topic in greater detail from various dimensions.

There are various approaches in the literature to conduct a qualitative study. We here however have relied on secondary data and the existing literature on the subject matter. We took data of general election 2013 and the HDI values from the same year. Similarly, the other variables are also from the same year. Graphical analysis followed in the later pages establishes some key relationships between the variables.

Construction of variables

Human Development Index

For economic inequality, we are relying on the most recent district wise distribution of Human Development Index (HDI) computed by the United Nations Development Program (UNDP). The data is available for the 36 districts of Punjab for the year 2018.

Living standard of people of a region can most accurately be determined by income or consumption. People tend to underreport their incomes. This is common in higher income class. This phenomenon undermines the spirit of income inequality studies. The other approach to measure the standard of living is the consumption. This approach is more commonly used due to higher chances of accuracy of data.

The HDI index used in this study covers all the important factors of development such as health, education, and the standard of living. The index has been calculated from the data collected by national agencies and computed by the United Nations Development Program (UNDP).

Many economists have calculated deprivation indices for the districts of Punjab. These indices are based on the level of education, health outcomes, employability, and access to other public services. Districts of Punjab have been ranked according to these indices.

Another economic measure is the district share in GDP. District level GDPs are calculated based on the share of agriculture and large-scale manufacturing of the districts. District of Punjab vary according to this ranking as well.

Political Awareness (Number of Contestants/Voter Turnout)

Political competitiveness is an important variable in this study. Various other scholars have used political competitiveness in their analysis. It has been mostly measured by looking at the pattern of seat distribution between top two political parties contested in general election. For instance, political competition has been used in these studies on the basis of above definition (Padovano & Ricciuti, 2009), (Besley, Persson, & Sturm, 2010) and (Dash & Mukherjee, 2014). For two reasons, in this study researcher has used electoral competition as a measure of political competition. According to (Blais & Lago, 2009) the use of seat differences among top two political parties can also capture the level of uncertainty in winning election. That is, the higher the seat differential, the lower uncertainty will be associated with leading the election.

For political participation, we are using number of election contestants of each district, for the last election. The Election Commission of Pakistan provides data for the candidates for each district. The data is available for the last 3 general elections of Pakistan. We determine the political competition by aggregating all the political candidates of all the constituencies of a district dividing with the number of constituencies.

Political competition determines the level of politicization in a district. Political competition can be measured from the number of candidates opting for elections in each district. Higher the number of candidates, higher the political competition. Higher political competition shows that people are highly political in that higher. Politicization beyond a certain threshold may cause the economic development to hinder due to severe divisions among people.

Level of social spending on crucial public services has a negative association with continuity of leadership. Continuity of leadership means if the same government is elected again and again will incentivize low public expenditure on social development. This will lead

to more political rents and less expenditure on education and health. Throughout the literature, it has been repeatedly shown that government policy, political awareness, electoral turnout and expenditure on social development are linked with each other. For instance, higher turnout in election implies greater political participation which further implies voters cannot afford their private health and educational expenditures. In highly competitive political market, greater turnout in election implies greater political participation and which is the only source of marginalized section to politically rescue their self with engaging political dynamics of the society.

In this study, researcher has incorporated this phenomenon by taking voter turnout as an indicator of political participation (independent variable) and HDI as an indicator of level of development (dependent variable) in all Districts of Punjab. Voter turnout is measurable and can be obtained by taking ratio of number vote cast to total eligible number of voter. In addition, other crucial socio-economic variables such as population size and per capita income. Higher population growth demands higher level of social expenditure. It means more schools; more hospitals and more roads are needed because of the larger population. Similarly, if per capita income is lower, then the voters cannot afford their private expenditure which demands further social contribution from their respective district governments. .

Population Density

Population density can be calculated by dividing the total population with area in square kilometers. For the districts of Punjab, the data is available by at Punjab Bureau of Statistics. All the people residing in the area are considered despite the age or citizenship status except for the refugees, which are not considered part of the population.

Degree of Industrialization

There are different measures to assess the level of industrialization in a locality. Industrialization usually refers to the manufacturing and the process of producing goods.

People have used various proxies for this purpose. In this study, we intend to use the number of factories in a district divided by its population as the measure of industrialization. The data for the number of factories is available at Punjab Development Statistics.

Data Range, Data Problems and Data Sources

The data is readily available for all the variables to be used in this study. The data, cross sectional in nature, will be used for the year 2013, the latest available data for HDI. Data for other variables is also available for this year.

Variable Names	Unit Measure	Data Sources
Human Development Index (HDI)	HDI Index	United Nations Development Program (UNDP)
Number of election contestants	Percentage	Election Commission of Pakistan (ECP)
Voter turnout	Percentage	Election Commission of Pakistan
Industrialization	Ratio	Punjab Development Statistics
Road Density	Ratio	Punjab Bureau of Statistics
Population Density	Ratio	Punjab Bureau of Statistics

Chapter No. 4

Analysis and Discussion of Results

Political Awareness

The district level data of HDI and number of candidates contesting the elections as depicted in the graph is perfectly synchronized. It is clear to see that the districts with higher value of HDI are the ones having higher number of candidates as contesting the elections. It can be argued that the districts with greater number of contesting candidates are the ones with higher population. While it is true that such districts have higher population, it is also important to note that they have more constituencies. Average population per constituency remains almost the same throughout the province. The data of constituencies also suggest that number of candidates in constituencies of developed districts is higher than those of underdeveloped.

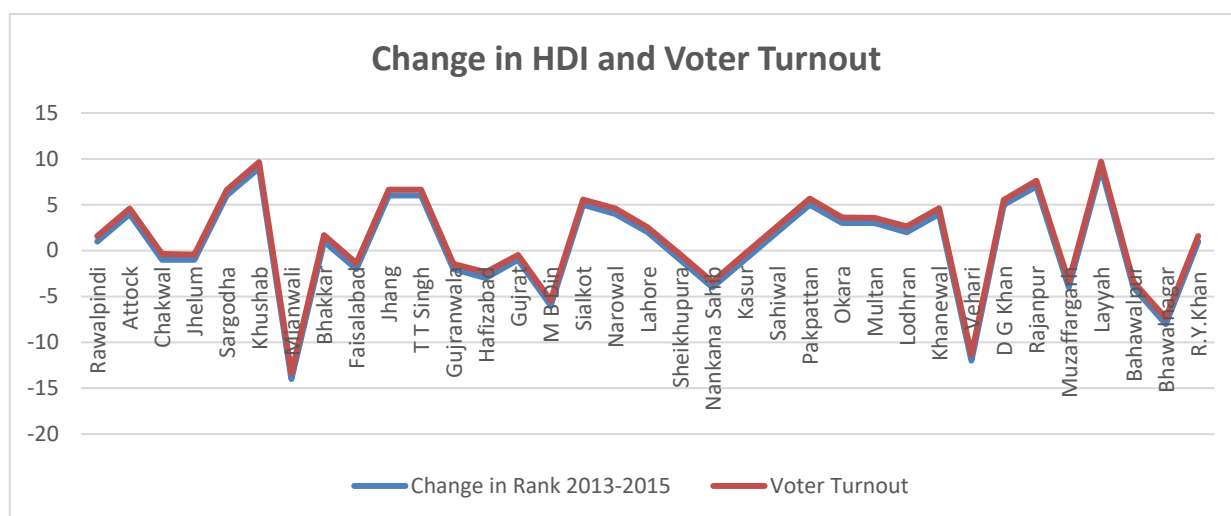
Another measure of political awareness is the proportion of votes of the winning candidates. Despite a significant number of candidates contesting elections in a constituency or a district, the major proportion of votes go to few candidates, usually the winning one only. This trend is also interesting. It shows that the voters of the constituency share unanimous opinion and favor the same candidate. It can lead to two different interpretations: either the voters of the district are mature enough to back a single candidate and then push him for their demands later, or they are not politically aware enough and line up after a single candidate, most likely in feudal settings in less developed districts of the Punjab.

Similarly, the measure of voting turnout is also not a single reliable measure to estimate political awareness. While it does reflect partial picture of the level of awareness, it cannot act as the only true measure. Voting turnout is subject to manipulation in a way that political candidates in less developed and less urbanized districts offer transportation facilities to their voters. Every contestant tries to bring as many voters as possible to the polling stations. This

behavior is reflective in the voter turnout number as even less developed districts show higher voter turnout in some cases (see Appendix II).

Change in HDI after the GE 2013

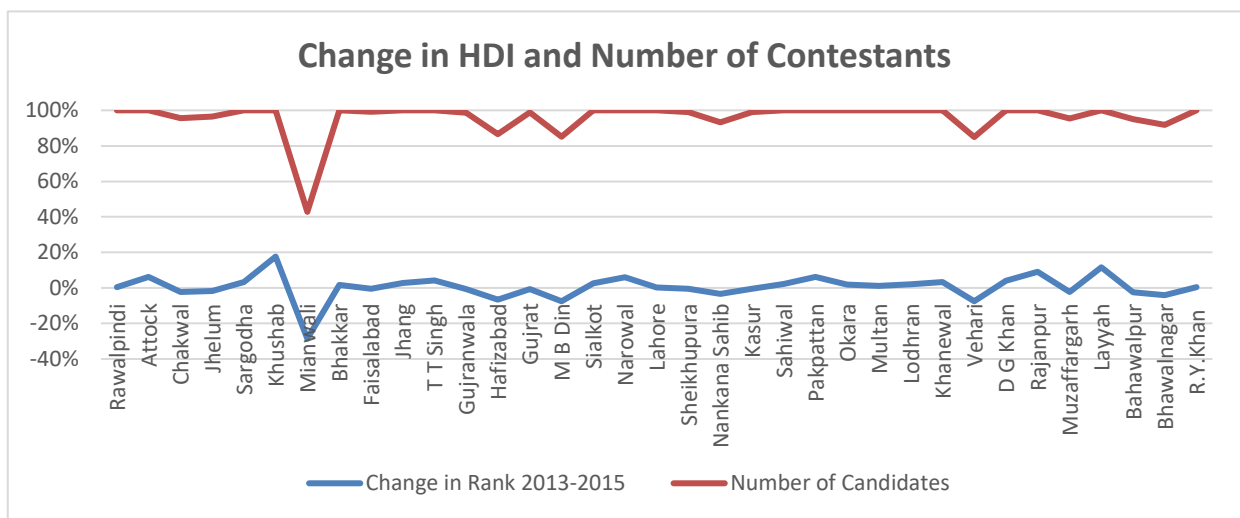
Across the districts of Punjab, the trend is visible in the graph below: higher the voter turnout, higher the change in HDI rank in the next two years. This analysis is interesting in a way that it shows how the voter turnout has become more relevant in recent years.



Democratic transition in Pakistan (2008) after a long dictatorial rule has resulted higher turnout in recent general election. In the literature, two such explanations have been given which explains this higher voter turnout in general election. Since, social expenditures are lower in dictatorship which implies inferior socio-economic condition of the voter has invoked him to cast his vote according to his aspirations. It does not mean that during the dictatorial regime (1999-2008) in Pakistan no elections has been conducted rather that election was neither competitive nor so much open to entire populace. Secondly, the assassination of Benazir Bhutto was sympathized by the general public through participating in general election and consequently PPP got majority of seats in National assembly. Due to low political competition, the previous turnouts in general elections were relatively insignificant. Consequently, the determinants of voting turnout have not been properly enlisted in the

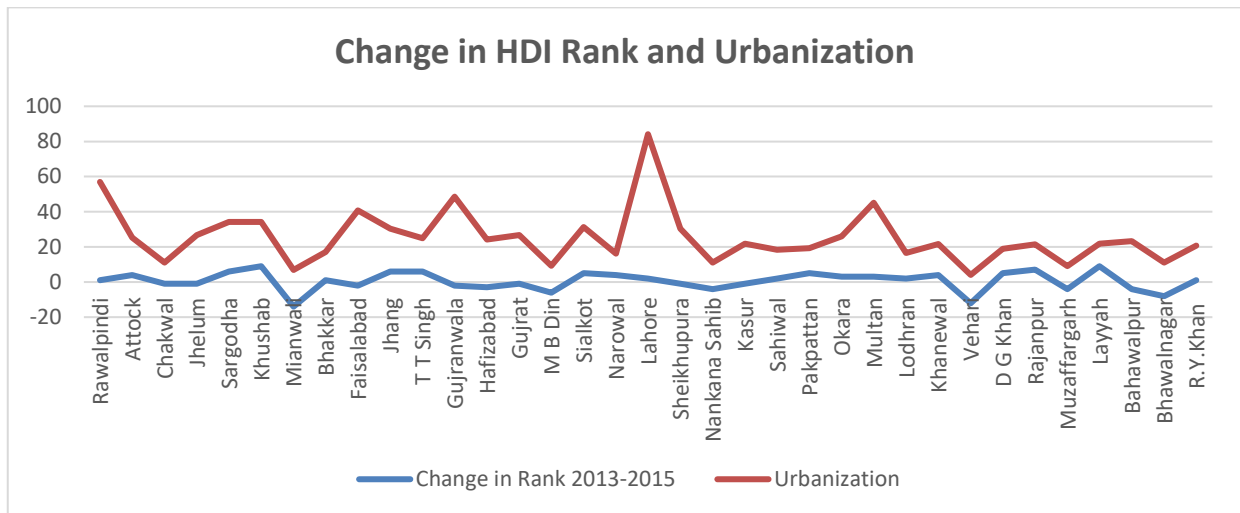
literature.

The General Election of 2013 occurred in a heated environment where all the political parties competed fiercely for the government. Political activity in the country had been higher since some years before the elections. All of this translated into raised awareness of the voters. Resultantly, the voting turnout figures became more rational as voting was a more conscious choice. The graph above shows how, in the next two years, the districts HDI numbers matched their voting turnout performance.



Urbanization

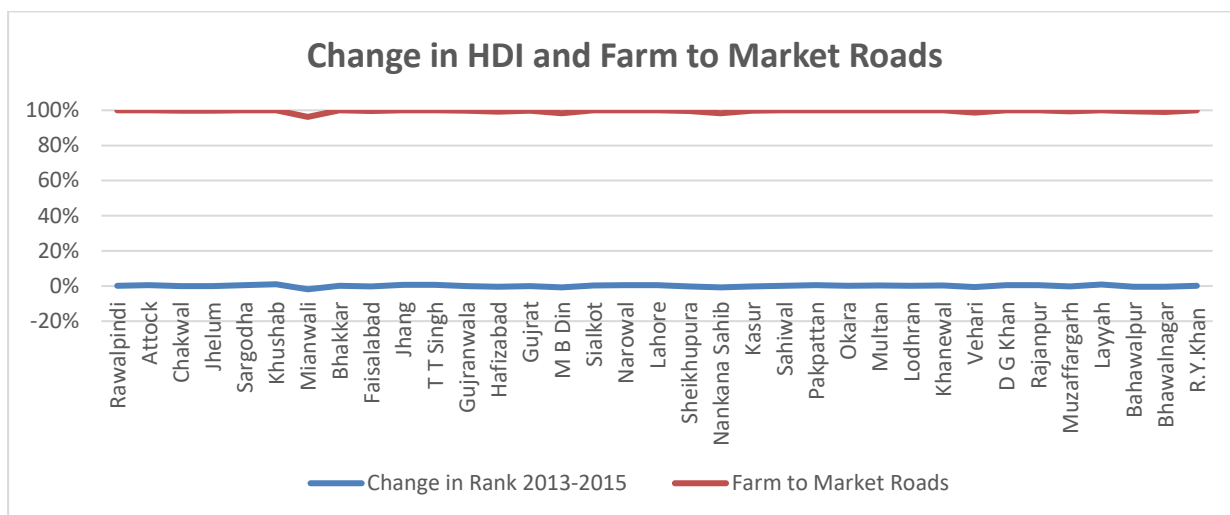
Urbanization also poses a strong, positive relationship with the values of HDI. As the graph shows, the districts with more urbanized populations have higher HDI values and vice versa. This is true because urbanization is a catalyst of growth according to the literature. When people start living in close communities, interact with each other more often, and collaborate on diverse range of projects, they tend to be more creative, more productive, and grow at a higher rate. Due to this fact, urbanization is a way to achieving high growth around the world.



Moreover, it is easier to provide community-based services to people living in urban societies. These services include education, health, roads, and access to markets. All these amenities of life are prerequisite for high performing communities with higher rates of HDI. Considering these facts, the New Growth Strategy developed by the Planning Commission of Pakistan also highlights the importance of urbanization and considers it one of the most important pillars of growth for Pakistan.

Road Density

Communication infrastructure is of primary importance for movement of people and goods. It is an important element for economic growth and the standard of living. Trade and commerce are the backbone of any economy. They facilitate transaction of goods and services and hence serve everyone in the business an opportunity to create more value. Trade and commerce are not possible without good road infrastructure. Districts with higher road density perform good at the HDI value and the ones with the lower road density perform poor on the index.



As it can be seen from the graph, the economically well-off districts also have dense network of roads. While the poor and backward districts of South Punjab perform low in terms of the index value. Farmers are not able to take their agricultural produce to the markets. The analyses show that the political competitiveness has a strong positive significant association with development outcomes. These results suggest that facing high degree of political competition in election from the opposition parties, Governments increase spending of development expenditures to maximize their chances of winning in the next election.

In some cases the literature has been divided on the basis of different results associated with democracy especially in developing countries. On theoretical ground, there is no such good thing as democracy and has often being highly praised is become inefficient on practical grounds with special reference to developing countries. On one hand, it is and admitted fact that democracies are better in social provision and redistribution than other political regimes. For instance, Chaudhry & Mazhar (2018) has noted that democratic institutions such as electoral competition among political parties have increase social development expenditures. Similarly, Kosec, Haider, Spielman, & Zaidi (2018) argued that electoral competition has increased spending on primary education in African countries. In the same way, aggregate expenditure on infrastructure and social development is highly connected in India as highlighted by Ghosh (2010).

A huge body of literature has appreciated highly competitive political market for the above reasons. If political market is more competitive and open then voters can have the above facilities. However, in fact on real ground democracy has been failed in Pakistan by not committing his theoretical promises. Pakistan is a clear example of such countries where despite a democratic set up the condition of socio-economic development is not satisfactory. In other words, greater political competition in Pakistan has not reduces so far the disparities on provincial level due to ethnicity based politics. Political competition without required political awareness might be the explanatory factor behind the inefficiency of democracy in Pakistan.

Chapter No. 5

Conclusion, Policy Recommendations, and Way Forward

Conclusion

Pakistan is a developing country with an aim to grow at a faster pace like other developing nations in the neighborhood. Growth and development cause disruptions in the economic lives of different segments of the society. While it benefits some sections, the others are put in disadvantageous position.

As with the parliamentary democracy in the sub-continent, the race for resource sharing has altered altogether. People target maximum share from the resources of state through their representatives. The whole power structure revolves around the public representatives, directly elected by the public in general elections. These representatives strive to take up the case of their constituencies and districts to divert public funds and tilt public policies in their favors.

The present study, pioneer and exploratory in nature, has tried to discover the relationship between political awareness of people and its resulting impact on their state of development on a district level. It is found that districts with higher rate of political awareness are performing better in terms of their HDI score and vice versa. Political awareness tends to cause higher HDI through increased share of state resources for infrastructure development, accountability of their representatives, more equitable distribution, and inclusiveness.

Another significant determinant of district HDI is the phenomenon of urbanization. Urbanized societies are more connected and characterize higher degree of specialization of labor, thus higher productivity and rate of growth. The empirical evidence also supports the argument and the districts with higher degree of urbanization rank higher on the HDI scale.

Same is true for industrialization. Industrialized districts are capital intensive, constitute

higher GDP, and offer more employment opportunities to their inhabitants. All this raise standard of living of the citizens of the district. Therefore, the districts with higher rate of industrialization, usually found in upper and central Punjab, are the ones performing better in terms of HDI score.

Policy Recommendations

Political parties should encourage political activity among the masses especially in the rural areas. Trade unions, peasant movements, and labor organizations could raise the level of political awareness of an area, resulting in increased demand for their civil rights and decrease in injustices. Not only economic, political parties could also mobilize people around social issues.

For public policy makers, it is important to incentivize urbanization, industrialization, and transport infrastructure in less developed districts. City centers in less developed districts could devise their own economic visions, encompassing quality public services and employment opportunities for their inhabitants. This will encourage the trend of urbanization. Similarly, industrialization could also be promoted by providing necessary infrastructure, land, and tax incentives to industrialists. The least developed districts are rich in agricultural produce and industry could capitalize on the availability of raw material. Moreover, farm to market roads can catalyze market development, access to markets, and labor mobility; all this resulting in higher economic gains for these districts.

Way Forward

This study has been pioneering in nature as there is no other study close to the theme of this one. We did find studies on the dynamics and determinants of HDI and few studies on voter behavior. There has been no study, however, on the relationship between political awareness and development. Therefore, the current study has tried to define the scope of this kind of work and establish a primary link between the two variables.

After this exploratory research, future research can extend to other provinces as well. The other three provinces are small as compared to the province of Punjab and they strive for their due share of power. A future study can be about the distribution of power and resources in the center.

It is also important to note that a power-development nexus like the one developed in this study has certain assumptions. The most important of those assumptions is the presence of democratic values such as freedom of speech, freedom of association, free & fair elections, and the rule of law. State coercion through civil and military institutions is a common practice in Pakistan which undermines the true impact of political awareness on development.

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Appendix-I

Data

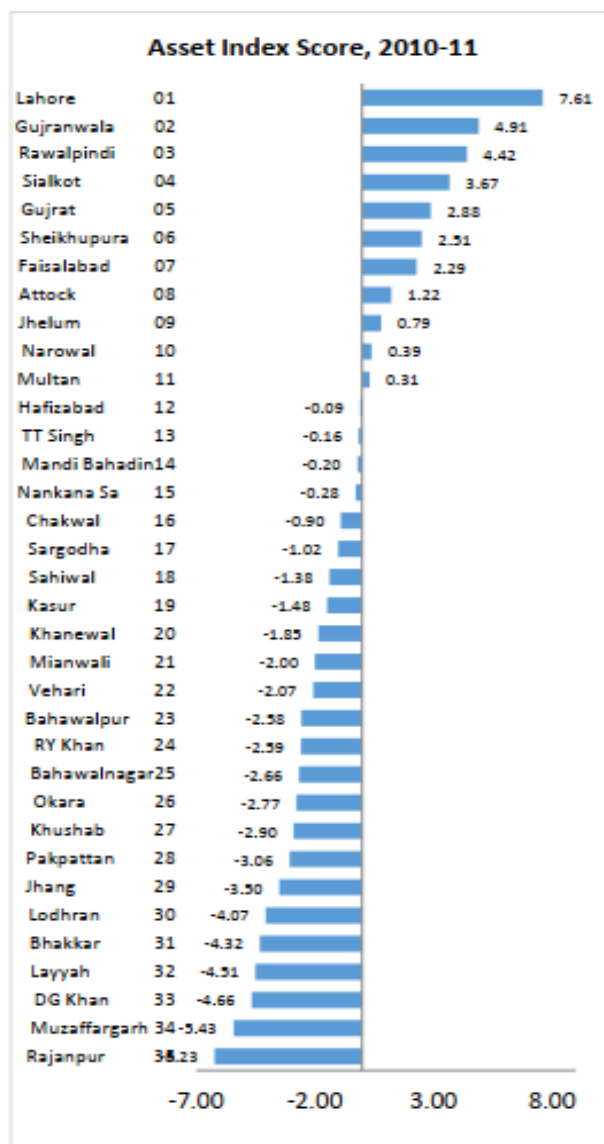
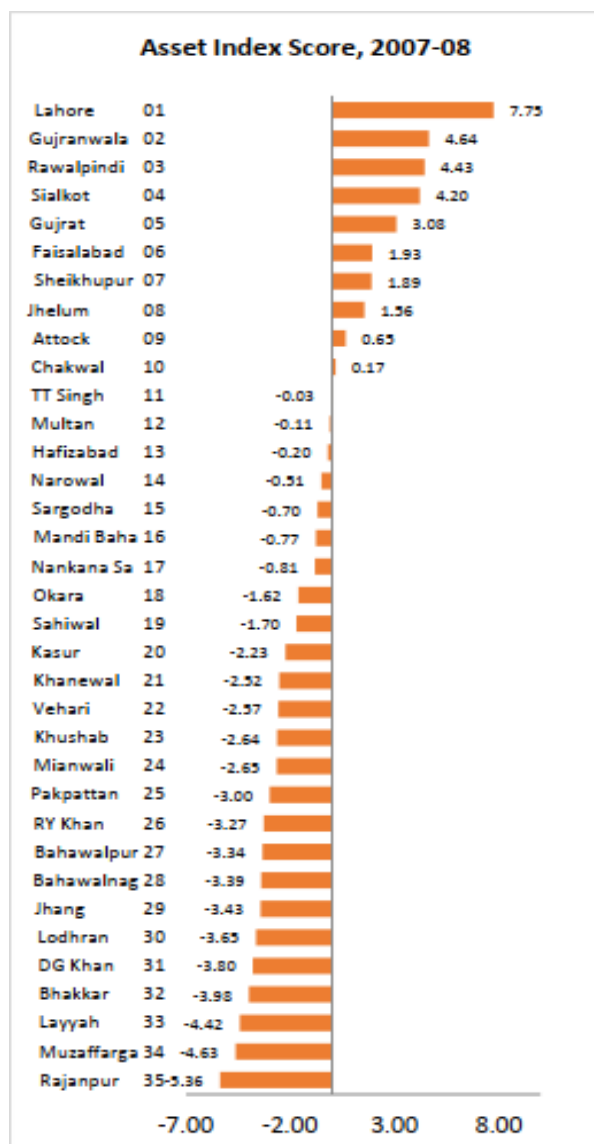
District	HDI 2013	HDI 2013	Change 2013- 15	Voter Turnout	Number of Candidates	Winner's Votes/Registere d Voters	No of Factories	Urbanization	Population Density	Farm to Market Roads
Rawalpindi	0.826	82.6	1	0.572403	224	0.246487	310	55.88365	85.86566	1618.64
Attock	0.762	76.2	4	0.595084	60	0.198467	49	21.28834	23.77133	931.54
Chakwal	0.788	78.8	-1	0.622866	45	0.268111	138	12.13916	20.70815	1432.18
Jhelum	0.811	81.1	-1	0.555582	57	0.232494	93	27.6884	32.92445	921.73
Sargodha	0.692	69.2	6	0.598712	176	0.266639	360	28.14949	56.679194	1084.82
Khushab	0.65	65	9	0.623365	42	0.263328	110	25.26408	17.4474	878.22
Mianwali	0.655	65.5	-14	0.611751	35	0.27189	72	20.83333	23.42466	732.6
Bhakkar	0.587	58.7	1	0.687932	57	0.264596	28	16.00567	17.31878	1335.21
Faisalabad	0.775	77.5	-2	0.599305	517	0.290205	1674	42.6971	121.9433	1127.83
Jhang	0.636	63.6	6	0.632285	203	0.244257	177	24.41472	27.15405	967.42
T T Singh	0.72	72	6	0.645306	135	0.27429	135	18.82927	63.03813	965.48
Gujranwala	0.774	77.4	-2	0.560552	314	0.254425	1092	50.5618	127.7747	1481.32
Hafizabad	0.693	69.3	-3	0.635652	42	0.291582	64	27.2217	45.16265	843.32
Gujrat	0.792	79.2	-1	0.533185	177	0.210605	556	27.73109	82.01754	968.42
M B Din	0.738	73.8	-6	0.565965	75	0.209391	88	15.17483	53.49794	694.53
Sialkot	0.77	77	5	0.562646	181	0.310349	787	26.19181	118.2361	1305.51
Narowal	0.706	70.6	4	0.576332	63	0.293339	24	12.19822	67.35131	795.42
Lahore	0.858	85.8	2	0.525763	685	0.290866	2255	82.12687	516.8736	343.47
Sheikhupura	0.76	76	-1	0.575457	197	0.219588	839	31.40687	93.39914	496.72
Nankana Sahib	0.762	76.2	-4	0.603291	116	0.215043	214	15.12539	46.91176	478.87
Kasur	0.695	69.5	-1	0.638362	192	0.264364	583	22.83365	79.14894	649.89
Okara	0.667	66.7	3	0.607136	164	0.28143	86	23.02405	66.48389	1869.83
Multan	0.693	69.3	3	0.570182	257	0.218144	432	42.21321	112.7151	872.65
Lodhran	0.629	62.9	2	0.633594	93	0.21341	132	14.50285	56.83945	962.54
Khanewal	0.651	65.1	4	0.621304	116	0.243571	166	17.63401	62.19821	1394.8
Sahiwal	0.691	69.1	2	0.614072	90	0.265506	220	16.38152	73.03968	1231.6
Pakpattan	0.629	62.9	5	0.650865	75	0.287203	177	14.2435	62.11454	1138.34
Vehari	0.661	66.1	-12	0.628521	147	0.244588	179	16.05423	64.23006	1845.6
D G Khan	0.504	50.4	5	0.51732 9	119	0.174811	98	13.93862	19.67791	993.58
Rajanpur	0.481	48.1	7	0.62163 8	70	0.275166	73	14.53155	12.73746	1289.59
Muzaffargar h	0.564	56.4	-4	0.637644	172	0.240527	132	12.96883	45.89647	1296.52
Layyah	0.682	68.2	9	0.681621	68	0.222557	130	12.89087	24.9086	982.83
Bahawalpur	0.629	62.9	-4	0.597843	158	0.264532	350	27.33707	13.65687	1210.41
Bhawalnagar	0.635	63.5	-8	0.636213	189	0.230845	206	19.04584	30.22077	1806.9
R.Y.Khan	0.585	58.5	1	0.579176	220	0.234621	207	19.63439	37.29798	2081.53

Data of Voter Turnout

District	HDI 2013	Voter Turnout
Rawalpindi	82.6	0.572403
Attock	76.2	0.595084
Chakwal	78.8	0.622866
Jhelum	81.1	0.555582
Sargodha	69.2	0.598712
Khushab	65	0.623365
Mianwali	65.5	0.611751
Bhakkar	58.7	0.687932
Faisalabad	77.5	0.599305
Jhang	63.6	0.632285
T T Singh	72	0.645306
Gujranwala	77.4	0.560552
Hafizabad	69.3	0.635652
Gujrat	79.2	0.533185
M B Din	73.8	0.565965
Sialkot	77	0.562646
Narowal	70.6	0.576332
Lahore	85.8	0.525763
Sheikhupura	76	0.575457
Nankana Sahib	76.2	0.603291
Kasur	69.5	0.638362
Okara	66.7	0.607136
Multan	69.3	0.570182
Lodhran	62.9	0.633594
Khanewal	65.1	0.621304
Sahiwal	69.1	0.614072
Pakpattan	62.9	0.650865
Vehari	66.1	0.628521
D G Khan	50.4	0.517329
Rajanpur	48.1	0.621638
Muzaffargarh	56.4	0.637644
Layyah	68.2	0.681621
Bahawalpur	62.9	0.597843
Bhawalnagar	63.5	0.636213
R.Y.Khan	58.5	0.579176

Source: (UNDP, Pakistan; 2013)

Rankings of Punjab Districts by Asset Score



Source: Burki et al.