A STUDY ON GOVERNANCE AND DEVELOPMENT IN BODOLAND TERRITORIAL AREA DISTRICTS OF ASSAM IN INDIA

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Article History: Received on 27th September 2019, Revised on 30th October 2019, Published on 19th November 2019

Abstract

Purpose of the study: The study examines the relationship between the quality of governance and level of development in the Bodoland Territorial Area District (BTAD) of Assam in India. It also assesses which dimensions of governance influence the level of development.

Methodology: The study is based on the data collected from a field survey of 400 households in both rural and urban areas of BTAD. Important dimensions pertaining to measuring the quality of governance is a broad manifestation in several institutions such as Political, Legal and Judicial, Administration and Public service delivery, and Economic and Social. Similarly, we measure development in terms of economic, social and empowerment dimensions. The study uses statistical techniques of Correlation and CHAID analysis.

Main findings: The study finds that the quality of governance is critical to development. Amongst other factors, efficient system and management of political institutions and effective administration and public service delivery is the key to enhancement of economic development.

Social Implications: The study depicts disparity with respect to social and economic space; and suggests inclusive participation in political and fine-tuning in the front of administration and delivery of public services.

Originality/Novelty of the study: The study brings out the dynamics of deficit of governance and its impact on economic development at the level of the sub-national state. It further confirms and substantially contributes to the literature on development – governance nexus.

Keywords: Governance, Development, Administration, Public Service Delivery, Political, Bodoland Territorial Area District.

INTRODUCTION

In developing economies, despite the potentials for accelerating economic development, there are various social, economic, institutional and geographical issues that inhibit enabling growth and development. The quality of institutions matters for economic development (Rodrik et al., 2004). The failure to factor in institutions as constraints/drivers of growth and development in developing countries during the 1980s has given rise to ‘development disorder’. Governance as an institution has come out to be one of the most pressing challenges in the entire debate of economic development syndrome today. Contemporary discourses on development put issues of “governance” at the heart of an understanding of development as such poor countries are considered poor because their governance quality is bad, and rich countries are those that have better governance quality (Besley and Persson, 2011). Those poorly governed countries do not reap the benefits of public spending on various public sectors such as health and education (Rajkumar and Swaroop, 2008). It has been established that good governance may either directly or indirectly impact evaluations of well being of individuals. According to (Helliwell, 2014) direct impact maybe, because people are happier living in a context of good government, and/ indirect maybe, because good governance enables people to achieve higher levels of something else that are associated to their well-being. In Development as Freedom, Sen (2000) sees development as expanding real freedoms such as escaping morbidity, being nourished, being literate and being able to participate in social functions, etc. The means to these developmental outcomes depend on the nature and state of governance such as provisioning of public services, maintaining law and order and participation of citizens in democratic franchising.

Economists agree that governance is one of the critical factors explaining the divergence in economic performance across developing countries (Khan, 2008). It has been agreed that in developing countries political corruption and poor governance inhibit economic development and social betterment (Kurtz, 2007). A better level of governance has its impact on improvements in infrastructure, productive activities, health and education facilities and reduction of corruption (Mauro, 1995; Grindle, 2004; Banerjee and Iyer, 2005). There is also empirical evidence with respect to the access of citizens to governance mechanisms linked with development performance, discriminatory governance mechanisms leading to poor development, links between democratic governance, distribution, and standards of living (Oster, 2009; Kumar, 2013; Blaydes and Kayser, 2011).

Corruption also significantly affects the well being of individuals in society. According to a cross-country European study, Tavits (2008) found that when the level of corruption is higher, people tend to report lower levels of subjective well-being. Similarly, a study by Heukamp and Arino (2011) in a sample of 64 countries shows lower levels of corruption in a country
significantly increases life satisfaction, even when taking into account many other related variables. Cheung and Leung (2007) found a significant positive correlation between perceived government accountability and life satisfaction, especially for those with less political power in China. Rodriguez-Pose and Maslaukaite (2011) show that the greater is the level of political decentralization the greater is the degree of life satisfaction. Similarly, Ott (2011) finds that good governance lowers inequality of happiness among citizens. A study in South Africa reveals that “improvements to local services were closely associated with increases in happiness among all sectors of the population, including rural dwellers and the poor” (Moller and Jackson, 1997). Lou (2009) observed that Chinese citizens were more likely to report a high level of personal well-being when government policies are responsive to their needs, and studies also show that Government effectiveness is positively associated with life satisfaction (Fereidouni, Naidi, and Amiri, 2013; Kim and Kim, 2011).

Thus, many studies have empirically examined the relationship between different aspects of governance and economic development and well being at different points of time and space. What becomes evident therefore is that governance matters for economic and social development. Hence, it is a vital area of research that needs to be tested across time and space for developing appropriate policies. In this study, we attempt to examine the relationship between the quality of governance and level of development in the Bodoland Territorial Area District (BTAD) of Assam in North East India. Thus, we developed the following research questions and hypothesis.

**RESEARCH QUESTIONS**

1. What is the relationship between the level of development and quality of governance in BTAD?
2. Which dimensions of governance influence the level of development?

**Hypothesis**

H1: Level of development is associated with the quality of governance

The significance of the present study lies in its setup whereby BTAD is an underdeveloped area in terms of various social and economic development indicators. Bodoland Territorial Area District (BTAD) falls within the jurisdiction of the Bodoland Territorial Council (BTC). BTC is an autonomous territory within the state of Assam in India, which was created on 10th February 2003 through Memorandum of Understanding (MoU) between the Union government of India, State Government of Assam and the then militant group Bodo Liberation Tiger Force (BLTF). BTC was created in order to provide “constitutional protection under Sixth Schedule to the said autonomous body; to fulfill economic, educational and linguistic aspirations and the preservation of land-rights, socio-cultural and ethnic identity of the Bodos; and speed up the infrastructure development in BTC area” (Bodoland Territorial Council Accord 2003). Since its inception, fifteen years have passed whereby these mentioned developmental activities have been undertaken by the government and its associated institutions in BTAD. It is in this context; we attempt to examine the relationship between the level of development and quality of governance in BTAD. We also assess which dimensions of governance influence the level of development. In the pursuit of this exercise, we develop a framework for the analysis of quality of governance and development and their interrelationship. The study is based on data reported by the citizen’s cognitive evaluations of the extent to which they perceive governance from their experiences and their achievements in various developmental parameters.

**The Unfolding Concept and Practice of Governance**

The elements of good governance and their relation to development have been reflected in a plethora of works undertaken by a number of multilateral organizations like the United Nations Development Programme and the World Bank amongst others. According to the World Bank (1992), governance is defined “as the manner in which power is exercised in the management of a country’s economic and social resources”. Similarly, UNDP (1997) defines governance as the “exercise of economic, political and administrative authority to manage a country’s affairs at all levels which comprises mechanisms, processes, and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences”. These broad dimensions of governance of the two international bodies have become popular and are used by many researchers and institutions to study various aspects of governance and its relation to developmental outcomes.

In the context of India, the term ‘governance’ gained currency during the liberalization of the Indian economy in the 1990s (Mathur, 2015). Subsequently, the Tenth plan (2002-2007) in India made explicit mention of the term governance whereby it was stated that “governance has in the recent times merged at the forefront of the development agenda and good governance is one of the most crucial factors required if the targets of the Tenth Plan are to be achieved”. According to the Tenth Plan, Governance relates to “the management of all such processes that, in any society, define the environment which permits and enables individuals to raise their capability levels, on one hand, and provide opportunities to realize their potential and enlarge the set of available choices, on the other”.

Notably, there are few institutions and scholars in India who attempted to evaluate governance on the basis of some dimensions. Mathew et al. (2017) identified 10 themes encompassing 25 focus subjects spread over 68 indicators in order to develop a Public Affairs Index (PAI) for the Indian states. The main components of good governance included in the index are the rule of law, benign policy environment, fostering a market for growth, public services, social sector
responsibility, accountability, information, etc. Mundel et al. (2016) in their study used the output of the quality of public service delivery as the measure of the quality of governance in Indian states and prepared an index of governance quality to rank states of India. Virmani et al. (2006) also computed an index of quality of governance at the state level in terms of the provision of public goods by the state governments in India and also in Pakistan and Sri Lanka. Similar studies on governance were undertaken by Court (2003) and Basu (2002).

On the basis of the above discussion, in our study governance has been analyzed in a multidimensional framework and is defined as “the way economic, political and administrative authority” is exercised for the development of BTAD. This implies the performance of various institutions within the territory which enables individuals to raise their capability levels and provide opportunities to improve their socio-economic condition. In this study, important dimensions pertaining to measuring the quality of governance is a broad manifestation in several institutions such as Political, Legal and Judicial, Administration and Public service delivery, and Economic and Social.

The framework of Governance Assessment

The empirical approach to the study of the quality of governance at the local level needs to consider the economic and social setting of the study area. In this context, we have adopted the framework of governance assessment from the Department of Administrative Reforms, Public Grievances and Pensions (DARPP 2009) which was developed keeping intact the Indian political economy context. This framework encompasses and is congruent with the principles and constituents of the quality of governance of the World Bank and UNDP, thus making it a globally competent one. However, we have modified the framework according to the suitability and need of our study thus contextualizing the approach. There are four dimensions of governance pertaining to measuring Quality of Governance (QoG) that have been used in this study namely: Political (PoQD), Legal and Judicial (LJQD), Administrative and Public Service Delivery (APSDQD) and Economic and Social dimensions (ESQD). Each of these dimensions has been captured by several other attributes of governance. These dimensions of the quality of governance (QoG) has been discussed in the following and depicted in figure 1.

Political Quality Dimension: Political Quality Dimension (PoQD) assesses the perceptions of the people in matters of conduct of individuals and institutions representing the people, contestation and use & abuse of political authority, decentralization and citizen’s faith in the political system. This component has been captured by the questions: whether they have voted in the last council election, whether there were any incentives offered by any political parties in cash/kind or whether the election was held in a peaceful environment. Another political dimension of governance pertains to asking the public about the accessibility to the elected leaders, their transparency and accountability, and the performance/functioning of the Village Council Development Committee (VCDC), Town council/Municipalities.

Legal & Judicial Quality Dimension: The state is vested with coercive power to maintain law and order the state must ensure that every individual has the right to justice. This function of the state has vital implication for economic activity that when the general law and order is seen to be poor; investors, businesses, etc. are affected, which has detrimental effects on the economic environment and employment opportunities of the people. Under the Legal and Judicial Quality dimension (LJQD), we seek to assess prevailing law and order wherein citizens’ lives and property are generally safe and secure. This component has been captured by asking the questions related to trust in the police/judiciary and other security measures served by the administration.

Administrative and public service delivery: Provision of public services is the most important function of the state. The citizens of a country, especially the poor and disadvantaged, depend on the government for various public services such as basic infrastructure, education, primary healthcare, water, and sanitation, etc. For the majority of the population, this reflects governance – good or otherwise. The Administrative and Public Service Delivery Quality Dimension (APSDQD) is captured by asking the respondents about their accessibility to the public services, the nature of the response to the needs of the general public and their grievances, perceptitional level of corruption, etc.

Economic and Social Dimension: The Economic and Social Quality Dimension (ESQD) looks at the ability of the state to cater to the needs of the poor sections of the society and to create a conducive environment for economic activity to take place. This component pertains to those aspects of economic governance which affect the livelihood of the people within the territory and includes general investment climate, credit facility, infrastructure, etc. This component has been captured by asking the respondents whether they avail benefits of social security schemes such as monthly ration, housing, etc. And also, respondents were asked about their treatment in public places due to being different in religion, caste/community, etc.

The framework of governance analysis as depicted in figure 1 is the basis of our study. Governance constitutes four dimensions namely Political (PoQD), Legal and Judicial (LJQD), Administrative and Public Service Delivery (APSDQD) and Economic and Social dimensions (ESQD); and these dimensions have been captured by forty-eight indicators. The last branch in figure 1 (i.e. P1, P2, P3, ..., E6, E7, E6) depicts the indicators that have been used in the questionnaire to draw the data.
Figure 1: Framework of Governance Quality Analysis

Sources: Adapted with modification from D.A.R.P.P (2009)

Contextualization of development

Economic development implies an improvement in the standard of living and well being. According to Sen (1988) in order to assess “what kind of a life the person has succeeded in living, we have to take a more integral view of that person’s life apart from the real income enjoyed by a person in a given year, which otherwise reflects at best only the extent of well-being enjoyed by that person at that period of time”. Hence we posit that broader evaluation of the level of development of individual/society has to be undertaken in a multidimensional framework and should include economic status, social status, and empowerment. A household/individual may be economically poor but maybe rich in other dimensions of social status and empowerment and vice versa.

The present study considers three dimensions of development viz. economic, social and empowerment for evaluation of a household/societal level of development that has been discussed in the following.

Economic: This dimension assesses the economic status of the household. There are different ways to assess the economic condition of a household; one very fundamental indicator that has been rigorously used in economic analysis is the income. However, with the genesis of various dimensions of development, income has been considered only as a means to end; hence we include two components of economic status in this study namely: income and assets. Assets in this study include durable goods such as Television, Mobile Phones, Motor vehicle, Bi-cycle, etc. and household characteristics such as type of floor, roof, presence of drinking water facilities, separate kitchen, toilet, etc. Shariff (2017) in his analysis of district development for some Indian states constructed the ‘composite district development index’ using both income and assets as measures of economic status and material wellbeing respectively. Income variable and asset measure may be correlated; however, the two might reflect different dimensions of economic well being (Gasparini et al., 2008; Lora, 2008; Headey and Wooden, 2004; D’Ambrosio et al., 2009). Income reflects the short run wealth and long-run wealth can be derived by nonmonetary assets which give an understanding of the long-run financial conditions of individuals and households (Kuypers, 2018). In a primary study as this one, it appears that sometimes a household may be poor in terms of monetary income but when we consider household assets including livestock, land, carts, television, etc., it balances out in
comparison with those counterparts who are rich monetarily. Therefore, overlooking wealth in terms of assets apart from the direct income flows misses much of the scope for analysis of the level of development.

**Social:** Social dimension of development analysis has been captured by the health and educational status in empirical studies by researchers and institutions such as in UNDP Human Development Index (HDI), Sustainable Society Index (SSI), and Composite Global Well-Being Index (CGWBI) among others. In this study also, we use educational achievement and health status in the analysis of social development. According to Diener et al. (1997) development must be able to make an individual healthy and knowledgeable.

**Empowerment:** This dimension is another very important part of the analysis of development; an individual who claims to be developed, he must be empowered too. However, it is a complex dimension to deal with and not everyone accepts that empowerment can be clearly defined, let alone measured (Kabeer, 1999). In this study, empowerment is analyzed from the perspective of women empowerment. The inclusion of women empowerment in development analysis is significant in India for the well-being of the entire household (Kishor and Gupta, 2004). We ascribe to the empowerment domains of resources and agency space (Mahmud and Tasneem, 2014) in evaluating the status of women empowerment in this study. Being able to make independent decisions with respect to political participation, social practices (religion, festival) and marriage, etc. are important indicators of empowerment (Charmes and Wieringa, 2003). The empowerment aspect of the developmental analysis is what Sen (1985) terms as capabilities: the potential that people have for living the lives they want. In the field investigation, questions related to empowerment were asked within the domains of resource (economic), agency (socio-cultural), and agency (interpersonal). These dimensions deal with the decision making and power of the women in their personal decision and household functioning.

Based on the above discussions, our evaluation of development is based on the framework as depicted in figure 2. It constitutes three dimensions of development namely economic, social and empowerment. Under “economic dimension”, income and assets have been used as the indicator; under “social dimension” education and health are used as the indicator and empowerment dimension has been captured by the domains of agency and resource.

![Figure 2: Framework of Development Analysis](image)

**DATA AND METHODOLOGY**

Bodoland Territorial Area District (BTAD) which is the study site is situated on the lower Assam within India’s North Eastern Region (Figure 3) It comprises of four districts (Kokrajhar, Chirang, Baksha, and Udalguri) and has a population of about 3,155,359 (in lakh) and an area 8,821.68 sq.km (Census 2011). In this study, we have purposively selected two districts of BTAD, namely Kokrajhar and Udalguri. We selected six Community Development Blocks (CDB) from each district and from the selected CDBs, 17 villages were sampled to collect data at the household level. Households were randomly selected from the sample villages and from each household, an adult member above 18 years was randomly chosen as the respondent. The present study used data from the field survey of 400 households in both rural and urban areas of the two districts. The method used to collect the data was direct personal investigation through a scheduled questionnaire which is given in the appendix. A field survey was conducted by the author from February to May 2018.

**Construction of Indices:** Our analysis is based on the index value of governance and development variables. We have constructed Composite Quality of Governance Index (QoGI) on the basis of four sub-indices of governance namely: Political Quality Dimension (PoQD), Legal and judicial (LJQD), Administrative (APSDQD) and Economic & Social (ESQD). Similarly, for the development variable, we have constructed Composite Development Index (CDI) on the basis of three sub-indices of development namely: Economic Index (EcI), Social Index (SoI) and Empowerment Index (EmpI).
In order to obtain the Composite Development Index (CoDI) and the Quality of Governance Index (QoGI), we follow the following steps:

**Step 1:** The values in each indicator of a sub-dimension have been summed up to get the Sub-dimensional Score.

**Step 2:** Having derived the dimensional score, we have standardized the values by the following method:

$$X_{ij} = \frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}$$

Where, $X_{ij}$ is the standardized score of $j$ sub-dimensions and $i$ households, $i=1,2,3,...,400$

**Step 3:** Standardised Dimensional score obtained have been used to obtain the value of the dimensional index by the following equation:

$$C_{ij} = \frac{\sum_{i=1}^{400} X_{ij}}{n}$$

Where $C_{ij}$ is one of the components of governance/development dimensions; index $X_{ij}$ is the subcomponent that constitutes the main component ($C_{ij}$) and $n$ is the number of sub-components.

**Step 4:** Having obtained the Dimensional index ($C_{ij}$), the next step is weighting. We have used the method of Principal Component Analysis to derive the weights for each dimension.

We computed the weighted dimensional index as follows:

$$Z_{ij} = W_j C_{ij}$$

Where, $Z_{ij}$ is the weighted dimensional score of $j$ dimension, $W_j$ is the weight of $j$ dimension and $X_{ij}$ is the actual score of the dimension, where $i=1,2,3,...,400$

**Step 5:** Finally, the Composite Indexes obtained by taking the average of the $Z_{ij}$ i.e.

$$Y_i = \frac{E(Z_{ij})}{N}$$

Where, $Y_i$ is the Composite Index (QoGI or CoDI) ; $i=1,2,3,...,400$ and $N=$ total number of dimensions.

The value of the composite index lies between 0 and 1. The value closer to 1 shows a higher level of development/better governance and value closer to 0 represents a poor level of development/governance.

Depending on the nature of the data, we used: (i) Pair-wise Spearmen Rank Correlation analysis and (ii) CHAID decision tree development.

**Spearmen rank correlation:** Spearmen rank correlation coefficient is a nonparametric measure of the correlation between variables. It assesses how well an arbitrary monotonic function could describe the relationship between two variables, without making any assumptions about the frequency distribution of the variables. This statistics is used basically to meet the first objective of the study i.e. to test if significant correlations exist between the dependent and independent variables over the entire sample. This test is done for the BTAD as a whole and at a district level as well.
CHAIID: Chi-squared Automatic Interaction Detector (CHAIID) is used to achieve the second objective of the study i.e. to examine dimensions of governance influencing the level of development. CHAIID is based on Pearson’s Chi-square statistic and corresponding p-value. CHAIID is a form of analysis that determines how continuous variables best combine to explain the outcome in a given dependent binary response variable. Hence, CHAIID detects the association between the categorical dependent variable and multiple independent variables (Milanović et al. 2016). In the present study, the response variable is the status of development i.e. being developed or poor. The benefit of this analysis is that it can visualize the relationship between the binary target variable and the relative factors in a tree image. The state of development has been classified into binary as “developed” and “poor”. CHAIID analysis is used to examine the influence of governance variables on the level of development. For CHAIID analysis we have used IBM SPSS Statistics for Windows, Version 20.0.

RESULTS AND DISCUSSION

Correlation Analysis: Pair-wise Spearman correlation analysis indicates the existence of important relationships between variables of governance and development (see Table 1). The correlation results between the level of development (CoDI) and Quality of governance (QoG) in BTAD is found to be positive and significant (p<.05). This implies that improvements in economic and social development and empowerment are related to the quality of governance. When we examine the correlation across dimensions of QoG and CoDI, we find that CoDI& LJQD and QoGI&E Empowerment do not have significant relationship. Nevertheless, the positive correlation between these dimensions of development and governance is indicative of the fact that improvements in LJQD and QoG will have a positive impact on the CoDI and Empowerment respectively. However, a very significant relationship (0.01 level) is observed between the CoDI and APSD which is suggestive of the fact that as administrative and public service delivery dimensions of governance improve, there will also be improvement in the level of development. Similarly, we find that CoDI and Political dimensions of governance (PoQD) are correlated at 0.05 level of significance. We also find that QoG is significantly associated with economic and social development dimensions.

Despite the results of positive and significant correlations of the considered variables of development and governance in the BTAD as a whole, when we examine it district wise sharp differences were observed in the direction of the relationship between QoG and CoDI and their components. This depicts the regional disparity in the study area and therefore uniform developmental policy framework is envisaged for balanced spatial development.

The result shows that in Udalguri there is a negative relationship between CoDI & QoGI, CoDI & LJQD, CoDI & APSD, and QoGI & Empowerment. The positive relationship is observed only in the case of CoDI & PQDI, QoGI & Economic and QoGI & Social; although the relationship is not statistically significant. This result, however, is not surprising. When we proposed this study, it was striking in our minds that if we are to evaluate the level of development and governance in BTAD, then we must take a representative sample of both population and places in BTAD. Therefore, out of the four districts in BTAD, the district of Udalguri was purposively chosen along with Kokrajhar, so that we can examine the results of study at the farthest place from the headquarter of BTAD. Having visited the places in Udalguri during our field survey, we observed that people’s perception of governance and development about their locality as compared to Kokrajhar is poor. The infrastructural facilities such as roads and bridges and other social services such as educational facilities are perceived to be poor and opined that all the developmental works have been driven towards Kokrajhar. It is fair to say that the majority of the developmental works under BTAD have been undertaken in Kokrajhar district until recent years. For instance, apart from other infrastructural development, prominent ones are in the educational sectors such as the establishment of ITI, Bodoland University, Central Institute of Technology (CIT), Bineswar Brahma Engineering College, Medical College, etc. This perception of being deprived of developmental facilities might be a reason for the negative correlation in Udalguri.

However, in Kokrajhar district, there exists a positive correlation across all dimensions of governance and development and the relationship is statistically significant at p<0.01 in the case of CoDI & QoGI, CoDI & APSD, QoGI & Empowerment. On the other side, the QoGI & Economic dimension of development has a positive significant relationship at p<.05. Although the relationship between CoDI & LJQD and QoG I& Social is positive, it is not statistically significant.

Table 1: Rank Correlation between CoDI and QoG, CoDI and dimensions of QoG

| Study Area | N     | CoDI/ QoGI | CoDI/PQDI | CoDI/LJQD | CoDI/APS D | CoDI/ESD | QoGI/Economic | QoGI/Social | QoGI/Empowerment |
|------------|-------|------------|-----------|-----------|------------|----------|---------------|-------------|------------------|
| Kokrajhar  | 210   | .222*      | .113      | .114      | .223*      | .134     | .154          | .113        | .241*            |
| Udalguri   | 190   | -.015      | .088      | -.022     | -.023      | -.103    | .004          | .102        | -.088            |
| BTAD       | 400   | .121*      | .106*     | .050      | .130*      | .035     | .099*         | .114*       | .092             |

** denotes significance of correlation at the 0.01 level
* denotes significance of correlation at the 0.05 level

Sources: Author(s) calculation based on field survey data
Village-wise Analysis

As observed in the previous analysis that the relationship between the level of development and governance varies from place to place. Does this mixed relationship results replicate across the villages in the study area? In the following analysis, we attempt to examine them and the result has been shown in Table 2.

The relationship between CoDI & QoGI is positive in the villages of Nepalpara, Dotma, Kahjurbari, Magurmari, Ravapara, Andurjhar, Kalaigaon, and Naptipara. It implies that the positive relationship is observed in only 8 villages (47%) of the study area and it is statistically significant only in Magurmari village. Similarly, we observed that across the villages and across dimensions of governance and development, the relationship differs from place to place. A positive relationship across all dimensions has been observed only in three villages of the Kokrajhar district namely Nepalpara, Dotma, and Magurmari. It is interesting to observe that the two urban wards Kokrajhar ward no.5 and Udalguri ward no.2 show a negative relationship in all dimensions (except QoGI & Empowerment in Kokrajhar and QoGI & Social in Udalguri). Perhaps, it may be because urban dwellers are richer and more informed about the policies than their rural counterparts. From the field survey observation, we found that the people in the urban dwellers have high expectations of the government and authorities concerned for better delivery of public services. They expect better schools and colleges, better recreational grounds & parks, better sanitation, proper drainage system and a responsive authority. According to them, this could be due to lived experience of the poor as they can have a better assessment of the deficiencies of the public policies and therefore rate them as low. Lora (2008) calls this phenomenon ‘aspirations paradox’, as the perceptions of the poor are shaped by their lower expectations because “lack of aspirations weakens the demand of the poor for better education, health services, and social protection compared with middle or high-income groups that have more information and political influence”.

Table 2: Rank Correlation between QoGI and dimensions of CoDI

| Name of Villages          | N  | CoDI/QoGI | QoGI/Economic | QoGI/Social | QoGI/Empowerment |
|---------------------------|----|-----------|---------------|-------------|------------------|
| Nepalpara (Dotma)         | 31 | .337      | .420          | .174        | .192             |
| Debargaon (Dotma)         | 24 | -.032     | .118          | .023        | -.127            |
| Dotma Pt.-II (Dotma)      | 25 | .238      | .223          | .083        | .334             |
| PachimDangarkuti (Dotma)  | 11 | .355      | -.245         | -.292       | -.278            |
| Khajurbari (Dotma)        | 13 | .390      | -.148         | .285        | .441             |
| Magurmari (Dotma)         | 14 | .640      | .326          | .726        | .671             |
| Ravapara (Dotma)          | 20 | .081      | -.002         | -.048       | .095             |
| Narabari (Dotma)          | 15 | .089      | -.057         | -.220       | -.041            |
| Andurjhar Pt.I (Bilasipara) | 12 | .340      | .098          | .235        | .408             |
| Ward No. (Kokrajhar)      | 5  | .45       | -.196         | -.073       | .035             |
| Rangagaon (Khoirabari)    | 15 | .157      | .014          | .231        | .071             |
| Jhargaon (Khoirabari)     | 28 | -.178     | -.203         | .015        | -.233            |
| Tokankata (Kaligaon)      | 23 | -.178     | -.203         | .015        | -.233            |
| Kalaigaon (Kaligaon)      | Town | .036   | .050          | .205        | -.046            |
| JhiliKhat (Kaligaon)      | 15 | -.142     | -.282         | -.005       | .011             |
| Naptipara (Kaligaon)      | 18 | .059      | -.070         | -.198       | .195             |
| Ward No. (Udalguri)       | 2  | 52        | -.017         | -.053       | -.025            | -.055            |
In this section, we attempted to examine which dimensions of governance influence the level of development. Level of development is classified as “being poor” or “being developed”. Our hypothesis is that dimensions of the quality of governance determine the level of development.

CHAID analysis identified the two most important dimensions of governance that have an impact on the level of development. As can be seen in figure 4, the most significant independent variable is the Political dimension of governance (PoQD) which implies that it is most strongly associated with the dependent variable (development status) and has the most power in the division of observations into two groups. (Statistical significance of PoQD was determined, with $\alpha=0.05$ using following values: $\chi^2=20.905, df=2, p\text{ value}=0.001$.) The political dimension splits the root node into two groups containing different categories of PoQD presented as node 1, node 2 and node 3. The majority of respondents belong to node 3 (153) which groups values of PoQD ranked as $>211$. Node 2 has the second-largest respondents with 137 which ranked PoQD as $(75<\text{PoQD}<211)$. The rest of the respondents belong to node 1 containing PoQD values ranked $<75$. As for the percentage distribution of the two categories of development Node 1 and Node 3 groups are dominated by poor categories of development; while node2 is dominated by the developed category group. Therefore, for PoQD within the first level of the tree, node 2 is the parent nodes.

Within the second level of the tree, one statistically significant variable is identified: Administration and Public service delivery (APSDQD). Variable APSDQD is significant for splitting of node 2 ($\chi^2=9.776, df=1, p\text{ value}=0.001$). Accordingly, it splits the respondents into two categories: respondents who ranked APSDQD=$\leq172$ belong to node 4, while those who ranked APSDQD $>172$ belong to node 5. As for the percentage distribution of the two categories of development node 4 groups are dominated by developed categories of development; while node 5 is dominated by the poor category group. (Node 4 implies that ranking administrative and public service delivery $=172$ influenced 73.6% of the respondents to be developed and only 26.4% of the respondents to be poor. On the other hand, of the total respondents in node 5, those who ranked APSDQD $>172$, 52.3% of the respondents are to be poor and only 47.7% belong to a developed category.)

Thus CHAID generates a set of rules for classification of respondents into one of the defined categories of the variable i.e. developed or poor and the decision tree can be formulated as if-then rules. For instance, the rule in node 4 can be interpreted as follows: if a respondent has ranked APSDQD $\leq172$ and Political dimension $(75<\text{PoQD}<211)$ then, we can state with 0.74 probability, that category of development of that particular respondent is “developed”.

The CHAID analysis extracted two statistically significant predictors of a level of development viz. political dimension and administrative and public service delivery dimensions of governance that reaffirms governance-development nexus. Thus we accept the hypothesis the PoQD and APSDQD dimensions of governance influence the level of development in the study area.

Table 3 depicts the prediction risk as a percentage of inaccurately classified observations. The findings in this study suggest that given the ranking of governance in terms of the four independent variables, the risk of inaccurately classifying respondents in terms of being poor/developed is 37.5%; while that risk is 41.2% in model cross-validation when a test sample is used.

| Risk                     | Estimate | Std. Error |
|--------------------------|----------|------------|
| Re-substitution          | .375     | .024       |
| Cross-Validation         | .412     | .025       |

Dependent Variable: Classification of development into binary class

Sources: Author(s) calculation based on field survey data

CONCLUSION

The results of our study show that the quality of governance is critical to development. An important implication emerging from this study is that political, legal and judicial, administrative and public services delivery, economic and social dimensions of governance is found to be associated with the economic, social and empowerment dimensions of development. The significant positive relationship between the level of development and quality of governance implies that
improvements in economic and social development and empowerment are related to the quality of governance. Nevertheless, district wise and village wise analysis depict regional disparity in the study area and therefore uniform developmental policy framework is envisaged for balanced spatial development.

The identification of the political and public service delivery dimensions of governance as important influencing factors on development reaffirms the governance-development nexus. Accordingly, amongst other factors, an efficient system and management of political institutions and effective administration and public service delivery is the key to the enhancement of economic development. This envisages improvements in the quality of political contestation, conduct of individuals and institutions representing the people, proper use of political authority and decentralization powers and earns citizen’s faith in the political system. Likewise, the priority of the state should be a better policy framework for the provision of public services such as primary healthcare, education, water and sanitation, basic infrastructure, etc. Because, for the majority of the population, this reflects governance – good or otherwise.

![Classification of Development](image)

![Political Dimension of Governance](image)

![Administration and Public Service Delivery Dimension of Governance](image)

**Figure 4: CHAID Analysis**

**Sources:** Author(s) calculation based on field survey data

**RESEARCH LIMITATIONS**

The study is based on perception data; hence results may be affected by bias responses. The study does not analyze the temporal dynamics of development that is necessary to examine how development evolves. It also does not analyze the causality of the variables. How public perception changes over time? These are scope for the future course of research.

**ACKNOWLEDGMENT**

The author acknowledges the support of the University Grants Commission (UGC) of India for the Senior Research Fellowship.
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APPENDIX: QUESTIONNAIRE

| Table A: Political dimension of Governance |
|-------------------------------------------|
| **Indicators** | **Description of Indicators** | **Code** |
| P1 | Voted independently in the last election. | #LS |
| P2 | Political Parties never offered any kind of incentive to vote for them. | LS |
| P3 | The last election was peaceful. | LS |
| P4 | The elected representatives are easily accessible. | LS |
| P5 | The elected representatives do not misuse the power & authority given to them. | LS |
| P6 | Do you feel that corruptions are not prevalent among the leaders? | LS |
| P7 | Concern about the welfare of the people. | LS |
| Indicators | Description of Indicators | Code |
|------------|--------------------------|------|
| P8         | Transparent in their functioning. | LS   |
| P9         | Hurtes/bandhs in your locality do not affect you. | LS   |
| P10        | The performances of elected representatives are satisfactory. | LS   |
| P11        | The functioning of VCDC/Town Municipality is satisfactory. | LS   |
| P12        | The leadership quality by the chairman of VCDC/Municipality is satisfactory. | LS   |
| P13        | The Chairman is easily accessible to general public. | LS   |
| P14        | The representatives in VCDC/Municipality do not misuse the power & authority. | LS   |

# Note: LS stands for Likert Scale; 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree

Table B: Legal and Judicial Dimension of Governance

| Indicators | Description of Indicators | Code |
|------------|--------------------------|------|
| L1         | You feel that life and property are secured. | #LS  |
| L2         | The police in your area are adequately prepared to enforce law and order. | LS   |
| L3         | The government in your area is adequately prepared to handle grave security threats. | LS   |
| L4         | The people are at ease with the local police. | LS   |
| L5         | The thefts and other crimes are under control. | LS   |
| L6         | Feel that any person in your area will be fairly treated if arrested. | LS   |
| L7         | People do not need to pay bribe to police officials. | LS   |
| L8         | People do not need to pay bribe to law officials. | LS   |
| L9         | Feel the judiciary can be trusted. | LS   |
| L10        | The judicial system in your district is not corrupt. | LS   |

# Note: LS stands for Likert Scale; 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree

Table C: Administrative and Public Service Delivery dimension of Governance

| Indicators | Description of Indicators | Code |
|------------|--------------------------|------|
| A1         | Government functionaries in your area are usually accessible to general public. | #LS  |
| A2         | Government functionaries are responsive towards the needs of the general public. | LS   |
| A3         | The response of grievance redressal in your area is satisfactory. | LS   |
| A4         | Supply of monthly entitlement of food grains at fair price shops is satisfactory. | LS   |
| A5         | Supply of electricity in your area is satisfactory. | LS   |
| A6         | The quality of education provided is satisfactory. | LS   |
| A7         | The quality of mid day meals provided is satisfactory. | LS   |
| A8         | The quality of roads in your locality is satisfactory. | LS   |
| A9         | The transportation facility in your locality is satisfactory. | LS   |
| A10        | The postal services in your locality are satisfactory. | LS   |
| A11        | The community health worker visited your household in every three months. | LS   |
| A12        | Doctor(s) is/are regularly available at the health care centers. | LS   |
| A13        | At the health care center staffs treat patients with due care and courtesy. | LS   |
| A14        | Medicines are usually available at the health care centers. | LS   |
| A15        | Healthcare services provided by the health care centers are satisfactory. | LS   |
| A16        | Corruption in delivery of public services has come down in your area. | LS   |

# Note: LS stands for Likert Scale; 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree
The marketing support provided in your area is satisfactory.  
There is easy access to credit facility for agricultural/business start-up purposes.  
The quality of agricultural material (seeds, fertilizers, etc.) is satisfactory.  
The goods/materials provided by the government is satisfactory.  
There is fair distribution of the stipulated amount of ration every month.  
There is timely delivery of old age pension.  
There is freedom to practice the religion of your choice in your area.  
No discrimination in social life due to your religion, social or cultural identity in your area.

# Note: LS stands for Likert Scale; 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree

| Components | Indicators | Value/Code |
|------------|------------|------------|
| Income     | The total monthly income of the family. | In Indian Rupees |
| Asset      | The ownership of the following assets in the household: | |
|            | i) Own agricultural land. | 1', if yes; '0' otherwise |
|            | ii) A pressure cooker. | 1', if yes; '0' otherwise |
|            | iii) A cot or bed per person. | 1', if yes; '0' otherwise |
|            | iv) An electric fan/ ceiling fan. | 1', if yes; '0' otherwise |
|            | v) A television. | 1', if yes; '0' otherwise |
|            | vi) An LCD/LED TV. | 1', if yes; '0' otherwise |
|            | vii) A smart phone. | 1', if yes; '0' otherwise |
|            | viii) Use internet. | 1', if yes; '0' otherwise |
|            | ix) A computer/Laptop. | 1', if yes; '0' otherwise |
|            | x) A refrigerator. | 1', if yes; '0' otherwise |
|            | xi) A watch/clock | 1', if yes; '0' otherwise |
|            | xii) A bicycle. | 1', if yes; '0' otherwise |
|            | xiii) A motor cycle. | 1', if yes; '0' otherwise |
|            | xiv) A four wheeler vehicle. | 1', if yes; '0' otherwise |
|            | xv) Livestock. | 1', if yes; '0' otherwise |
|            | xvi) Dwelling is a hut. | 1', if yes; '0' otherwise |
|            | xvii) Roof is tiles/concrete. | 1', if yes; '0' otherwise |
|            | xviii) Roof is iron sheets. | 1', if yes; '0' otherwise |
|            | xix) Concrete brick walls. | 1', if yes; '0' otherwise |
|            | xx) Floor is concrete. | 1', if yes; '0' otherwise |
|            | xxi) Floor is mud. | 1', if yes; '0' otherwise |
|            | xxii) Drinking water from public tap. | 1', if yes; '0' otherwise |
|            | xxiii) Drinking water from own tap. | 1', if yes; '0' otherwise |
|            | xxiv) Main source of lighting is electric. | 1', if yes; '0' otherwise |
|            | xxv) Main cooking fuel is purchased firewood. | 1', if yes; '0' otherwise |
|            | xxvi) Main cooking fuel is LPG. | 1', if yes; '0' otherwise |
|            | xxvii) Own toilet. | 1', if yes; '0' otherwise |
|            | xxviii) A separate room used as a kitchen. | 1', if yes; '0' otherwise |
|            | xxix) Use motor for drawing water. | 1', if yes; '0' otherwise |
|            | xxx) A room per person. | 1', if yes; '0' otherwise |
### Table F: Description of indicators for Social Dimension

| Components       | Indicators                                                                 | Value/Code            |
|------------------|-----------------------------------------------------------------------------|-----------------------|
| 1. Education     | Number of adults 25 years or older who have attained the following education: |                      |
|                  | No schooling                                                               | In number             |
|                  | Primary school                                                             | In number             |
|                  | Middle school                                                              | In number             |
|                  | High School                                                                | In number             |
|                  | Higher Secondary school                                                    | In number             |
|                  | Graduate                                                                   | In number             |
|                  | Post graduate                                                              | In number             |
| 2. Health        | Do you agree to the following statements:                                   |                       |
|                  | i) Your household members’ current health is good?                          | ‘1’ if yes; ‘0’ otherwise |
|                  | ii) Does not any member of your household suffered from acute illness (cough, cold, fever, diarrhoea, hepatitis, inflammation, etc.) in the past 3 months? | ‘1’ if yes; ‘0’ otherwise |
|                  | iii) Does not any member of your household suffered from chronic illness (asthma, bronchitis, heart disease, kidney, etc) in the past 12 months? | ‘1’ if yes; ‘0’ otherwise |

### Table G: Description of indicators for Empowerment Dimension

| Components                          | Indicators                                                                 | Value/Code             |
|-------------------------------------|-----------------------------------------------------------------------------|------------------------|
| Women empowerment                   | Do you agree to the following statements:                                   |                        |
| i)                                  | Can the women in your household decide on children’s level of education?     | ‘1’ if yes; ‘0’ otherwise |
| ii)                                 | Can the women in the household associate with their friends/relatives/neighbours independently? | ‘1’ if yes; ‘0’ otherwise |
| iii)                                | Do the women in the household have bank accounts on their own?              | ‘1’ if yes; ‘0’ otherwise |
| iv)                                 | Do the women in the household have equal access to the resources of the household? | ‘1’ if yes; ‘0’ otherwise |
| v)                                  | Can the women vote on her preference in the election?                       | ‘1’ if yes; ‘0’ otherwise |
| vi)                                 | Can the women negotiate her preference for marriage?                        | ‘1’ if yes; ‘0’ otherwise |