

What Makes People Satisfied with Local Government Service Delivery: An Empirical Investigation in the Context of West Bengal, India

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Abstract

In the changing paradigm of governance and public policy sphere, the importance of local-level governance institutions and expectations from them in delivering services has increased in the recent past. The present study analyses the framework of delivery of basic services. It attempted to measure the delivery and satisfaction out of service delivery by developing indices following the data-driven weightage method. Based on users' feedback, it attempts to examine how the satisfaction from services from local government varies according to household characteristics. Four basic services from local government viz. drinking water, roads, sanitation and public health are evaluated on the basis of four objective parameters viz. availability, accessibility, reliability and quality. Along with, level of satisfaction over services delivered have been assessed subjectively based on feedback. Regression method used to identify the determinants of satisfaction. The findings suggest that apart from the level of service delivery, the intrinsic household characteristics make people satisfied. The study identifies the possible presence of clientelism in service delivery. The study suggests redesigning policy to create space for citizen engagement for coproduction and reduce clientelism in service delivery by local government.

Keywords: Citizen Feedback, Clientelism, Co-Production, Local Government, Public Service Delivery, Satisfaction

Introduction

In the changing paradigm of policy making and governance, it is argued that, the 'wicked policy issues' are being addressed by decision makers through involving a range of different actors in their strategies (Weber & Khademian, 2008; Eckersley, 2017). There are literatures from scholars like Ostrom (Ostrom, 1990) to appreciate the role of subnational bodies and governance institutions in the delivery of public services. Public services are considered as indicators of a society's health, which strengthen the social contract between the state and its citizens. Not only are they the key elements of the quality of life, but they are also the essential components of poverty-reduction strategy (Akinboade, Mokwena & Kinack, 2013). Regular evaluation of such services carries significance from the standpoint of understanding the quality of services delivered and the level of satisfaction people derive from them. In the public administration and public policy discourse, assessment of performance of public service is in discussion quite a long time. The earlier literature emphasized upon mainly two different paradigms of research into service quality. These are the expectation disconfirmation paradigm and the performance paradigm. Whereas in the former model, there is a comparison between the performance and expectation of the perceived quality of public services, the performance paradigm considers only performance and considers the expectation irrelevant

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(Oliver, 1980; Carvalho, Brito & Cabral, 2010). Of late, citizens' feedback survey has gained momentum as a new technique to assess and evaluate services provided to citizens by the multi-layered government (Sekhar, Nair & Reddy, 2005; Zama, 2012). In the event of failure of traditional instruments viz. audit and legislature oversight to hold public institution accountable (Ravindra, 2004), the process of citizens' feedback solicits users' feedback on the measuring performance of public services and is increasingly being used as a tool for civic engagement (World Bank, 2004).

Keeping people satisfied with quality service is considered to be goal of any organization. However, as service quality is being seen as an antecedent of customer satisfaction, it involves measuring both customer perceptions and expectations of service (Stradling, Anable & Carreno, 2007). It is also argued that people who remain satisfied may tend to have been successful to grab greater share of the public services, possibly due to their unique socio-economic and political characteristics (Deichman & Lall, 2003). These variations in satisfaction levels have important ramification. On an ideal ground, one may argue that higher the satisfaction people derive from the public services better is the service delivery. It perhaps meets the welfare goals of client outreach and achieving desired outcomes like improvement in the quality of life, eradication of poverty, hunger, destitution and so on. While there is no denying that objective parameters measure the actual quality and quantity of services delivered, some people may remain satisfied with a given level of services, while others may not. There can, however, be an ulterior motive on the part of the service provider to keep the beneficiaries satisfied as the latter's satisfaction level has a lot to do with their judgment regarding the service providers. Especially, if the incumbent government is the service provider, this judgment carries enormous significance as it eventually gets reflected in their voting behaviour. As public services may involve 'clientelism' (World Bank, 2004) wherein the recurring benefits accruing to the people, who may belong to, what Chatterjee (1993) calls the 'political society', have an expected reciprocal return in the forms of voting the current government back to power by lowering the potential competition from the opposition parties (Bardhan & Mookherjee, 2012). It may be, in this context, imperative to understand what determines the level of people's satisfaction from the delivery of public

services and to what extent, clientelism acts an underlying force in the delivery of public services.

The present study, thus, makes an assessment of the level of satisfaction people derive from four basic services viz. drinking water, roads, sanitation and health on the basis of citizens' feedback and tries to examine how the household characteristics influence their levels of satisfaction. While examining the role of household characteristics on satisfaction, the possibilities of 'clientelism' in service delivery are also examined. In essence, the study tries to apply the notion of neoclassical utility function and satisfaction is treated as the levels of utility households derive from services delivered to them. The study argues that utility in effect, does not depend only on the commodity bundle, here, the amount of services delivered, but also on other factors like household characteristics. Accordingly, the following section of the paper delineates an analytical framework of service delivery and satisfaction. The next section outlines concept, methodology and database for the study. Following sections, respectively, explore relationship between service delivery, satisfaction and household characteristics, discuss the results and offers implications, and conclude the study.

Service Delivery and Satisfaction: An Analytical Framework

Basic services are primary requirements for reducing poverty and improving the quality of life. It is widely accepted that state should take the responsibilities of providing basic services to its citizens. In both developed and developing countries, there are specific services, which the government is responsible for funding. Though the basic characteristics of pure public goods and services are that they are non-excludable and non-rival in nature (Gruber, 2011), Seetharamu (2004) argues, it is public, as it is paid by the government. However, there are diverse mechanisms through which services are provided. Broadly, they can be classified as follows: (a) services provided only by the government; (b) services provided through the agencies; (c) services available through government and open market; (d) services provided to augment economic development and extend livelihood opportunities; and (e) services provided to a target group. Based on the modes of delivering, services are further

classified as (a) those that are process dependent and (b) those that are individual provider dependent (Pritchett & Woolcock, 2004; Roy, 2008).

Conventionally, government was the sole provider of public goods and it is argued that the private sector is likely to under provide public good due to free rider problem (Gruber, 2011). Such a monopolistic behaviour was often criticized for its out-dated approach and unfeasibility leading to the gradual emergence of private players in service provisioning (Joshi & Moore, 2004). Of late, direct market provision on a commercial basis, social provision through private association and self-provisioning through collective action have evolved as alternative service delivery mechanisms to supplement social provisioning through state agencies and sub-contracting of delivery of services (Joshi & Moore, 2004).

In recent years, there seems to have been a paradigm shift in the service delivery mechanism towards more people-centric decision making. The concept of 'co-production' has emerged as a direct form of participation so as to influence the quality of service delivery. Co-production refers to the involvement of citizens in the production process (Brandsen & Pestoff, 2008) where citizens are expected to engage and contribute and provide inputs to coproduce services hitherto exclusively produced by local government agencies in a traditional way. The process expected to establishes a synergy between efforts of citizens with government (Brandsen & Pestoff, 2008) where citizens are expected to play an active role in producing public goods and services of consequence to them (Ostrom, 1996). The three broad activities that constitute co-production are (a) citizens requesting assistance from public agencies; (b) citizens providing assistance to public agencies; and (c) citizens and agencies interacting to comply with each other's service expectations and actions (Whitaker, 1980). Co-production argued to be important for services seeking transformation of the clients' behaviour and lessening over-reliance upon service agents and bureaucratic organization (Whitaker, 1980).

In development discourse of services of public good, existence of clientelism may turn out to be a potential threat to efficient distribution of public goods. Clientelism may involve a tendency on the part of the politicians, in exchange political advantage, disproportionately favouring one group of clients over another (World Bank,

2004). It entails strategic transfers by governments to the poor and the disadvantaged as a means of securing their votes. These transfers seem to come at the expense of long-term development and, in effect, they could be inherently discretionary (Bardhan & Mookherjee, 2012).

In the efforts to evaluate service delivery, the notion of utility appears to be an important component for consideration. There are debates also of taking consumers' perception as critical component as it is an antecedent to their satisfaction. Perceptions have been defined in various ways. Consumers' perception, as defined by Strydom, Jooste and Cant (2000) as the process of receiving, organizing and assigning meaning to information or stimuli detected by the consumer's five senses and giving meaning to the world that surrounds the customers. Perceptions are also described as the end result of a number of observations by the customers. Customers perceive services in terms of quality of services provided and the satisfaction level attained (Kumasey, 2014). The perception, in turn, depends upon different service characteristics, like frequency of use, heterogeneity and directness. It is argued that less visible services, whose functions (or even which level of government is responsible) are not clear to most citizens, often enjoy more favourable views than do visible services (Hoogland, Lowery & Lyons, 1990; Kampen, Van De Walle & Bouckaert, 2006). The basic reason might be that the visibility might neutralise the expectation of citizens regarding service delivery. In evaluating satisfaction with public services, it is argued that individuals compare actual levels of service performance with their expectations about service performance. The expectations regarding services are formed based on two ways, first, the idealized way, i.e. what should be provided and second, the past experiences of service delivery (Deichman & Lall, 2003). So, the satisfaction typically does not only depend upon the level of service delivery but also the characteristics of the people receiving it. The present study thus tries to assess the impact of the level of delivery of services as a commodity bundle, considering household characteristics as control.

Concept, Methodology and Database

Conceptualising Satisfaction

The concept of neoclassical utility function has been used to conceptualize household's satisfaction. The utility

function represents that level of satisfaction is a function of level of services delivered and different household characteristics. It is assumed that, a households' level of satisfaction from service delivery is a function of level of services delivered, along with, economic status of household, the level of education and awareness of the household, size of land holdings, gender of the head of the household as well caste and political affiliation of household. Accordingly, the utility function of an individual household can be expressed as follows

$$U = U(S_i, I_i)$$

where 'S' represents the amount of services received by the households, and is measured through service delivery index in this paper, and 'I' is the vector of individual household characteristics like, education, income, land holding, political affiliation, etc.

Now, the general form of random utility function is

$$U_{ij} = \bar{U}_{ij} + \varepsilon_{ij}$$

where, \bar{U}_{ij} is a deterministic part and ε_{ij} is a stochastic part. As in this random utility model, it is assumed that the utility U_{ij} provided to individual i by service j is composed of a deterministic component \bar{U}_{ij} , which can be calculated based on observed characteristics, and a stochastic error component ε_{ij} which is unobserved.

Methodology

The objective of the study is to assess delivery of services by local government and the satisfaction from them from the users' perspectives. In this context, four basic services viz. drinking water, roads, sanitation and public health, which are important for lives of citizen and being delivered by the local government have been identified. Feedback from the households, who were recipients of these services, were sought qualitatively and quantitatively for assessment. The service delivery was assessed in two ways. Firstly, it was assessed using objective parameters like availability, accessibility, reliability and quality. Secondly, a subjective assessment of the satisfaction of the households from the services delivered to them was carried out to elicit the levels of their satisfaction over the services. The latter carries significance for the simple reason that regardless of the nature and magnitude of services, the level of satisfaction

is likely to vary according to the socio-economic and political attributes of the consumer of service delivery.

Formulation of Indices

To assess level of service delivery and satisfaction, the present study developed two indices, namely service delivery index and satisfaction index by using principal component analysis (PCA) to identify weight. The method of PCA is used in the formation of weighted index, popularly known as 'data-driven weighting index (Perišić, 2015; Decancq & Ana Lugo, 2013)'.

The method of principal component analysis is considered to be a special case of the more general method of factor analysis. The process of principal component analysis is used to transform the original set of variables into smaller set of linear combinations that account for most of the variance of the original set. The aim of the method of principal component is to construct out of a set of variables, X_j 's ($j = 1, 2, \dots, k$) new variables (P_i) called 'Principal Components', which are linear combinations of the X 's (Koutsoyiannis, 2001).

Representing it mathematically,

$$P_1 = a_{11}X_1 + \dots + a_{1n}X_n$$

$$P_2 = a_{21}X_1 + \dots + a_{2n}X_n$$

$$\dots$$

$$P_m = a_{m1}X_1 + \dots + a_{mn}X_n$$

Here, the coefficients a 's are called factor loadings. Following Perišić (2015), the first principal component have been taken into consideration to identify weight. The first principal component is the linear combination of the standardised variables that has the greatest possible variance. Procedures for the formulation of indices following the method of data-driven weighting index are enumerated as follows.

Service Delivery Index (SDI)

The present study attempted to develop service delivery index for each household by integrating status of services delivered to each household by the local government. For developing the service delivery index, four basic services

namely, roads, drinking water, sanitation and public health have been considered. By taking four different important aspects of service delivery, viz. availability, accessibility, reliability and quality, 'service delivery scores' for each service were calculated. Factor loadings corresponding to first principal component were considered to derive Principal Component (PC) scores for each service. By using the range equalization method, the estimated PC scores were normalized and then these scores have been integrated to compute service delivery index (SDI). It may, thus, be represented as

$$SDI_i = Y_{\text{water}} + Y_{\text{roads}} + Y_{\text{sanitation}} + Y_{\text{health}}$$

$$\text{when } Y_j = \sum_{i=1}^{250} \sum_{j=1}^4 X_{ija}1j$$

Here, vector X refers to the score of service delivery assessed objectively, as mentioned earlier, through four objective parameters namely availability, accessibility, reliability and quality of services delivered by local government. Values of Y were calculated by taking into consideration the factor loadings corresponding to the first principal component (1) only. SDI_i represents services delivered to ith households, which have been calculated by integrating Y_{water}, Y_{roads}, Y_{sanitation} and Y_{health} whereas, Y_{water}, Y_{roads}, Y_{sanitation} and Y_{health} are range-equalized PC scores for delivery of drinking water, road, sanitation and health services, respectively. The level of services delivered to each household has been captured by the service delivery index and it is thus calculated that higher the value of service delivery index represents higher level of services received by the household.

Satisfaction Index (SI)

In order to measure the level of satisfaction out of the aforesaid four services, a satisfaction index (SI) is formulated. Households were asked to rate their satisfaction out of services on a five-point scale from completely dissatisfied to very satisfied, and consequently, the scores under each service were used to form the satisfaction index. The factor loadings corresponding to the first principal component were considered as weight to calculate PC score. Then similar to procedures as described above, range equalization with equal weight method was used to calculate satisfaction index. Satisfaction index can be represented as

$$SI_i = Y_{\text{water}} + Y_{\text{roads}} + Y_{\text{sanitation}} + Y_{\text{health}}$$

$$\text{when } Y_j = \sum_{i=1}^{250} \sum_{j=1}^4 X_{ija}1j$$

Here, the vector X represents score on the level of satisfaction of households. Here, SI_i represents satisfaction index of ith household and Y_{water}, Y_{roads}, Y_{sanitation} and Y_{health} are range equalized PC scores of satisfaction out of the corresponding services.

Database

The present study is based on primary data collected through household level survey conducted during the period October 2010 - July 2011 in the district of East Medinipur in the state of West Bengal, India. The sample size is 250 households, which were selected following the method of stratified random sampling. The concerned district, East Midnapore, which has 25 development blocks, from there five development blocks were selected. Factors like proximity to the district headquarters and geographical spread were considered as the key criteria at the time of selection of blocks. Following the same rules, viz. proximity to the block and Gram Panchayat office, respectively, and geographical spread, the selection of Gram Panchayats (village level institute of self-governance) and villages under them was done. However, the respondent households were selected at random from the sampled villages. The procedure followed for the purpose is questionnaire-cum-personal interview. Personal interviews of households were conducted based on structured questionnaire. The questionnaire covers broad aspects of socio-economic, demographic and village-level characteristics. The subjective notions of satisfaction out of service delivery, as well, motivation and willingness to participate in the decision making and contribute towards service delivery process were also assessed during personal interview through structured questionnaire. The researcher conducted personal interviews of households and feedback from 250 respondent households finalised for analysis.

Service Delivery, Satisfaction and Household Characteristics

The study attempted to explore the relation between satisfaction and amount of service delivery, household characteristics and household's contributions in the provisioning. The following multiple regression models have been specified for estimation.

$$SDI_i = \alpha + \beta_1 Edu_i + \beta_2 Inc_i + \beta_3 Land_i + \beta_4 NewsP_i + \gamma_1 Pol_i + \gamma_2 Cont_i + \epsilon_i \quad \dots(1)$$

$$SI_i = \alpha + \beta_1 Edu_i + \beta_2 Inc_i + \beta_3 Land_i + \beta_4 NewsP_i + \gamma_1 Pol_i + \gamma_2 Cont_i + \epsilon_i \quad \dots(2)$$

$$SI_i = \alpha + \beta_1 SDI_i + \beta_2 Edu_i + \beta_3 Inc_i + \beta_4 Land_i + \beta_5 NewsP_i + \gamma_1 Pol_i + \gamma_2 Cont_i + \epsilon_i \quad \dots(3)$$

Here, SDI_i represent values of service delivery index and SI_i represents Satisfaction Index for i^{th} household. The independent variables Inc, Edu, Land, NewsP, Pol, Cont represent monthly income, mode years of schooling, size of agricultural land holdings, number of household members reading newspapers, political affiliation and contribution towards service delivery, respectively. All these variables are considered at the household level.

Income, years of schooling are incorporated considering natural logarithm of the respective values, while the rest of the variables are standardized following $\frac{x-\mu}{\sigma}$ where μ is mean and σ is standard deviation of variable. Political affiliation and contribution are taken as dummies. A brief description of operationalization of variables and their summary statistics are presented in Table 1.

Table 1: Method of Operationalization of the Variables and Summary Statistics

Determinants	Variables Considered	Method of Operationalization	Symbol Used	Mean	Standard Deviation
Knowledge and Awareness Level	Years of schooling	Natural log transformed mode years of schooling of the household	Edu	10.48	3.63
	Access to information	Standardized number of members of a household member reading newspaper	NewsP	1.2	1.3
Economic Status	Household income	Natural log transformed monthly income of the household	Inc	5790	4904.64
	Land holding	Standardized size of land holding of the household (in acres)	Land	0.45	0.75
Political Behaviour	Political Affiliation	$\gamma_1=1$, if household is affiliated or supporter of the same political party of the concerned local elected representative =0, otherwise	Pol		
Contribution	Contribution towards delivery of basic services of roads and drinking water	$\gamma_2=1$, if household contributed = 0, otherwise	Cont		

Results and Discussion

The regression result represented in Table 2 indicates the existence of relationship between Service Delivery and Satisfaction with household characteristics. Results of model 1 indicate that the estimated coefficient of income has a negative sign, indicating thereby that with rising income, the households receive fewer amounts of public services. However, political affiliation and land holding were found to be positively related to service delivery. This implies, households with more land holdings are, thus, likely to attract more public services in their favour. The positive result of political affiliation indicates political proximity of households with representative of local Gram Panchayat. The Gram

Panchayat is the institute of self-governance at local level as well the service delivery institution at local level. This result indicates the household with the proximity with the political representatives tends to attract more public services in their favour. This situation raises the possibility of 'clientelism' in the service delivery at the local level (Nayak & Samanta, 2014). In the development discourse, 'clientelism' indicates the a typical patronage behaviour of politicians, where the political competition is addressed by excessively favouring one group of clients over another group, in exchange of political advantage (World Bank, 2004). Contribution of households, which indicates higher form of participation as coproduction, was found to be positive. Contribution in different forms, towards services, was found to have significant

positive impact on delivery of basic services. The result indicates that a household receive better services, when it contribute towards supply of basic services or engage in coproduction. The result provides hints and suggestions that peoples' engagement in service delivery process through contribution establishes a kind of community ownership over the goods and services, which are being delivered through local government. The process also encourages households, hitherto recipient, to hold service provider institution accountable and pressurise them hard to ensure serve them better. The experience of Cotlear on Peru in health sector (Cotlear, 2000) also establishes almost same fact that in a health institution, which is

being managed by local citizen, the health outcome found to be better and improved than other health institutions managed otherwise. This type of practice, often termed as 'co-production, creates avenues for a designing public policy accordingly to create spaces to engage citizens with service providers. Co-production, as defined by Brandsen and Pestoff (2008), is a public policy initiative in establishing synergy between the efforts of the government and the citizen. It is considered to be a higher form of participation, where citizens' behaviour transforms and hitherto exclusive traditional public service delivery agencies creates spaces for inputs from citizen to coproduce services.

Table 2: Regression Results

Variables	Model 1	Model 2	Model 3
	Service Delivery Index	Satisfaction Index	Satisfaction Index
Service Delivery			.404(.064)***
Education	-.013(.021)	-.022(.023)	-.017(.021)
Access to information	-.002(.009)	-.020(.010)**	-.019(.009)**
Household income	-.046(.013)***	.013(.014)	.032(.013)***
Land holding	.035(.008)***	.015(.009)*	.001(.008)
Political Affiliation	.050(.016)***	.041(.017)***	.020(.016)
Contribution towards delivery of basic services	.081(.016)***	.041(.017)***	.009(.017)
F Value	13.08***	3.18***	8.83***
R-Squared	0.2442	0.0728	0.2034
Adj R-Squared	0.2255	0.0499	0.1803

Note: 1. Standard errors given in parentheses.

2. *, **, *** represent levels of significance at 10%, 5% and 1% respectively.

Source: Author's calculation from the primary data.

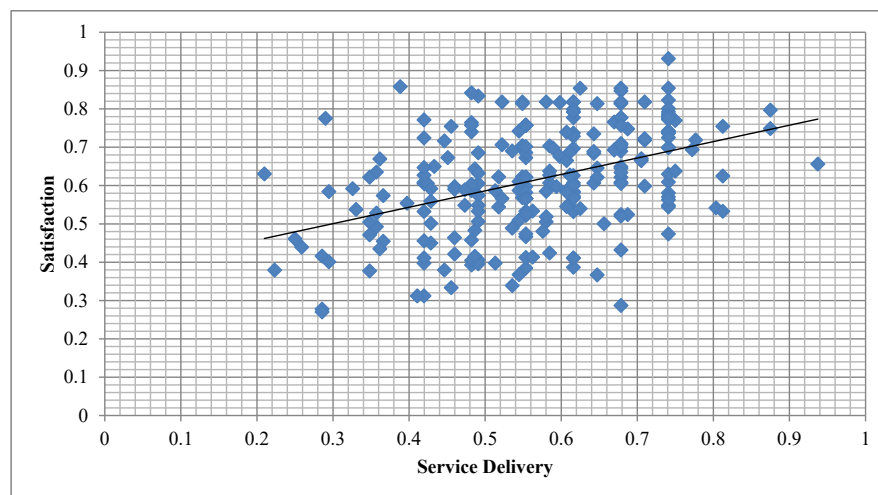


Chart 1: Plotting of Satisfaction and Service Delivery Indices

The results from models 2 and 3 clearly specify a strong relation between satisfaction and service delivery. Among the other factors chosen, factors like land holding, reading newspaper, political affiliation and making contributions influence the level of satisfaction of the households. While reading newspaper leads to negative impact on the level of satisfaction, the remaining factors exert positive impacts. Interestingly, education and income do not seem to influence satisfaction of the households. As households possessing greater land holdings are found to have greater access to public services (from model 1), it is expected that these households will remain satisfied. Reading newspaper, as a source of awareness, may raise expectations among people from the services delivered, which may raise the expectation of households on service delivery and make the households less satisfied with the given standard. This result might confirm the expectation-disconfirmation paradigm of service delivery, as argued by Oliver (1980), where the citizen compares between the expectation and perceived service quality. The positive impact of political affiliation again opens up the possibility of 'clientelism' in delivery of basic services, which implies that channelization of more services towards the supporters by a local representative for political mileage. Another argument in this regard might be that the supporter of the current ruling political party identified themselves with the government and self-contained them with services they receive. This typical behaviour has the tendency to transform an individual's thinking of identity from citizen to part of the ruling party. Moreover, during the field study, it was observed that people are strongly divided on party lines and remain loyal to the elected representatives regardless of favour. Yet another interesting finding is that if the households make contributions, it may establish some kind of ownership over services. This may keep the households content with the service provisions.

Conclusion

In the changing paradigm of governance and public policy sphere, the importance of local-level governance institutions and expectation from them in delivering services have increased in recent past. The study is an attempt to explore the issue of satisfaction from local government services and identifying underlying causes for satisfaction. The study considered satisfaction from

service delivery from the perspectives of users' feedback and treated service delivery status as a consumption bundle. The study found that though amounts of service delivery significantly influences the levels of satisfaction, certain household characteristics also become important. The positive impact of involvement of the households in the service delivery on their level of satisfaction has strong policy implication for service delivery agencies to rope in with the people in delivery of services and design policy to emphasize coproduction. However, there is also a fear of 'clientelism' in the delivery of basic services. As making delivery according to their need make the citizen more satisfied with service, the study suggests for policy to create spaces for citizen engagement in service delivery decision making. Besides, the study also calls for designing appropriate policy to reduce prevalence of political clientelism in the provision of public services.

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