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Spatial planning policies and reduction of territorial inequalities in DR Congo: A critical look at the preliminary results of the local development programme for the 145 territories

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ABSTRACT

Since 2021, the Democratic Republic of the Congo has been experimenting with the implementation of an ambitious development program, entirely dedicated to rural areas, with a view to reducing development inequalities and biases in the allocation of resources, observed for many decades between cities and rural areas, despite the fact that they are populated by the vast majority of the population. This is the local development program of 145 territories, financed in December 2022 by the government of the DRC and its partners. Data collected from various program documents, as well as direct observations from the field, were used to conduct a critical analysis of the program. The statistical results indicate a large disparity between the start-up rate (estimated at 93%) and the completion rate (weakly estimated at 38%), with a non-significant statistical relationship between the two rates, at the critical threshold of 5% (i.e., 7.5%). Given that the expected variable (the completion rate) is not satisfactory, a new study on the fundamental factors influencing the failure of public interventions in the DRC is needed.

Contribution/ Originality: This study is distinguished by a critical analysis of the preliminary results of an ongoing program, where few scientific evaluations are conducted in the DRC. It aims to prevent the failure of public interventions by identifying gaps between the start-up and completion rates at an early stage.

1. INTRODUCTION

Economic policies are a set of actions promoted by public authorities to adjust economic "disturbances" deemed harmful (Assogba, 1993). These policies play a fundamental role in structuring a country's economic and social conditions by defining growth strategies, investment priorities, and regulatory mechanisms. Overall, there are three types of economic policies (Abdelaziz, 2011): structural, cyclical, and distributive**.** Structural policies cover many areas, ranging from regional policies, spatial planning, demographic and family policies, to specific policies, including agricultural policy. Cyclical policies aim to promote GDP growth, price and employment stability, and also seek to reduce the budget deficit and unemployment. As for distributive policies, known as secondary policies, that operate mainly through compulsory collections, the transfer dynamics of which can be varied, highlighting vertical mechanisms (from high to low incomes), horizontal mechanisms (from the single taxpayer to the family), or intergenerational mechanisms (pension systems). In the context of this research, our attention will be focused on structural economic policies, in particular those related to regional planning.

Economic policies for spatial planning emphasize geographical areas as assets for the harmonization of socio-economic development between different regions. They aim to eradicate disparities between territories and promote equitable economic growth. These policies are relevant for channeling infrastructure, mobility, and economic activities to strategic areas, thereby promoting the sustainable development of a country. In the Democratic Republic of Congo (DRC), the dynamics of the National Land Use Policy, adopted by the government during the Council of Ministers meeting in July 2020, were formulated in a participatory manner. This policy mobilizes communities on a rational consumption of forest resources, highlights fundamental rights, as well as the aspirations of local populations and indigenous peoples. Additionally, the DRC's economic policy concerning regional development is organized with the help of various tools or instruments that enable territories to serve as vectors of harmonious and sustainable development. These instruments include plans (PNAT, SDAU, PLU), laws and regulations, development projects and programs such as PDL-145T, financial instruments (development funds, tax incentives), governance institutions (development agencies, decentralization), evaluation tools (indicators, GIS), and citizen participation (public consultations, forums). Although these instruments are established to structure territorial development in the DRC, the reality on the ground and over time indicates that poverty remains a significant challenge, compromising the effectiveness of these initiatives.

In DR Congo, as confirmed by Grégoire Ngalamulume (Akilimali, 2022), Rural areas seem to be the majority and are home to nearly 70% of the population. These populations and the ecosystems that host them face enormous challenges related to poverty in all its forms. In response to these challenges, the government of the DRC opted in 2015 to develop a National Strategic Development Plan (NSDP). This plan provides an answer to the question "What is to be done?" by proposing to build an inclusive growth economy to address the issues of unemployment, income, and therefore poverty (Angeon and Callois, 2005). In addition, the plan provides a framework for harmonizing development partners' interventions and aligning their contributions with national priorities at the sectoral and provincial levels.

Furthermore, the experience of the last twenty years suggests a posteriori that top-down economic growth often appears to be non-inclusive, with an unequal distribution of income among the different strata of the Congolese population (depending on whether urban or rural) (Consulting Goose, 2024). Faced with this observation, a paradigm shift in the mode of governance in the DRC has been promoted through bottom-up development approaches: Bottom-up, participatory, local (Blancheton, 2020). These approaches have made it possible to initiate a specific program, entirely dedicated to the rural areas of the DRC, whose priorities have been determined by the communities themselves through consultations with stakeholders in the 145 rural territories. This initiative has been called: "Local Development Programme of the 145 Territories (PDL-145T) "(Boutemadja, 2002). The particularity of this approach is to boost the economies of territories and improve the living conditions of local populations through massive public investments. The aim is to reduce biases in resource allocation that disadvantage rural areas and to contribute to the reduction of urban-rural territorial inequalities.

This ambitious and proactive programme, which is one of the instruments and/or tools of national land use planning, was financed by the public authorities in order to promote a rapid convergence of incomes and living conditions between rural and urban populations. With an estimated cost of USD 1.66 billion (subsidized by the Government of the Democratic Republic of the Congo (DRC) and supported by its development partners), this program is structured around four components (Deiss and Gugler, 2012) (i) Development of basic socio-economic infrastructure; (ii) the revitalization of local and rural economies; (iii) strengthening local governance; and (iv) the development of a geo-referenced information system for monitoring PDL-145T and other country programmes. Only the first component has been effectively implemented to date. Although the components of PDL-145 are well defined, it is necessary to provide an overview of the actual context of the implementation of public projects and programs in the DRC. In addition, although the components of PDL-145T are well defined, it is crucial to give a comprehensive overview of the actual context of the implementation of public projects and programs in the DRC.

Indeed, over the past decades, the implementation of public development projects and programs in DR Congo has been characterized by failures, leading to the transformation of initiatives into "white elephants." Generally speaking, these failures are linked to the inadequacy of adequate policy planning and monitoring and evaluation instrumentalized implementation (Gajdos, 2001). These white elephants, whose expenses were colossal, had an impact on the destruction of the Congolese state, both because of the lack of participation of local communities and especially because of the gap between real needs and funding. Faced with this observation, Ordinance No. 23/003 of January 12, 2023, highlights the creation, structuring, and institutional environment of the implementation, monitoring, and evaluation of the PDL-145 T, providing instructions on the modus operandi for executing the activities of this program. The ordinance also establishes an environment conducive to relevant consultations and decisions among stakeholders to promote effective implementation and monitoring of the monitoring and evaluation of PDL-145 T. Additionally, it offers critical guidance and measures needed to address potential challenges and bottlenecks in achieving the objectives in line with the program's expected results.

Thus, without claiming to draft a monitoring and evaluation protocol or a final report of fundamental evaluation, this work focuses on the analysis of the preliminary results of the first component already implemented out of the four planned in this program. It should be noted that the ambition of the PDL-145 T is to contribute to the reduction of rural-urban territorial inequalities in the long term. Also, the analysis of the PDL-145 T at this stage is an interesting exercise insofar as it highlights the grey areas and fragilities that could be taken into account in the following phases of the implementation of the program, to enable it to contribute effectively to territorial planning and the reduction of territorial inequalities in DR Congo.

2. MATERIALS AND METHODS

2.1. Clarification of the Key Concepts of the Analysis: Economic Policy (Spatial Planning), Development Projects and Programmes, Local Development and Economic Theories of Inequalities

This section reviews the various basic theories used to carry out this preliminary study on the advancement of the territories of PDL-145.

2.1.1. Economic Policy (Spatial Planning)

Generally speaking, economic policy is the implementation by public authorities of tools that contribute to the achievement of certain objectives they have set for themselves. Restricted by Adam Smith to "the satisfaction of collective needs in administration, defence, and international relations," the latter has been reinforced in the last century by new objectives, such as the redistribution of income, education, and the balance of payments (Giraut et al., 2024).

As mentioned above, economic policies can be subdivided into three categories (ISCO, 2016): structural, cyclical, and distributive policies. In addition, the regional planning policy is the fusion of a triple dimension: sectoral, zonal, and territorial. The sectoral dimension focuses on the mobilization of equipment and the establishment of specific infrastructures in the national space. The zonal dimension divides territories according to the skills to be developed and the challenges to be met. The territorial approach segments territories into local entities, likely to have an integrated development project (KabuyaKalala and Mbiye, 2000). As can be seen, the objective of a spatial planning policy is to restructure spaces in order to enhance their potential while limiting constraints and possible waste, thanks to a rational use of space and resources. This contributes to the promotion of the well-being of the populations and communities occupying these spaces and to territorial equity. It is therefore understandable that the objective is to reduce territorial inequalities. In the case of DR Congo, territorial inequalities represent disparities in the levels of development of territories, often generated by biases in the allocation of resources, privileging large cities, urban centers, and large agglomerations, to the detriment of rural and village areas, abandoned to their sad fate.

2.1.2. Development Project and Programme

A development project is defined as a temporary organization endowed with human, financial, and technical resources. Its implementation enables the achievement of its objectives and is considered a pillar of transforming public action on a larger scale (Kirschen and Morissens, 1968).

Indeed, a development project can be understood as a set of actions and interventions that people or a human organization decide to implement in a defined community, following appropriate methods and strategies, mobilizing resources, to obtain useful results for a well-defined period of time (Aime, 1968). In concrete terms, this set of actions and interventions (Lapeyre, 2002):

- Generally includes the construction of physical infrastructure, the acquisition and implementation of material means and services.
- Is implemented by a well-defined human organization that produces economically (with the least effort) a collective utility, called "non-market," in combination very often with the production of exchange utility, called "market."
- Is delimited in space and time; in most cases, it involves several operators, autonomous from each other, each with its own motivations, free to join the organization carrying out the project or, at the very least, to be involved in its design and execution procedures, and linked to the project by their own interest.
- Aims to achieve an objective or a set of objectives of improving living conditions and access to their own collective and individual happiness, explicitly defined and desired by the participating beneficiaries, or at least by their majority.
- Is carried out within the framework of a project organization responsible for coordinating all activities (actions and interventions).
- Follows a pre-established schedule and schedule.
- Is carried out on the basis of an estimate of the total cost of all actions and interventions, regardless of the source or method of provision of each component of this total cost.
- This is followed by a distribution of this total cost in a financing plan explaining the contributions of all operators, decided by each of them, whether these contributions are made in cash or in kind.
- Whose benefits, whether measurable in monetary terms or not, are considered to outweigh the costs incurred by all those who contribute to those costs, whether they are the beneficiaries themselves, the providers of financial resources, or the suppliers of goods and services.

A program, on the other hand, constitutes a grouping of activities or projects, often varied, related to a main objective or a set of specific objectives with a view to producing goods or services using resources (human, material, and financial organized in a coherent manner) (Ministry of Spatial Planning and Urban Renewal (DRC), 2024).

2.1.3. Theoretical Foundations of Local Development

Since the 1960s, local development has been understood as an innovative process of development. Its integration into the development landscape requires territorial anchoring. Associated with this idea is the notion that development occurs at subnational scales (Ministry of Planning, 2019); This presupposes, on the one hand, the existence of spatial divergences (in terms of wealth, for example) and, on the other hand, that the levers for action can be initiated at the territorial level or originate from local initiatives. Moreover, it is crucial to note that local development is based on a specific logic.

Indeed, the logic of local development is based on the ability of local actors to organize themselves around a project, i.e., to federate around a common development objective by mobilizing the potential and resources existing in a territory. This definition highlights three dimensions (Naggar and Lahssini, 2015)(i) the localized and territorialized nature of the activities and actions. (ii) It invites us to consider the temporality of these actions. The finalized acts reflect the ability of the agents to design a common future. In the context of territorial development,

this common objective is based on the development of resources. (iii) Finally, it expresses that the territory is the result of interactions between actors engaged in a collective approach.

Note that local development emphasizes the territorial dimension and considers all economic, social, and cultural forces, as well as the resources of the concerned territory, with the aim of mobilizing them for development. It is an approach characterized by four features (Ngalamulume, 2019).

- A territorialized intervention: the actions are part of a socially and economically relevant territory (Proximity and reciprocity: Village, group, sector, parish, territory);
- Integrated action: which reconciles political, economic, and social aspects in three areas: (development of people's skills with a view to strengthening the power of reflection and action; creation of jobs and support for local actions; social revitalization of the environment);
- A partnership approach: Diversity of actors: public sector, private sector, commercial, and associative sector with a view to coordination and cooperation.
- A desire for democratic participation through the involvement of residents in the development of their environment.

Local rural development advocates cooperation and partnership between the various economic and social actors.

2.1.4. What About Inequalities?

The concept of inequality, which arose with the rise of the aspiration for equality in modern societies, is very common in sociological thought, but it is also of interest to economists and political scientists. Indeed, there are qualitative and quantitative inequalities. These inequalities take various forms (Ngalamulume, 2016): inequalities of income or wealth, educational, cultural, generational, gender, political, territorial inequalities, etc. Inequalities are an objective and quantifiable phenomenon, but also a subjective dimension through their perception and feelings by individuals.

Indeed, just as humanity needs a coherent order relationship to compare real numbers, the economic theory of measuring inequality also requires a logical relationship to compare the distributions of a quantitative variable (wages, income, consumption, wealth, etc.) observed over a population. However, although a relationship with the properties necessary to compare distributions has not yet been discovered, there is nevertheless an economic theory of the measurement of inequality that emphasizes axiomatic approaches and the use of quasiorders across distributions (Organisation for Economic Co-operation and Development (OECD), 2024).

Axioms on which the total-order relation is based: The economic theory of measuring inequality relies on a set of axioms to establish a total-order relation across all distributions and to ensure it possesses the desired properties. According to axiom 1, there exists a total, transitive, and non-trivial binary relationship among all income distributions. This order relation is considered continuous (axiom 2), impartial with respect to individual identity (axiom 3), monotonic (axiom 4), λ-invariant (axiom 5), μ-invariant (axiom 6), and consistent with the principle of transfers (axiom 7).

Orders defined across all distributions: According to Petrella (2004) while it is difficult to explicitly define the set of income distributions that are less unequal than a given X distribution, it is nevertheless possible to propose a number of criteria to (partially) order income distributions. As a result, quasi-orders have been defined for all income distributions. These are mainly (i) the Lorenz quasiorder, (ii) the absolute differential quasiorder, and (iii) the relative differential quasiorder.

In agreement with several studies that have developed models by combining variables used by different approaches to explain the economic policy tools of land use planning in DR Congo, this study uses a combination of the components of the Local Development Program of the 145 Territories (PDL-145 T) to carry out this analysis of the preliminary results of the LDP-145 territories. As a result, the factual variables of the empirical analysis will

emerge from four components of this PDL-145T: (i) infrastructure and basic socio-economic services, (ii) development of rural economies and local value chains, (iii) local development management capacities, (iv) georeferenced information system. These components will be considered as research hypotheses, the objective also being to verify whether they are linked to the spatial planning policy.

2.2. Table of Assumptions

Table 1 highlights the components retained in this analysis, which we consider to be research hypotheses. These assumptions are expressed as signs of expected influence and are formulated based on the results of similar studies conducted in other contexts. The language of these expected signs can be explained as follows:

- Negative (-) indicates that the component of the PDL-145T is not related to land use policy.
- Positive (+) indicates that the component of the PDL-145T is related to land use policy.
- Components that have no signs have not been referenced in previous studies; in this case, we will assume that they are positive, i.e., that they are linked to regional development policy.

Table 1. Table of assumptions.

Categories	Predictors	Expected signs.	Unit	Nature of the variable	References
Components of LDP-145: Predictors of Land Use Planning		Liaison between land use planning and the PDL-145T component			
	Georeferenced information system	+	Factual	Explanatory	(6) Boutemadja Abdelkader
	Basic socio-economic infrastructure and services	+	Factual	Explanatory	(13) Ministry of Spatial Planning,
	Rural Economies and Local Value Chains	+	Factual	Explanatory	(14) Mustapha
	Local development management capacities	+	Factual	Explanatory	(2) Abdelaziz Adidi

3. BRIEF PRESENTATION OF THE STUDY ENVIRONMENT

The Democratic Republic of the Congo is the largest country in Central Africa, with an area of 2,345,000 km² and an estimated population of more than 100,000,000 inhabitants. In the north, the DRC is characterized by equatorial forests and ranks first in the world; the east is dominated by mountains, hills, large lakes, and volcanoes. The south and center are rich in wooded savannas and form a high plateau with various minerals. The country's general climate is hot and humid, but this varies from one province to another. This variation is due to the fact that the equator crosses the entire Congolese territory. To the west, the DRC is bordered by the Kabinda enclave in Angola and the Republic of Congo (Congo-Brazzaville); to the north, by the Central African Republic and Sudan; to the east, by Uganda, Rwanda, Burundi, and Tanzania; and to the south, by Zambia and Angola. The DRC has 26 provinces; the 25 provinces outside Kinshasa are subdivided into cities and territories; the 35 cities are divided into 137 urban communes; the 145 territories are divided into 174 rural communes, 471 sectors, and 264 chiefdoms; the sectors and chiefdoms are further divided into 5,908 groups.

Figure 1. Map of the Democratic Republic of the Congo.

Source: https://fr.mapsofworld.com/afrique/democratic-republic-of-congo/

This map of the Democratic Republic of the Congo shows the provinces, the national capital, and international borders. The 145 territories covered by the PDL-145 T have been delineated within the twenty-six provinces.

4. PROGRAM DELIVERY MECHANISM

PDL-145T is implemented by three agencies: the United Nations Development Programme (UNDP), the Central Coordination Office (BCeCo), and the Fragile States Financing Unit (CFEF). UNDP oversees activities in 54 territories across 9 provinces (Bas-Uélé, Kasaï, Maniema, Mongala, Sankuru, South Kivu, Tanganyika, Tshopo, Tshuapa). For this initial phase, 423 schools, 287 health centres, and 54 administrative buildings are expected to be built and/or rehabilitated in this area. The Central Coordination Office (BCeCo) operates in 48 territories within 9 provinces (Haut-Katanga, Haut-Lomami, Haut-Uélé, Ituri, Kasaï Central, Kasaï Oriental, Lomami, Lualaba, North Kivu), planning for 414 schools, 269 health centres, and 48 administrative buildings during the first phase. The Fragile States Grant Delivery Unit (CFEF) functions in 43 territories across 7 provinces (Kongo Central, Kwango, Kwilu, Mai-Ndombe, Équateur, Sud-Ubangi, Nord-Ubangi), with plans for 360 schools, 232 health centres, and 43 administrative buildings during this initial phase. All of this information is concisely presented in Table 2:

Table 2. Provincial distribution of the 145 territories by implementing agency (Zones A, B, C).

Zones	Implementing Agency	Provinces covered	Number of territories	Remarks
Zone A	UNDP (United Nations Development Programme)	Bas-Uélé, Mongala, Tshopo, Tshuapa, Sankuru, Maniema, Kasaï, South Kivu, Tanganyika	43 territories	Eastern and Central-Eastern zone. UNDP relies on UN system support. Slight delays reported.
Zone B	BCeCO (Central Coordination Bureau)	Kwilu, Mai-Ndombe, Kasaï-Central, Kasaï-Oriental, Lomami, Ituri, Haut-Uélé, Kinshasa, North Ubangi	54 territories	Central and Western zone. Steady progress. Directly supported by the Ministry of Finance.
Zone C	CFEF (Fragile States Financing Execution Unit)	Haut-Katanga, Lualaba, Haut-Lomami, Kongo-Central, Équateur, North Kivu, South Ubangi	48 territories	Southeastern and Northwestern zones. Highest execution rates. More flexible deployment capacities.

The institutional framework, established somewhat belatedly by the presidential decree mentioned above, includes five bodies, notably the political steering committee placed under the high patronage of the President of the Republic; the Strategic Steering Committee under the leadership of the Prime Minister; national operational coordination under the supervision of the Minister in charge of planning, in cooperation with sectoral ministers; the Technical Committee provides the secretariat for the national operational coordination and the implementing agencies (UNDP, BCeCO, and CFEF).

5. METHODOLOGY OF THE CRITICAL ANALYSIS OF THE LOCAL DEVELOPMENT PROGRAMME OF THE 145 TERRITORIES (PDL-145T)

5.1. Data Collection

The data collection for this study is mainly based on the documentary technique, using program documents and reports as the primary data sources. These documents provide quantitative information on factual variables, progress rates of components and activities, investments made, as well as on the territorial impacts of the Local Development Program of the 145 Territories (PDL-145T). The particularity of this study lies in the fact that the PDL does not target a specific sample but covers all 145 territories**,** spread over all the provinces of the DRC. This is a comprehensive population, which allows for an analysis of the implementation of the program at the national level.

Moreover, direct field observation made it possible to verify the consistency between the reported results and reality, thereby strengthening the critical rigor of this analysis.

5.2. Presentation of Data, Analysis and Justification of the Proposed Statistics

The data collected will be analyzed based on several statistical methods: rate calculations (start-up and completion rates), standard deviation and mean calculations, correlation tests, etc. Using these statistical analysis methods, we will gain an in-depth understanding of the performance and resource allocations in the 145 Territories Local Development Program (PDL-145 T).

Table 3 presents the distribution of the investment envelope by component, Table 3 presents the distribution by territories covered by PDL-145T, and Table 5 the progress data.

Table 3. Initial cost (Per component).

Components	Cost in USD	% of Tot. program
Component 1: Basic socio-economic infrastructure	1,168,636,205	70.0%
Component 2: Rural economy and value chains	290,000,000	17 %
Component 3: Local Capacity Building	4,940,000	0.3 %
Component 4: Georeferenced system for monitoring and evaluation	5,540,000	0.33 %
Total A of components (1+2+3+4)	1,469,116,205	88 %
Study, monitoring and monitoring (5% of A)	73,455,810	5 %
Fiduciary management, coordination, monitoring and communication (8% of A)	117,529,296	7 %
Total programme	1,660,101,312	100 %

Source: Project document (Prodoc) and Ministry of Planning.

According to Table 4, the cost of the local development programme for 145 territories is estimated at $1.66 billion. This programme invests 70% of its budget in basic socio-economic infrastructure, making it the main component. Secondly, the rural economy and value chains account for 17% of the budget, local capacity building and the monitoring and evaluation system are more simply financed at 0.3% and 0.33% of the budget. In addition, studies, monitoring and control receive 5% of the budget and fiduciary management, coordination, monitoring, and communication receive 7%. This distribution highlights a high priority given to basic infrastructure, while integrating management and monitoring mechanisms to ensure the proper implementation of this programme.

Table 4. Breakdown of the investment package by territory.

No.	Designation	Amount USD
01	Rehabilitation and maintenance of agricultural feeder roads and engineering structures	1,600,837
02	Construction of mini-solar power plants (photovoltaic)	720,690
03	Public lighting of the main roads of the territory with solar street lamps over 1 km	324,828
04	Construction of boreholes + integrated solar pump and catchment + development of water sources	562,206
05	Market construction with living space	582,690
06	Construction of administrative buildings in territorial and sector capitals	331,586
07	Construction of a dozen housing units for the territory's supervisory staff	1,000,000
08	Structuring and professionalization of local producers	200,000
09	Acquisition of production and processing equipment	1,500,000
10	Acquisition of agricultural inputs (Seeds, fertilizers, etc.)	300,000
11	Construction, rehabilitation, and equipment of health centres.	1,130,814
12	School construction, rehabilitation, and equipment	1,805,910
	Average total investment at the territorial level	10,059,560

Source: Local Development Programme for the 145 Territories, p. 36.

According to Table 5, the majority of the budget is allocated to basic socio-economic infrastructure, including schools, health centres, agricultural feeder roads, accommodation for administrative staff, rural energy, and support for agricultural production in the broadest sense. This priority is justified by the fact that the development dynamics of modern society emphasize infrastructure as the foundation (and essential component) for national prosperity. Additionally, this resilient and protected infrastructure is fundamental to economic prosperity, as it supports not only the efficient operation of businesses and services but also fosters trust and long-term planning within a territory, thereby encouraging consistent investment rates. Ensuring their resilience and security can serve both as a direct contribution to the territorial or sectoral economy and as a catalyst for economic growth and investment.

Table 5. Data on the progress of the 145 T development program as of July 2024.

Works	UNDP	BCeCo	CFEF	Total
Total planned works	764	731	635	2130
Total works started	631	729	620	1980
Schools	334	414	355	1103
Health Centers	245	269	223	737
Administrative buildings	52	46	42	140
Total remaining works	133	2	15	150
Start rate	83 %	99.73 %	97.64 %	93 %
Total works completed	151	293	300	744
Schools	81	156	177	414
Health Centers	54	131	91	276
Administrative buildings	16	6	32	54
Rate of works completed (Started)	24 %	40.19 %	48.39 %	38 %
Rate of Completed (Planned)	20 %	40 %	47 %	35 %

Source: Ministry of Planning and Technical Monitoring Committee PDL-145T.

In July 2024, the development programme for the 145 territories (PDL-145T) had a high overall start-up rate of 93%, with 1,980 works actually launched out of the 2,130 planned. While the BCeCo (99.73 per cent) and CFEF (97.64 per cent) agencies have started almost all of their work, the UNDP is lagging behind with only 83 per cent of work undertaken. However, despite this apparent progress, completion rates remain low: only 35% of planned works and 38% of works started have actually been completed. CFEF stands out with the best completion rate (47%), followed by BCeCo (40%) and UNDP (20%). This lag between start-up and completion, particularly on the UNDP side, reveals delays in implementation that compromise the effectiveness of the programme and require urgent corrective measures to ensure the expected impact on the beneficiary territories.

6. ANALYSIS OF THE PROGRESS DATA OF THE LOCAL DEVELOPMENT PROGRAMME OF THE 145 TERRITORIES (PDL-145T)

6.1. Start-up and Completion Rates (see Table 4*)*

This section presents statistics related to the start-up and completion rates of the PDL-145T. The start-up rate is understood as the statistical measure of the work actually begun compared to what was initially planned. It is calculated as follows: $=\frac{\text{Nombre d'ouvrages prévus}}{\text{Nombre d'ouvrages deémarrés}} \times 100$

The completion rate measures the proportion of work started that has been completed. It is calculated as:

$=\frac{\text{Nombre d'ouvrages achevés}}{\text{Nombre d'ouvrages démarrés}} \times 100$

Table 6 shows the start-up and completion rates of the different implementing agencies: UNDP, BCeCo, CFEF.

Table 6. Start-up and completion rates of the various implementing agencies.

Agency	Start-up rate (%)	Completion rate (%)
BCeCo	99.73%	40%
The	97.64%	47%
UNDP	83%	20%
Global	93%	38%

The results of this Table 6 suggests that the overall start-up rate for this component related to basic infrastructure, namely schools, health centers, and administrative buildings, is 93%, which indicates that this program had a strong capacity to initiate the planned activities in this component. Of all the implementing organizations, BCeCo stands out with a remarkable start-up rate of 99.73%, meaning that it has initiated almost all of the planned infrastructure. This would require organizational capacity, proactive management, or well-allocated

resources at the beginning of the process, as well as effective schedule management. The FCEF has a solid rate of 97.64%, while UNDP lags slightly behind with a rate of 83%. The fact that UNDP has a lower rate than other agencies could indicate difficulties related to initial planning, coordination, or administrative or logistical obstacles.

Regarding the completion rate of the program in this first component that was actually started, it is estimated at 38%, which suggests that fewer of the program's initiated infrastructures are fully completed. In this context, CFEF recorded the highest rate with 47%, indicating relatively effective management of the program and a higher degree of efficiency compared to other agencies in completing the work. BCeCo follows with a rate of 40%, which, while respectable, leaves room for improvement. UNDP, which remains in last place with a rate of 20% of the program completed, stands out for having a significant gap between start-up and completion, indicating difficulties in implementation or substantial delays. These data can be examined in detail in the following graph:

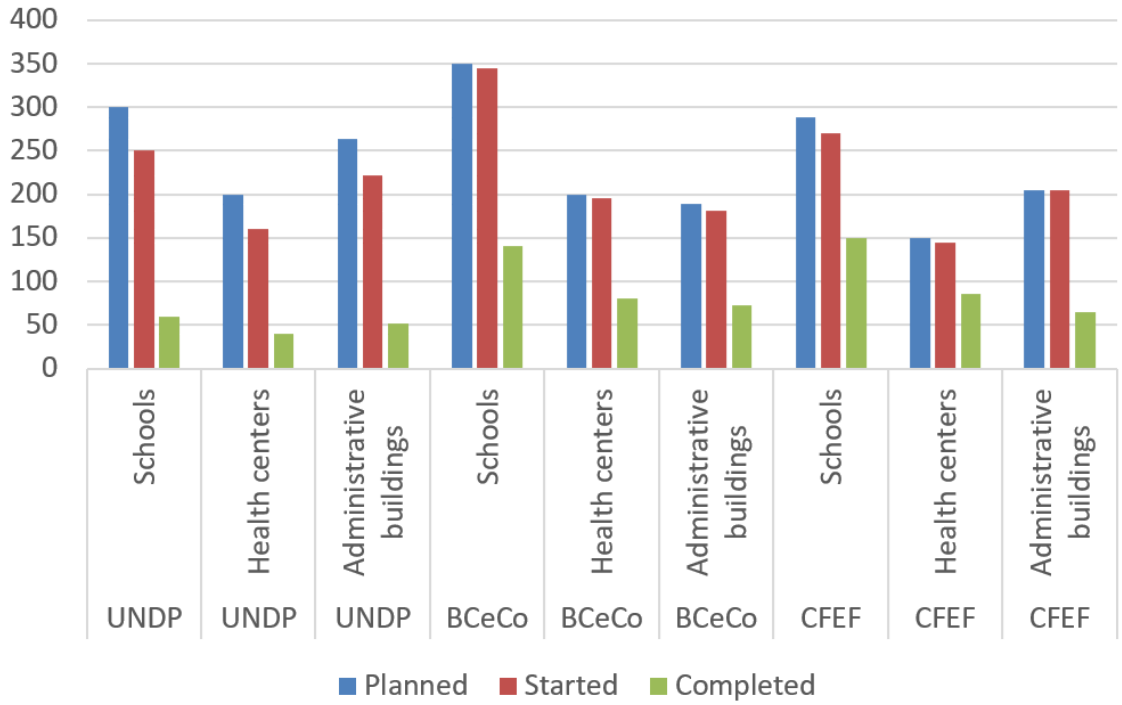

Figure 3. Number of activities planned, started and completed.

This graph examines the number of infrastructures planned, started, and completed in three categories: schools, health centres, and administrative buildings, under the guidance of implementation by UNDP, BCeCo, and CFEF. Overall, school construction predominates in terms of forecasting, start-up, and completion. The other infrastructure is weak. This predominance of educational infrastructure is justified by the fact that the Constitution of the DRC, in its article 43, paragraph 5, prescribes compulsory and free primary education in public schools (Pike, Rodríguez-Pose and Tomaney, 2007). The new government is trying, as far as possible, to make this commitment to free primary education a reality. At the same time, this teaching also promises the dynamics of educational infrastructures.

6.2. Descriptive Statistics and Regression of Start-Up and Completion Rates of PDL-T Structures

Table 7 provides detailed descriptive statistics on the start-up and completion of the local development programme in 145 territories.

Table 7. Descriptive analysis of the start and completion of the PDL-T work.

	N	Minimum	Maximum	Sum	Average		Standard deviation	Variance	Asymmetry		Kurtosis	
	Statistics	Statistics	Statistics	Statistics	Statistics	STD Error	Statistics	Statistics	Statistics	STD Error	Statistics	STD Error
Starting rate	4	83.00%	99.73%	373.37%	93.3425%	3.72327%	7.44655%	55.451	-1.237	1.014	1.078	2.619
Completion Rate	4	20.00%	47.00%	145.00%	36.2500%	5.75000%	11.50000%	132.250	-1.311	1.014	2.374	2.619
Valid N (in the list)	4											

As for start-up, the latter has an average of 93.34%, suggesting that, on average, PDL-145's activities had started at high speed. The results also suggest that the standard deviation is 3.72%, indicating that start-up rates vary little around this average, with limited divergences between the completion of the work. However, start-up rates range from 83% to 99.73%, indicating some disparity in how the implementation of the work began. On the other hand, the skew of -1.24 shows that the distribution of business start-up rates is skewed towards the highest values, suggesting that the implementation of structures has tended to start well above average, with a few notable exceptions. As for the kurtosis, which is 2.62, it indicates that the distribution of the starting rates has been more concentrated around the extremes, with thicker-than-normal tails, indicating that very high values are relatively frequent.

As for the completion rate, its average is 36.25%, well below the start-up rate, which indicates that, on average, less than one in two works is completed. The standard deviation of 5.75% indicates high variability in the completion rate, meaning that not all work was completed at the same time. Explicitly, the variation in completion rates is between 20% and 47%, which signifies a significant dispersion from start-up rates. Moreover, the asymmetry of -1.31 suggests a distribution leaning towards lower values, indicating that most completed works have below-average rates. Regarding the kurtosis of 2.37, it indicates, similar to the start-up rates, that the distribution of completion rates is more concentrated around the extremes, with thick tails, suggesting that very low or high completion rates have been relatively common.

Table 8 shows the relationship between the start-up rate and the completion rate of the local development programme in 145 territories.

Table 8. Relationship between the start-up rate and the completion rate of PDL-145 work in the territories.

Coefficients						
Model		**Non-normalized coefficients**		**Normalized coefficients**	**t**	**GIS.**
		Has	**Standard error**	**Beta**		
1	(Constant)	71.632	6.544		10.947	0.008
	Completion Rate	0.599	0.174	0.925	3.441	0.075

Note: has. Dependent variable: Start rate

Overall, the results suggest a strong positive relationship between the completion rate and the start-up rate, although this relationship is not statistically significant at the 5% level, notwithstanding the fact that it approaches a marginal level at 7.5%. This positive relationship is expressed through the regression coefficients. In this context, the non-standardized coefficient for the completion rate is 0.599, which means that for every one-unit (or percentage) increase in the completion rate, the start-up rate increases by an average of 0.599 (about 60%). The Beta (or standardized coefficients) is 0.925. This coefficient indicates a strong positive link between the completion rate and the start-up rate. As a result, although these figures indicate a positive relationship, the significance level (Sig.) is **0.075** (or 7.5%), which is above the usual threshold of 5%. This means that the relationship is close to being significant but not completely significant by strict standards, showing that there could be other variables influencing this relationship. Therefore, a new study will be considered, taking into account the achievements of the other components.

7. DISCUSSION OF THE RESULTS

The local development programme for 145 territories has an estimated cost of USD 1.66 billion. The results on the allocation of the investment packages indicate that a large part (70%) of the budget was allocated to basic socio-economic infrastructure, making it the main component. These results are in line with those of other projects funded over the past five years in the DRC, which have prioritized socio-educational and health infrastructure (Resources in the Economic and Social Sciences (ESS), 2024): Basic Education Development Project (PRODEB)

(2012-2020), School Infrastructure Rehabilitation Program (2014), Health System Reconstruction Support Project (PARSS) (2005-2013), Reference Hospital Rehabilitation Project (2008-2015), Rural Infrastructure Promotion Programme (PPIR) (2010-2016), Rural Infrastructure Development Support Project (PADIR) (2012-2018), Socio-Economic Infrastructure Strengthening Project in the Centre Region (PRISE) (2015-2020), etc.

In addition, the results indicate a high program start-up rate (93%), which means that the program had a high capacity to launch planned activities and a low completion rate (38%), suggesting that less than half of the program work started is fully completed. Moreover, at the linear regression level, the relationship between the start-up rate and the completion rate is not statistically significant at the 5% level, despite the fact that it approaches a marginal level at 7.5%. These results corroborate those of the implementation of previous projects financed by the Government of the DRC and its partners, projects that had an adequate start and a low completion: Inga III Project, Sino-Congolese Programme (Sino-Congolese Contract), Railway Rehabilitation Project (SNCC), Kinshasa-Matadi Road Reconstruction Project, "Kinshasa Zero Hole" Programme, N'djili International Airport Project... According to the sources, this same observation relating to the successful start-up and poor implementation of projects is a general problem in Africa: the case of the Kilamba New Town Project (Angola), Lagos-Kano Railway Project (Nigeria), Medupi Coal-Fired Power Project (South Africa), Tanzania Railway Rehabilitation Project (TRC), Côte d'Ivoire Satellite Cities Project. According to Bernache Conseil, ten causes explain the poor completion or failure of projects in Africa.(Sama and Jean-Michel, 2021): The weaknesses in project implementation, lack of funding, and deficiencies in understanding cash flow are evident. The old reflex of "Let's get started..., we'll see later" persists, along with errors in recruiting implementation staff, governance issues, weaknesses in risk management, failures in follow-up and team meetings, and communication problems. The core issue, as highlighted, is the lack of rigor and cultural considerations. In this context, Assogba Yao believes that these failures are generally perceived and interpreted as expressions of resistance to change and attachment to the centuries-old traditions of African populations (Sjöblom, Löfgren and Godenhjelm, 2013).

With regard to the PDL-145T in particular, its implementation presents several challenges and constraints. The pace of work is not the same across implementing organizations, between firms, between provinces, and between territories. Several factors explain this: the internal procedures of the agencies, the technical and financial capacities of the companies, accessibility, insecurity, and disagreements between the actors in the sites. First of all, it should be noted that the political dimension has had a strong influence over the technical dimension. Indeed, an in-depth analysis of the situation and elements of interviews with actors in the field show that the high rate of start-up of activities is directly correlated with the announced start of the December 2023 election campaign. As a political program, the President of the Republic needed a speech and a report to present to the population to ask them to trust him in order to complete the work begun in the framework of the second term. And it worked very well. In addition, political interference in the choice of infrastructure and sites has led to delays in the start-up in some places, with people and communities fiercely opposing the proposed choices, without taking into account the objective criteria proposed at the outset (e.g., population density). As a result, additional time was required in some locations to allow the communities and the Ministry of Planning to agree on the final site chosen. This is the case of the work on the administrative building in the territory of Walungu (South Kivu), which has never started to date, the customary chief wishing to relocate it, or that of the territory of Lisala (Mongala), which wanted to be relocated and finally started late. In addition, according to the initial sequencing of the activities, it was necessary to start with the agricultural feeder road component, which could have had a real impact on the accessibility of the infrastructure sites, in terms of the supply of local and manufactured materials. This was not taken into account because results needed to be presented immediately to the population in the context of this electoral race. In this sense, the construction of buildings has been favored. Furthermore, basic studies have in most cases been fragmented, without considering the realities of communities. Thus, the almost standard budget proposed for the whole country was impossible to maintain in some hard-to-reach corners; this slows down the start of the program

in these entities and compromises its effectiveness.

In addition, the sustainability of the programme is questionable as component 3, which is intended to prepare and consolidate sustainability achievements, has not yet been implemented, while taking into account the low level of ownership of the programme by the communities. Infrastructure handed over to communities that are not sufficiently prepared for its management and maintenance is at risk of being abandoned. The communication and community mobilization component should be highlighted in this regard. In this sense, there is a certain inconsistency in the implementation of the program. Indeed, initially planned as an integrated program with several actions in various sectors to support each other, the PDL-145T focuses only on infrastructure, postponing actions in equally structuring sectors (Agricultural feeder roads, local economy, value chains, capacity building, etc.). The worrying insecurity in some ETDs prevents the normal start and/or progress of the works, which is another major challenge, not to mention the weak technical and financial capacity of some service providers recruited at the level of the implementing agencies. Finally, the low mobilization of resources is considered a major challenge in this program. Deficits in resources are noted at the level of each executing agency and prevent the normal continuation of activities already initiated, and jeopardize the launch of the infrastructure planned but lacking to date. This lack of resources seriously undermines the monitoring of the programme, as monitoring bodies at different levels are under-resourced. However, without rigorous and close monitoring, it can be difficult to achieve serious and rigorous results. Huge delays are being noted at various levels, preventing the resumption of classes in newly built schools or the use of administrative buildings and health centres by their beneficiaries.

8. IN CONCLUSION

Spatial planning policy tools, such as development programmes and projects, play a crucial role in territorial and local development. In this context, the programmes highlight strategic and fundamental priorities and provide a coherent long-term vision, while the projects implement these strategies through concrete and targeted actions. Overall, these instruments make it possible to harmonise initiatives, deploy the necessary resources, and respond effectively to the wishes of the regions.

This study carried out a critical analysis of the preliminary results of the first component of the PDL-145 T already implemented and funded in December 2022 by the Government of the DRC and its development partners. The results, as well as our statistical analyses based on available data, indicated that this program financed a large part (i.e., 70%) of the basic socio-economic infrastructure, making it the main component. The results also indicated a large disparity between the business creation rate (estimated at 93%) and the completion rate (weakly estimated at 38%), with a non-significant statistical relationship at the 5% threshold, i.e., 7.5%. In view of the assumptions set out in Table 1, this analysis confirms the second hypothesis in a practical way and proposes a new study on the other three components to confirm the remaining three theoretical hypotheses retained based on similar studies highlighting the link between these components (the development of rural economies and local value chains, the management of local development, the development of the georeferenced information system) with land use planning..

In view of these results, it is necessary to note that the PDL-145 T is a relevant and timely initiative for the development of the country, given the inequalities in income and access to resources, and therefore, development to the detriment of the rural environment. It is also the very first program designed and implemented in the same way throughout the national territory. The expected impact is very significant in terms of improving rural populations' access to basic services. In some areas, the infrastructure erected represents the very first and only building in the region made of sustainable materials. Giving attention and resources to the development of the rural environment is in itself a real step forward. However, now is the time to move on to concrete, thoughtful, and deliberate actions, implemented in accordance with the principles of governance, coherence, adequacy, effectiveness, and efficiency. Mutual responsibility and accountability for results are becoming essential for this type of action, which is part of a

dynamic of partnership and synergy with local communities, while respecting their identity, dignity, and deep aspirations. The general interest in the sense of Congo's development and the results to be achieved must guide this type of action, beyond any ethnic, tribal, religious, regional, or political consideration.

This is our contribution to the development and influence of the ambitious Programme (PDL-145 T) currently being implemented in the DRC.

In light of all the results of this analysis, we recommend that the government accelerate and complete funding for the rapid implementation of all streams and that the implementing organizations and their contractors expedite the construction and delivery of infrastructure. The PDL-145T is therefore an approach to be capitalized on to move towards inclusive local development.

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