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## ABSTRACT

*The recently announced Conception of Administrative Reforms in Uzbekistan emphasises the significance of developing an effective and professional civil service system and highlights the main direction associated with introducing a performance assessment system. This article examines the implementation of key performance indicators (KPIs hereafter) in 12 selected local districts (cities) throughout the country in 2020 as an experiment. The main focus is on 73 indicators to assess district (city) governments' local policy to achieve their projections. The authors conducted two surveys to measure local citizen and mahalla (civil society institution) chairpersons' satisfaction. Both the survey results and KPI values are utilised in the final evaluation. The experiment's findings show that if concrete, measurable, achievable, relevant and time-bound KPIs are adequately set up, the probability of achieving the envisioned performance results is high. It is argued that this study may be helpful the policymakers and government officials to formulate better regulation in this area.*

## **Keywords:**

*Administrative reforms, KPI, Performance management, Local government, Survey, Civil service, Implementation.*

## INTRODUCTION

Public sector organisations at both national and sub-national levels are lagging behind private sector organisations in the implementation of new management practices. Thus, it is imperative to empower public policy and administration reformists to implement sustained civil service performance improvement measures.

The paradigm of performance measurement is strongly linked to the New Public Management (NPM) as a major component in improving public service delivery in both the developed and developing countries. Its usage is often linked to broader transformations in the underlying political economy, evident since the 1980s (Ferlie 2017: 1). In essence, the evolution of performance appraisal developed the different types of performance systems in the public sector. Incentivising, developmental, symbolic, and want-it-all are among the most well-known and widespread types of performance appraisal systems for the civil service. The results-oriented or incentivised types of performance appraisal are recognised as being to be the most important NPM tool to enhance efficiency (Hajnal and Staronova 2021).

Results-oriented performance is an essential component in the NPM system and plays a crucial role in giving impetus and an entrepreneurial spirit to public servants. According to the NPM doctrine, government officials are motivated based on pay-for-performance and set clear performance targets evaluated through performance appraisals. In the realm of reforms, the case of Uzbekistan is not an exception. Whilst the reforms cover all aspects of the public sector, results-based management is one of the main topics of discussion at all levels of the public sector: national, regional and local, including the Agency for the Development of Public Service under the President of the Republic of Uzbekistan (Public Service Agency hereafter), the Cabinet of Ministers and government-funded

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research institutes are all involved in generating ideas, producing analytical information and exploring the relationships in the sphere of performance management.

Indeed, the country's civil service reforms have been one of the principal directions of the announced agenda in 2017, namely the Concept of Administrative Reforms (2017). The Government has a vision and it possesses the will to introduce a new system for evaluating the effectiveness of civil servants' performance based on personal achievements, knowledge and professional skills. Accordingly, this has generated an intense debate among government officials over KPIs in the public sector – meanwhile, assessing and studying other countries' experiences in using performance management methods, and implementing good practices. Thus, one of the most significant issues - discussed in the national context – emphasises drafting legislation, as implementation of a performance management system in the civil service requires the introduction of secondary legislation to have legal validity and be enforced by law.

Several systemic problems and shortcomings still remain in the country's civil service, leading to the existence of inadequate provision of qualified specialists for state agencies and organisations, and an evident mismatch between the qualifications of personnel and the tasks they are called to perform that culminates to low quality of decisions made. In particular, no directly applicable law provides comprehensive legal regulation of the civil service, including procedures for the open, independent competitive selection of candidates and defining criteria for the evaluation of civil servants' performance and competencies, nor the requirements for improving their qualifications. Furthermore, the absence of an authorised body to coordinate the state civil service does not allow for the implementation of a unified personnel policy in state bodies and organisations, effective personnel management and human resource development, or the formation of a competitive reserve of qualified personnel and the timely replacement of vacant positions in the civil service.

Such shortcomings are listed in the Decree of the President of the Republic of Uzbekistan “On measures to radically improve the personnel policy and the state civil service system in the Republic of Uzbekistan” (2019). However, the Decree provided for the establishment of the Public Service Agency, which is responsible for implementing a unified state policy in personnel management and human resources development in state bodies and organisations. The Public Service Agency reports directly to the President and is directly accountable to him. The Public Service Agency Director is the Adviser to the President on Public Service and Interaction with Representative Authorities.

The Decree also defines the priority direction, and primary functions of the Public Service Agency.<sup>3</sup> One of its main tasks is the introduction of a system of measurable indicators (key performance indicators) for evaluating the effectiveness of civil servants and analysing their results, conducting public opinion polls and forming an open rating of the heads of state bodies and organisations. The lack of a system for evaluating the performance of khokims of districts (cities) and their deputies leads to insufficient mobilisation of the capacity of local executive bodies. So, the advance of the performance paradigm in the local civil service is the calling of our time.<sup>4</sup>

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<sup>3</sup> The Public Service Agency is a high-level authority responsible for: (1) introducing a system of KPIs to assess the performance of civil servants and to analyse the results of their work, to study public opinion, and to form an open rating of heads of government agencies and organisations; (2) introducing a system for monitoring the implementation of the state, structural and local development programme by defining the main performance criteria for government bodies and organisations; (3) forming measurable indicators for government agencies and organisations, and providing methodological guidance and coordination of the monitoring and evaluation process for civil servants; and (4) analysing processes and providing its perspectives and recommendations for developing the civil service, as well proposing remedies to combat potential problems and threats in its domain of responsibility.

<sup>4</sup> Chapter XXI of the Republic of Uzbekistan's Constitution covers the Fundamental Principles of Local Bodies of State Authority. Based on the Constitution, the local government structure is based on the provisions of the Law on Local Public Administration (1993). Local government activities are specified in the seven chapters and twenty articles of the law. Local

Fortunately, civil service reform and its underlying transformation with the introduction of a KPIs system have received considerable favourable attention at a high level of authority. In fact, it is a first in the history of performance management systems' development that targets, rankings and skills with intellect are considered simultaneously, as they are all conceived as a critical factor in achieving predicted results. Hence, this study focuses on understanding the underlying reasons and main problems of Uzbekistan's performance management reform policy. It provides insights that may feed into the policy recommendation agenda to develop ideas for a potentially more effective outcome. On the other hand, the study's significance also related to the contemporary reform policy of the civil service. In favour of the Conception of Administrative Reform, this research will contribute to developing research activities, including the development of innovative ideas and the formation of a basic framework to ensure further development. This study provides an exciting opportunity to advance and share our knowledge of national experience.

The rest of this article is structured as follows. The next section is the literature review presenting comprehensible concepts and practices on performance management that underpin the study. The following section discusses the methodology of the research and its components. The findings of the research are discussed in the next section. The article ends with some conclusions and recommendations that are considered useful to policy and decision makers.

## LITERATURE REVIEW

The concept of new public management emerged as a response to the traditional or Weberian model of public administration for responding to the new socio-economic challenges faced by the modern world, three or four decades ago. Originally, preliminary work on performance management was undertaken in the 1970s; however, international organisations' practice and recommendations based on the NPM principles began in the second half of the 1980s. It has been mentioned that performance measurement is now widespread in the private sector and the public sector in many developed and emerging countries (Armstrong and Baron 1998, cited in Zheng et al. 2019: 1; Nimalathasan 2009: 2).

Much of the available literature on KPIs deals with our understanding of performance management, and this kind of significant issue in early 1990s research concerned the theoretical justification of the practice. For example, in their famous book, David Osborne and Ted Gaebler, namely "*Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*", pointed to how performance management practices' could be used in the public sector successfully (1992). Other studies have conducted systematic reviews of relevant KPI indicators' research to identify the coverage and public sector related performance management. There is a consensus, among public administration and public policy scientists that application of KPIs could assist in ousting out-of-date processes in the Administration to enhance efficiency in public sector organisations (Mingers et al. 2009; Propper and Wilson 2003; Smith 1993; Van Thiel and Leeuw 2002; Yuan et al. 2012; Zakaria et al. 2011).

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governments are divided into regional, district and city administrations. In Uzbekistan, a local government consists of a local state administration – "*khokimiyat*" (administrative body) and elected "*Kenghash*" of people's deputies (local council) at the regional (*viloyat*), district (*tuman*) and city (*shahar*) levels. According to Article 99 of the Constitution, representative bodies of government in regions, districts, and cities (except for cities of regional subordination) are the local councils (hereafter People's *Kenghash* or *Kenghash*), headed by "*khokims*" (mayors, governors), who, based on the interests of the state and citizens, resolve issues within their competence. The representative and executive authority in a relevant territory is headed by regional, district and city khokims. This means that regional, district and city khokims also function as the local executive branch's mayors.

According to Fryer et al. (2009) - who based their analysis on a review of 112 articles of the relevant literature – the main characteristic features of an exemplary performance management practice, which could be applied in the civil service successfully, are the following:

- Conformity of the performance management system and alignment with the organisation’s existing systems and strategies;
- Management commitment or political will;
- In a culture, it is seen as a way to improve and identify good performance rather than a burden that is used to punish poor performers;
- Stakeholder engagement;
- Continuous monitoring, feedback, transparency, and review of results (De Waal 2003; Franco and Bourne 2003; Wang and Berman 2001 cited in Fryer et al. 2009: 5; Folan and Browne 2005).

The drive to transform civil service systems around the world has emphasised the vital link between measuring public sector organisations’ performance and monitoring their managements’ results<sup>5</sup>. It is an especially actual pattern as a coherent performance management system based on the interrelationship of strategic goals and functions of local government to implement KPIs.

This demonstrates how important for local governments to apply the performance system is. Several reasons need to be considered. First, local authorities function under conditions of pluralism of instructions, simultaneously executing a significantly increased number of “urgent” instructions from higher state bodies, as well as implementing the functions and tasks assigned to them by law. As a result, the concepts of “important” and “urgent”, “strategic” and “current” nature of instructions are finally confused at the local level. Second, in most cases, the main functions are measured, and the secondary tasks of the local authority are ignored. And, this will lead to an imbalance in the management of performance. In this context, Kloot et al. (2000) draw our attention to a balanced approach to performance management issues in local governments, which have traditionally been concerned with measuring primary goals or outcomes at the expense of secondary goals or determinants of organisational effectiveness.

Some authors have mainly been interested in questions concerning increasing the efficiency of local governments’ public services. One of them – the prominent scholar of the 20<sup>th</sup> century Tiebout (1956, 1961) proposes that local governments, for their part, if they want to make favourable decisions for the provision of local public services – they better know what local people want. Considering Tiebout’s model as the basis for local government effectiveness then it is imperative that KPIs measure performance of local government in providing local public services. Such action will also supplement accountability.

Conversely, few writers have been able to draw on systematic research and transform it according to the national experience by proposing exact areas of application, indicators and weights. Some researchers have shown an increased interest in national experience by comparing two states such as Russia and China. Regional governments’ performance measurement has to be conducted utilising such KPIs such as Gross Regional Product (GRP), budget revenue, direct investment, and public services provision. This kind of indicators could be included in personal contracts of regional administrators.

This paper attempts to show that individual “performance contracts” have successfully promoted the KPI system in China, which is the best way to stimulate economic development and local

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<sup>5</sup> Monitoring data (results) can indicate the performance condition of the local authority and can help adjust policy measures (e.g., changes in priorities, tasks) in a specific area of KPIs.

government's accountability (Wang 2010 cited in Rochlitz et al. 2015). Table 1 shows a type of performance contract for mayors.

*Table 1: Example of Performance Contract for mayors*

Area	Indicator	Weight (%)
Economic development	GRP	10
	Budget revenue	10
	Direct investment	10
Social development	Science and education	6
	Culture, healthcare and sports	5
	Family planning	5
Living conditions	Average income	6
	City employment	4
	Social insurance	3
	Supporting people in need	2
Resources and environment	Emerging savings	3
	Environment protection	5
	Land management	2
	Planting	2
Social security	Social stability	7
	Safety	5
Establishing civil and military groups	Establish good governance	5
	Manage according to the law	3
	Build the basis of party organisation	2
	Establish loyal and incorrupt party organisation	3
	Create a non-material civilisation <sup>6</sup>	2
Total		100

In sum, a considerable amount of literature has been published on performance management. Such literature highlights the main ideas and features of our topic. However, when searching using keywords such as “measurement”, “appraisal”, “measurement” - associated with performance management in the civil service - in international journals, it seems that there has been no other study investigating the civil service reform process in Uzbekistan. There has been little discussion about the subject in the current literature. Consequently, this study contributes to research on performance management in the civil service by analysing Uzbekistan's national experience. The following sections of the paper discuss the research methodology, followed by discussion and conclusions.

## RESEARCH METHODOLOGY

This section describes the methods used in this investigation. The first section discusses the nuts and bolts using an experimental approach; the second part describes the conducted survey in greater detail. An experimental approach was used to establish whether the key performance indicators are applicable in the local civil service system. An examination of the legal acts, the tasks and functions of local authorities, including the mayor and his deputies, were carried out. At the same time, interviews were conducted with the mayors of 10 rural and urban districts located in different regions and locations. The activities they carried out were determined during the interviews, as well as the indicators of their effectiveness, which can be achieved within the competence of local authorities. Based on the results of the analysis of tasks and functions and the survey responses, 73

<sup>6</sup> Non-material civilisation is a stage of social development, which represents the values, norms and views of society that do not exist in the material world.

performance indicators were identified as most important that can be used to measure progress made in the socio-economic development of the territory. Other experiment details are organised as follows.

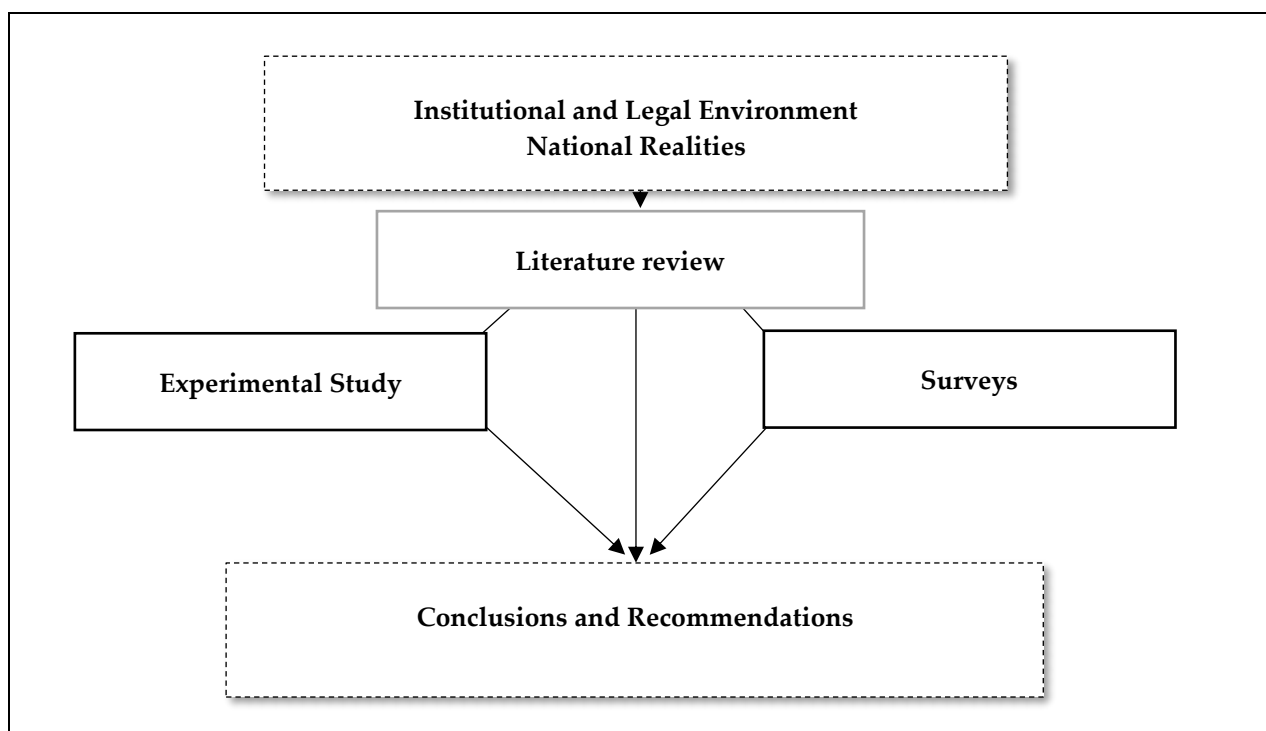
### Experiment selection

In this experiment, the local district's (deputy khokims) pre-experimental level of performance (KPIs values for the first quarter of 2020) and the KPIs values calculated after implementation of the performance management system (KPIs values measured at the end of 2020) were compared. The experiment, initiated in the first quarter of 2020, involved 12 local governments at the district and city level and the key performance indicators for their performance were established.<sup>7</sup> The experiment was conducted in a "controlled environment". Regions were divided into 5 categories depending on the size of their population, whether they have urban or rural districts, and the level of their economic development. Potential indicators for these 5 categories were determined in various ways, taking into account the capacity and prospects of the regions.<sup>8</sup>

### Research process

The following figure shows the flow of the research process.

*Figure 1: Flow of Research Process*



### Surveys

Having defined how the two-stage experiment of applying KPIs to measure the performance of deputy khokims, the discussion moves on to the survey questionnaires.<sup>9</sup> The Public Service Agency

<sup>7</sup> Local governments involved in the experiment: Yangiyol district and City of Yangiyol (Tashkent region); Yashnabad district (Tashkent city); Urgench city, Khazarasp, Yangibazar and Yangiarik districts (Khorezm region); Bostan district and City of Khanabad (Andijan region); Kokand and Kuva districts (Ferghana region); and Chortok district (Namangan region).

<sup>8</sup> According to its Constitution, Uzbekistan is a unitary state and consists of the Republic of Karakalpakstan, 12 regions, and the capital city Tashkent.

<sup>9</sup> It should be noted that the means of accumulating descriptive quantitative data is often defined as "conducting a survey". Researchers use the terms "survey" or "questionnaire" interchangeably (Simion 2016).

branches were in the frontiers interacting with local people to assess their degree of satisfaction. In addition, several other approaches were applied to elicit the participation of local respondents in the survey. For example, a detailed privacy policy was presented or visiting remote places with assistance from the local self-government – mahalla.

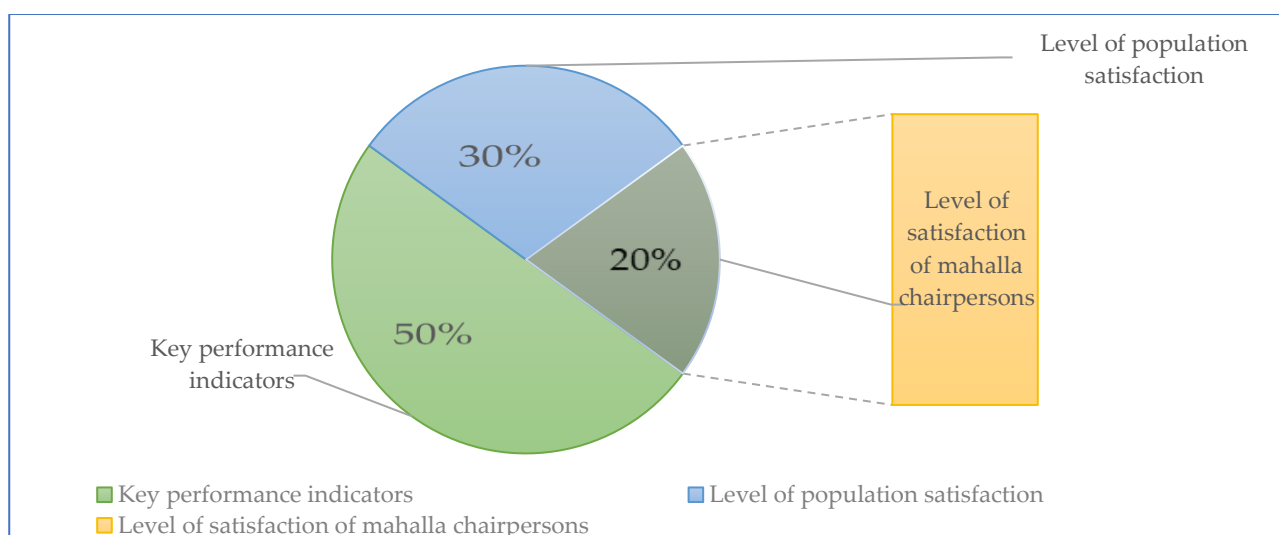
Based on their up-to-date experience, the authors developed an indicator system to measure deputy khokims’ performance, which overall could be identified as the khokim’s or local government’s performance management system.<sup>10</sup> The questionnaire analyses were performed using Microsoft Office Excel’s multiple functions, including statistical functions, to validate the findings of the survey and evaluate the performance indicators’ values. Seminars and meetings for introducing the performance assessment system for deputy khokims were held in all districts (towns) of the country, prior to its administration.

### Data collection

Evaluation of the performance of khokims of districts (cities) and their deputies is based on objective and corroborated data, including official statistics and data from other state bodies and organisations and the results of the opinion polls. Data were provided by the State Statistics Committee of the Republic of Uzbekistan, the State Tax Committee and other bodies on 1 January 2020 that were used to calculate forecasted values. Both paper-based and online surveys were used to collect data from respondents in the regions included in the survey to measure local citizens and mahalla chairpersons’ satisfaction with local mayor performance.

In achieving representativeness, the goal was to accumulate a minimum of 70 respondents to the questionnaire; local people in 12 districts (city), providing their responses for all 500 mahalla chairpersons. Consequently, the number of respondents were 2,369 individuals, and all 500 mahalla chairpersons.<sup>11</sup> The final assessment was based on key performance indicators for deputy mayors, and the levels of satisfaction of mahalla chairpersons, and of the local population satisfaction respectively (Figure 2).

**Figure 2: Sources of Formation of the Final Assessment**



<sup>10</sup> Due process of law, that is, following article 1 of the Law on Local Public Administration identifies that the khokim of the region, district, and city is the highest official of the region, district, city and at the same time heads the representative and executive authorities in the relevant territory. Khokim of the area or Tashkent’s capital city is accountable to the President and the corresponding Kenghash of people’s deputies. Khokim of the city’s district is responsible to the superior khokim and the corresponding Kenghash of people’s deputies.

<sup>11</sup> The specifics of the survey statistics are elaborated below.

## DISCUSSION OF FINDINGS

In this study, the key performance indicators that characterise the degree of achievement of the forecasted parameters of the approved KPIs are calculated using the following formula:

$$KPI_{outcome} = (Actual\ KPI / Predicted\ KPI) * 100\%$$

Name of the formula component	Note
<i>Actual KPI</i>	Actual KPI value for the reporting period
<i>Predicted KPI value</i>	Forecast KPI value for the reporting period (indicator value to be achieved)

The KPI value is calculated based on the assessed deputy khokim's position in the overall ranking of all deputy khokims that are assessed for the same indicator. However, it should be noted that the calculation of KPIs values were not carried out in the following cases:

- Estimated deputy khokim's stay on labour leave;
- Estimated deputy khokim's stay on leave without pay;
- Involvement of the evaluated deputy khokim to perform duties in the interests of the khokimiyats of the regions (professional development, business trips, undertaiking medical examinations and in some other cases);
- Temporary disability of the evaluated deputy khokim during the period specified in the sick leave;
- Involvement of the evaluated deputy khokims in the composition of interdepartmental working groups or participation in other activities that provide for their temporary inability to be evaluated on fulfilling their designated KPIs;
- During the first six months after entering the state civil service;
- In other circumstances that do not allow for an objective assessment of the effectiveness of the deputy khokim.

Based on the KPIs values summary, the deputy khokims overall KPIs values are calculated on which they are assessed. The analysis of the deputy khokims aggregated KPI is done by adding up the KPIs values, while considering their significance (weight), according to the following formula:

$$Aggregated\ KPI = \Sigma (Actual\ KPI_n * Weight_n)$$

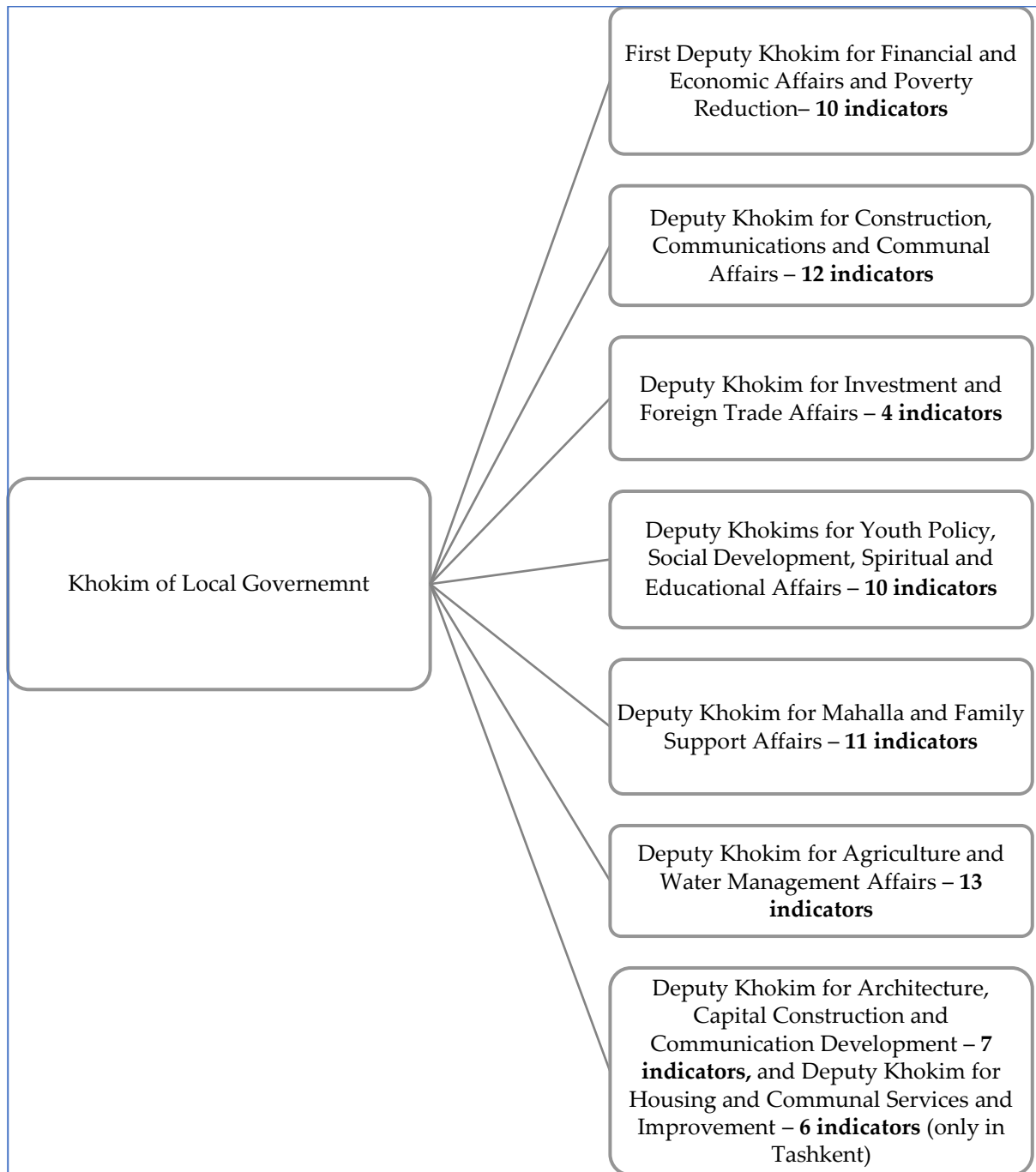
KPI weight is the significance of an individual KPI based on the correlation with the functional tasks of a deputy khokim. The maximum weight value of all KPIs developed is 1. The KPI weights for the assessed deputy khokims were established by the researchers – employees of the Department for Monitoring and Evaluation of Civil Servants when approving the target KPI values for these employees during the experiment.<sup>12</sup>

The combined KPIs of the 12 districts (cities) at all levels were estimated as an arithmetic average (weighted average) of the combined KPIs of the deputy khokims, who were assessed. The performance evaluation system for the six deputy khokims of districts (cities) was implemented based on 73 key performance indicators (Figure 3).

<sup>12</sup> KPIs as a performance management tool started in Civil Service Monitoring and Evaluation Department in 2020.



**Figure 3: Local District (City) Government's Administrative - Structure and the Number of Indicators<sup>13</sup>**



In the pilot phase, the performance of deputy mayors of districts and cities was defined based on precise figures and measurement units (percentages, numbers, amounts), which allow for an accurate assessment of the results achieved. Each indicator was given an appropriate weight on a 100-point scale according to its level of importance. The following is an example of performance indicators for the First Deputy Khokim level (Table 2).

<sup>13</sup> According to the organisational structure, the capital city Tashkent's districts have distinctive deputy khokims (mayors).

**Table 2: KPIs for First Deputy Khokims for Financial and Economic Affairs**

<b>№</b>	<b>Functions</b>	<b>Key Performance Indicators</b>	<b>Unit of Measure</b>	<b>Weight (overall: 100)</b>
1	Provision of projected revenues to the national budget (contingent)	The volume of revenues since the beginning of the year	Billion UZS	15
2	Provision of projected revenues to the local budget of the district (city)	The volume of revenues since the beginning of the year	Billion UZS	15
3	Reducing the share of the shadow economy	Relative comparison with the number of operating businesses to the total number of entrepreneurs who have switched to electronic invoices since the beginning of the year	Number	10
4	Reducing the number of low-income families	Families helped out of poverty since the beginning of the year	Number	10
5	Creating a permanent source of income for the population through employment	Change in the number of individual income taxpayers compared to the beginning of the year	Number	15
6	Promoting the creation of new business entities through the development of entrepreneurial skills among the population	Number of business entities (legal persons) registered since the beginning of the year	Number	6
		Number of business entities (individual entrepreneurs) registered since the beginning of the year	Number	5
7	Land allocation for starting a business	Land plots for business activities put on internet auctions via the electronic trading platform "E-IJRO AUCTION" from the beginning of the year	Number	8
8	Promoting access to a source of income through self-employment of the population	Number of citizens registered as self-employed since the beginning of the year	Number	5
9	Employment of the non-competitive population in the labour market <sup>14</sup>	Citizens involved in public works since the beginning of the year <sup>15</sup>	Number	5
10	Assisting the population in acquiring the skills needed in the marketplace	Citizens trained and retrained since the beginning of the year	Number	6

<sup>14</sup> Non-competitive population is people in need of social protection and experiencing difficulties in finding a job and unable to compete on equal terms on the labour market (persons with no place of usual residence and occupation, with a low level of education, etc).

<sup>15</sup> Public works is publicly available paid work, usually not requiring special preliminary training, types of temporary work activities for persons from among the unemployed and unemployed population.

### Pre-experimental condition

The KPIs values presented below show the district's pre-experimental condition (city) level of local government performance (Table 3). The analysis found that local governments have been assigned duties and functions that were not typical of their activities, and the absence of a unified system, specific criteria and indicators for evaluating the performance of the civil servants negatively affected their efficiency in implementing them.

Utilising Excel, the initial KPIs values were calculated. As the data in table 3 show, all districts (city) level local governments have had a performance rating below 70 (%), with the highest value registered in the Yangibazar district of the Khorezm region (69.5%) and the lowest in the Kuva district of the Fergana region (43.1%).

*Table 3: KPIs values in the first Quarter of 2020*

Name of Region	District (city) government	Initial KPI Values (%)
Tashkent	Yangiyol	53,7
	Yangiyol city	66,4
Tashkent city	Yashnabad	64,9
Khorezm	Urgench city	60,7
	Khazarasp	63,7
	Yangibazar	69,5
	Yangiarik	58,2
Andijan	Bostan	60,4
	Khanabad city	64,7
Ferghana	Kokand	43,2
	Kuva	43,1
Namangan	Chortok	58,8

### Citizen satisfaction survey

The satisfaction survey for this study was conducted among citizen in selected regions. Table 4 shows the number of respondents by regional and district (city).

*Table 4: List of Districts (Cities) and Respondents Participating in Survey*

No	District (city)	Respondents
1	Yangiyol city	90
2	Yangibazar	140
3	Bostan	128
4	Yashnabad	290
5	Khanabad city	70
6	Khazarasp	219
7	Yangiarik	195
8	Chortok	285
9	Urgench city	190
10	Kokand city	200
11	Yangiyol	332
12	Kuva	230

N: 2,369

The gender distribution of the respondents in the 12 districts (cities) shows that 50.7% were male, and 49.3% female. The age distribution shows that the majority of the respondents were between 21-30 years old (26.7% of the total population), and between 31-40 years (26%). The

youngest cohort of 16-20 years old represented 6.3%, whereas the 41-50 years old, 20.4% and the 54-60 years old cohort 10.4%. The last group of those over 61 years old represented 10.1%.

With respect to their occupation most of the respondents were teachers (18.1% of the total population). Followed by servicement (3.5%), students (6.9%), pensioners (11.8%), housemakers (12.8%), unemployed (22.2%) with other categories comprising 13.6% of the total population (Table 5).

**Table 5: Demographic Characteristics of the Respondents**

Characteristics	Dimension	Frequency	Rate (%)
Gender	Male	1,201	50.7
	Female	1,168	49.3
Age	16 - 20	150	6.3
	21 - 30	633	26.7
	31 - 40	616	26.0
	41 - 50	484	20.4
	54 - 60	246	10.4
	61 +	240	10.1
Occupation	Doctors	261	11.0
	Teachers	428	18.1
	Servicemen	84	3.5
	Students	164	6.9
	Pensioners	279	11.8
	Housemakers	304	12.8
	Unemployed	527	22.2
	Other	322	13.6

### Satisfaction of mahallas' chairpersons

A list of districts (cities) and chairpersons participating in the survey are presented in Table 6. Geographically, 18 mahalla chairpersons are from Yangiyol city, 28 from Yangibazar, 25, from Bostan, 58 from Yashnabad, 14 from Khanabad city, 44 from Khazarasp, 39 from Yangiarik, 57 from Chortok, 38 from Urgench city, 66 from Kokand city, 66 from Yangiyol, and 47 from Kuva.

**Table 6: List of Districts (Cities) and Chairpersons Participating in the Survey**

№	District (city)	Respondents (mahalla chairpersons)
1	Yangiyol city	18
2	Yangibazar	28
3	Bostan	25
4	Yashnabad	58
5	Khanabad city	14
6	Khazarasp	44
7	Yangiarik	39
8	Chortok	57
9	Urgench city	38
10	Kokand city	66
11	Yangiyol	66
12	Kuva	47
N: 500		

The gender distribution of the mahallas chairperson indicates that most of the 500 chairpersons are male; 400 or 80% of the total, and the remaining 100 or 20% are female. As far as the age distribution, more than a third of those chairpersons who responded 188 (37.7%) are between 54 and 60 years old, followed by those between 41 to 50 years old comprising 152 (30.5%) of the total number of respondents. 59 respondents were between 31 to 40 years (11.8%), and the remaining 100 respondents (20%) over 61 years old. Table 7 summarises the demographic characteristics of the mahallas chairpersons that participated in the survey.

**Table 7: Demographic Characteristics of the Respondents (mahalla)**

Characteristics	Dimension	Frequency	%
Gender	Male	400	80
	Female	100	20
Age	21 - 30	0	0
	31 - 40	59	11.8
	41 - 50	152	30.5
	54 - 60	188	37.7
	61 +	100	20.0

The results of the experiment confirmed the expectation that the performance indicators values would increase between the start and finish dates of the reporting period. This was due to the fact that the clearly planned activities at the beginning of the reporting period helped achieve the desired goals and thus report higher values at the end of the reporting period. It should also be noted, at the same time, that lack of a system for evaluating the effectiveness of district (city) khokims and their deputies does not lead automatically result to total mobilisation of local executive bodies. Table 8 presents the KPIs scores the deputy khokims achieved at the end date of the reporting period.

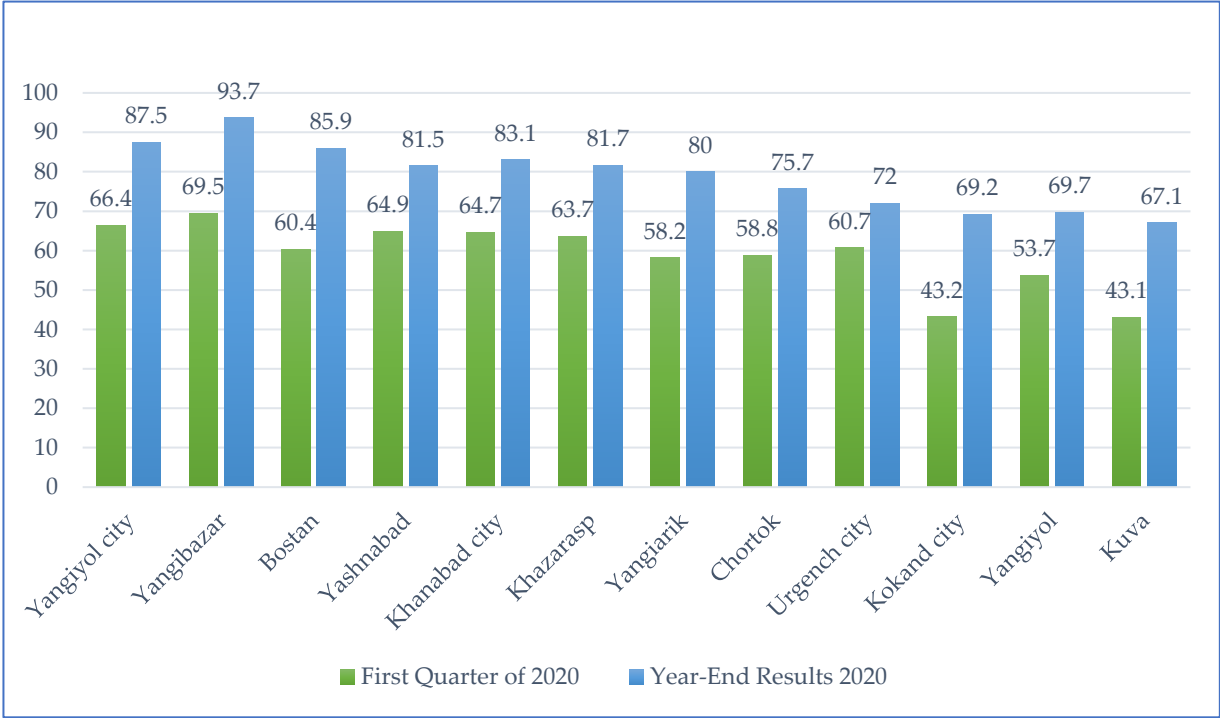
The Yangiyol city (Tashkent region) khokims' ratings went from 66.4% at the start of the experiment to 87.5% at the end of the reporting period. Similarly, the Yashnabad district khokim's ratings from 64.9% to 81.5%, Khazarasp's from 63.7% to 81.7%, Bostan district's from 60.4% to 85.9%, Khanabad city's from 64.7% to 83.1% (see also figure 4 below).

*Table 8: Year-End 2020 KPIs values achieved*

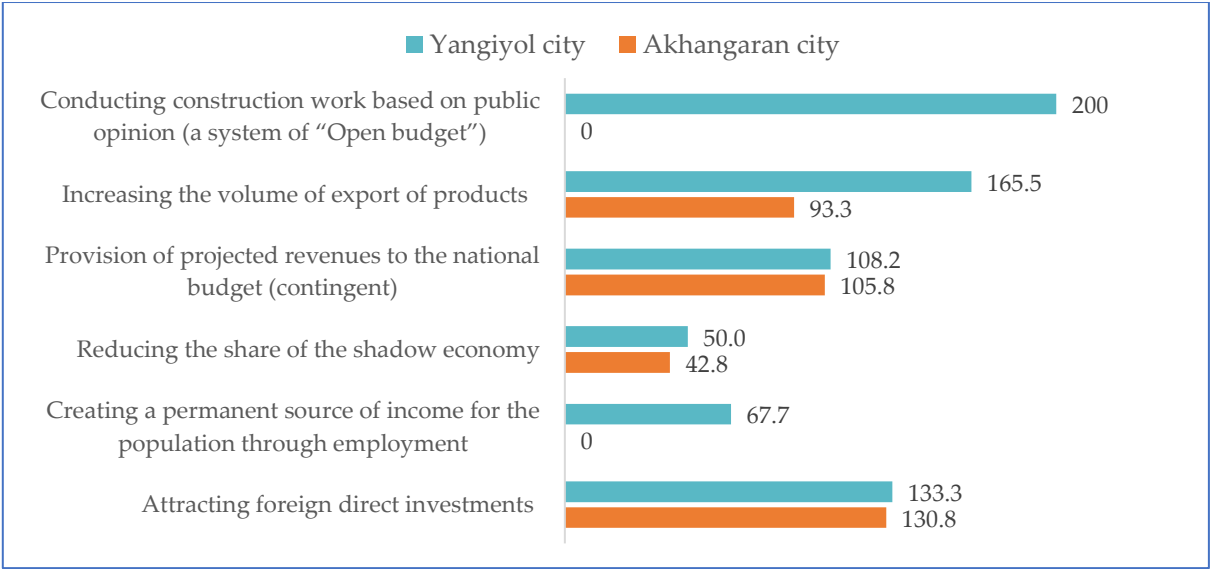
District (city)	Overall rating of khokims	Financial and Economic Affairs and Poverty Reduction	Investment and Foreign Trade Affairs	Construction, Communications and Communal Affairs	Housing and Communal Services and Improvement	Youth Policy, Social Development, Spiritual and Educational Affairs	Mahalla and Family Support Affairs	Agriculture and Water Management Affairs
Yangiyol city	87.5	88.1	102.7	92.9		59.1	94.6	
Yangibazar	93.7	100.4	103.7	100.5		61.4	108.8	87.2
Bostan	85.9	90.5	89.3	88.4		66.4	95.5	85.6
Yashnabad	81.5	96.9	89.8	89.7	69.3	64.5	78.8	
Khanabad city	83.1	88.0	87.3	77.5		63.3	99.2	
Khazarasp	81.7	90.9	101.0	78.1		55.6	81.4	82.8
Yangiariq	80.0	86.3	92.1	74.5		61.9	86.4	78.8
Chortok	75.7	85.8	77.6	72.1		67.1	71.0	80.6
Urgench city	72.0	84.4	87.0	69.2		55.6	63.6	
Kokand city	69.2	72.6	85.9	73.8		54.2	59.3	
Yangiyol	69.7	81.9	73.5	62.5		42.8	69.8	87.9
Kuva	67.1	78.2	62.0	63.7		49.8	67.7	81.3

The results obtained for the Yangiyol deputy khokim’s performance - where the new system was implemented – and those for the Akhangaron deputy khikim’s perfoamcne – where the new system was not implemented - were compared to assess the influence of the performance indicators’ implementation in measuring the deputy khokims tass and functions achieved (see also figure 5 below).

**Figure 4: Comparative Analysis of the Ranking Performance of District (City) Khokims**



**Figure 5: Comparison of City Local Governments with and without KPIs**



The evidence indicates that implementing KPS in the civil service at the district (city) level of local government and rating the performance of khokims and their deputies based on the level of achievement of several performance indicators is successful in the national context. Local authorities that have taken part in this pilot have become the pioneering local governments in implementing KPIs, since the central government announced the effort to enhance local government performance further to fulfil their mandate defined by legal acts. The

implementation of performance management indicators has improved the effectiveness of frontline services. Thus, it seems that the application of KPIs in all local governments' civil service may lead to an increase in their performance levels.

## CONCLUSIONS AND RECOMMENDATIONS

The present study was designed to explore the effect of implementing a performance management system through the use of KPIs at the district (city) level of local government. As local government administration civil service plays a crucial role in promoting the transformation of the entire government apparatus, application of key performance indicators is a noteworthy contribution to a "bottom-up" approach in increasing the efficiency of providing local government services to people. A well-designed performance management system will help to setting achievable targets, motivate local government personnel, and realign objectives based on legislation with changing administrative conditions. Although the current study is based on a limited geographic area, every local government civil servant, who participated in the experiment, was encouraged to improve the current values of their performance indicators. Without empowered local authorities, this study could not have been conducted promptly.

Since 2017, the central government's transformation efforts such as offering training and delivering rewards and recognition, has significantly improved public administration intellectual's capacity to conduct research. This new paradigm has raised many questions in need of investigation. Recognising that the local governments' management efforts in providing public services includes inputs, outputs, and outcomes, quantitative performance indicators are used to measure local administrators' performance as part of present-day civil service reforms.

This limited experimental study aimed at analysing the applicability of KPIs at the local government level by implementing an up-to-date performance management system that would contribute to increasing the performance of khokims and their deputies. It would also encourage competition among local government through its ranking of appraisees by the KPIs values they achieved. The study's findings suggest that the experiment played a positive role in developing the planning skills of local government leaders, in ensuring the accuracy of the data used in the assessment by obtaining information on the achievement of KPIs from government agencies, and by focusing on the emergence of a healthy competition among local governments and the effectiveness of their leaders.

Policy implications for performance management system in the context of bridging research and practice as follow:

- Incentives with bonuses for high performance and the introduction of a system of the reserve for executive positions;
- Clear delineation of their responsibilities and accountability by defining the duties and functions of each deputy governor in a single document;
- Creation of an electronic system that allows for the automatic calculation and monitoring of access to KPIs by local government leaders in real-time;
- Automated analysis of indicators by creating an electronic program on the evaluation system and reducing the human factor in this process;
- Introduction of the principles of meritocracy in the civil service through the gradual introduction of the practice of appointments to leadership positions depending on their effectiveness;



- Organisation of training of khokims of districts (cities) and their deputies by the Academy of Public Administration under the President of the Republic of Uzbekistan on special short-term courses on achieving major performance indicators.

As a result of the experiment, a system for evaluating the performance of regional, district and city khokims based on the key performance indicators was fully implemented and a legal basis for the evaluation system was created. In particular, the Regulation "On the procedure for the development, monitoring and evaluation of the key important performance indicators" was approved by Presidential Decree in 2021. According to the provisions of the Decree, the performance of deputy khokims is assessed quarterly against a set of predetermined KPIs. The assessment results are used to decide whether such individuals are in need of further encouragement, of disciplinary measures, or whether they remain in their current positions.

The findings from this study contribute to the current literature. They provide a framework for developing key performance indicators in the local civil service. It seems that there will be a shift in the institutional reform issues, laws and regulations by enacting new legislation and proposing new rules to implement the performance management system. On the other hand, the study's significance also related to the contemporary reform policy of the civil service. In favour of the Conception of Administrative Reform, this research will contribute to developing research activities, including the development of innovative ideas and the formation of a basic framework to ensure further development (2017).

In terms of the limitations of the KPIs system, its potential problems and the need for the development of a flexible system, the following conclusions were made:

First, the KPI system cannot be used as a universal assessment tool in all areas. In particular, in work related to the result of mental activity (analysis, rule-making, etc), the assessment will in most cases be associated with a human factor, and it will be impossible to determine in advance the criteria that need to be accurately measured, or it will be considered inappropriate to introduce a KPI system as it requires very large resources (time, human and financial resources).

Second, the lack of a proper definition of KPI criteria leads to a waste of the organization's resources, as well as an inability to achieve the desired outcome. That is, each set of criteria and indicators requires a deep analytical and strategic approach.

Thirdly, the introduction of the KPI system into the activities of employees at all levels can lead to negative consequences:

- for the organisation and implementation of evaluation processes, the bureaucratic workload will increase and excessive consumption of resources will occur. This negatively affects the efficiency of activities;
- the presence of individual performance of employees at all levels undermines the spirit of teamwork (deterioration of the working environment and relations in the team), because the employee primarily tries to work to achieve his (her) individual tasks up to a certain level of performance.

This process has a negative impact on the collective effort of a team. It is because of these risks that the introduction of a KPI system in the field of civil service is radically different from the implementation of a KPI system in private enterprises. In this context, the KPI system was introduced only for the activities of khokims.

Fourth, in the practical implementation of the KPI system it is necessary to create a fast and flexible system of formation (modification) of mechanisms and indicators. This is due to the fact that in the current period of rapid development, changing conditions can lead to the establishment of new tasks and target indicators for civil servants. This requires quick adjustments to existing tasks and changes in performance depending on current reality.

Fifth, it is necessary to create a solid organisational and legal basis for the implementation and practical application of the assessment system. Because the introduction of a new system requires a clear, understandable definition of the rights and obligations of all participants in the process of methodological support and evaluation.

Taken together, these results suggest that a flexible system must be developed, and it is recommended to limit the development of target KPI values of structural divisions (including subordinate organisations), without developing KPIs in measuring individual civil servants' performance. In this case, an assessment is assigned to a structural subdivision. The heads of these structural subdivisions assess their employees depend on contribution to the subdivision's KPIs.

Moreover, several other significant limitations need to be considered: extensive research has been carried out on KPI in the civil service (e.g., central, local), but national experiences have not been treated in detail, and that is why the data on the subject of Uzbekistan is limited. Secondly, it is also worth noting that reliability is an essential quality of any survey test; however, due to practical constraints, this paper could not provide a comprehensive revelation of some details of survey data (e.g., questionnaire items, KPIs of other deputy khokims). Further research might explore other public institutions and contrasting the findings, or research regarding this study's long-term effects would be interesting.

## REFERENCES

- Armstrong, M., & Baron, A. (1998). *Performance management: The new realities*. London: Institute of Personnel and Development.
- Bourne, M., Franco, M., & Wilkes, J. (2003). *Corporate performance management. Measuring Business Excellence*.
- Decree of the President of the Republic of Uzbekistan (2017). The Conception of administrative reform. Retrieved from the National legislative database of the Republic of Uzbekistan: <http://www.lex.uz/acts/3331176>
- Decree of the President of the Republic of Uzbekistan (2019). On measures to radically improve the personnel policy and the state civil service system in the Republic of Uzbekistan. Retrieved from the National legislative database of the Republic of Uzbekistan: <https://lex.uz/ru/docs/4552055>
- Decree of the President of the Republic of Uzbekistan (2021). On additional measures to strengthen the personal responsibility of deputy heads of local executive authorities for the performance of tasks assigned to them. Retrieved from the National legislative database of the Republic of Uzbekistan: <https://lex.uz/docs/5598099>
- Ferlie, E. (2017). The new public management and public management studies. In *Oxford Research Encyclopedia of Business and Management*.
- Folan, P., & Browne, J. (2005). A review of performance measurement: Towards performance management. *Computers in industry*, 56(7), 663-680.
- Fryer, K., Antony, J., & Ogden, S. (2009). Performance management in the public sector. *International journal of public sector management*.
- Hajnal, G., & Staronova, K. (2021). Changing patterns of individual performance appraisal systems for civil service in European Union countries: toward a developmental or an incentivizing model. *International Journal of Public Sector Management*.
- Kloot, L., & Martin, J. (2000). Strategic performance management: A balanced approach to performance management issues in local government. *Management accounting research*, 11(2), 231-251.
- Law on Local Public Administration (1993). Retrieved from the National legislative database of the Republic of Uzbekistan: <https://lex.uz/docs/112168>
- Mingers, J., Liu, W., Chen, Z. L., Li, Q., & Meng, W. (2009). The 3E Methodology for Developing Performance Indicators for Public Sector Organisations.
- Nimalathasan, B. (2009). Determinants of key performance indicators (KPIs) of private sector banks in Sri Lanka: an application of exploratory factor analysis. *The USV Annals of Economics and Public Administration*, 9(2), 9-17.
- Propper, C., & Wilson, D. (2003). The use and usefulness of performance measures in the public sector. *Oxford review of economic policy*, 19(2), 250-267.
- Reinventing government: How the entrepreneurial spirit is transforming the public sector, by David Osborne and Ted Gaebler. New York: Addison-Wesley, 1992, 420 pp.
- Rochlitz, M., Kulpina, V., Remington, T., & Yakovlev, A. (2015). Performance incentives and economic growth: regional officials in Russia and China. *Eurasian Geography and Economics*, 56(4), 421-445
- Simion, K. (2016). Qualitative and Quantitative Approaches to Rule of Law Research. Available at SSRN 2817565.
- Smith, P. (1993). Outcome-related Performance Indicators and Organisational Control in the Public Sector 1. *British journal of Management*, 4(3), 135-151.

- Tiebout, C. M. (1956). A pure theory of local expenditures. *Journal of Political Economy*, 64(5), 416– 424. <http://dx.doi.org/10.1086/257839>
- Tiebout, C. M. (1961). An economic theory of fiscal decentralisation. In Universities-National Bureau Committee for Economic Research (Ed.), *Public finances: Needs, sources, and utilisation* (pp. 79– 96)
- Van Thiel, S., & Leeuw, F. L. (2002). The performance paradox in the public sector. *Public performance & management review*, 25(3), 267-281.
- Wang, X., & Berman, E. (2001). Hypotheses about performance measurement in counties: Findings from a survey. *Journal of Public administration research and theory*, 11(3), 403-428.
- Yuan, J., Wang, C., Skibniewski, M. J., & Li, Q. (2012). Developing key performance indicators for public-private partnership projects: questionnaire survey and analysis. *Journal of Management in Engineering*, 28(3), 252-264.
- Zakaria, Z., Yaacob, Z., Noordin, N., Sawal, M. Z. H. M., & Zakaria, Z. (2011). Key performance indicators (KPIs) in the public sector: a study in Malaysia. *Asian Social Science*, 7(7), 102.
- Zheng, Y., Wang, W., Liu, W., & Mingers, J. (2019). A performance management framework for the public sector: The balanced stakeholder model. *Journal of the Operational Research Society*, 70(4), 568-580.

### *Acknowledgements*

This research was made possible by the Agency for the Development of Public Service under the President of the Republic of Uzbekistan. We gratefully thank our colleagues of Department for Monitoring and Evaluation of Public Servants for assistance in conducting research, for comments on the article, and their meaningful insights and comments. We also would like to thank the following people for their support, without whose help this work would never have been possible: Mr Khasanov Otabek, Mr Maksumov Nodirjon, Ms Mamatova Zulfiya. Finally, we wish to extend our special thanks to the constructive comments of the anonymous referees.