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Enhancing the capacity of the public sector in core
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Enhancing the capacity of the public sector in a fast-changing world for the achievement of the Sustainable Development Goals

Note by the Secretariat

The Secretariat has the honour to transmit to the Committee of Experts on Public Administration the paper prepared by Committee member Ora-orn Poocharoen, in collaboration with Emmanuelle D'Achon, Joan Mendez and Linus Mendjana.

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Enhancing the capacity of the public sector in a fast-changing world for the achievement of the Sustainable Development Goals

Summary

The present paper contains reflections on the new capacities needed in the public sector and for the public sector workforce, in a fast-changing world, in order to implement the Sustainable Development Goals. An overview of public administration paradigms is provided, and the new concept and paradigm of smart sustainable governance is introduced, which underlies the new capacities and skills required by government leaders and public sector employees to effectively and inclusively realize the 2030 Agenda for Sustainable Development.

Based on the conceptual foundation of the principles of effective governance for sustainable development endorsed by the Economic and Social Council in July 2018, in its resolution 2018/12, the paper links the principles with the Sustainable Development Goals and includes newly emerging technologies (the Internet of things, artificial intelligence, blockchain, social media and others) to show how they are shaping and moulding the content and pace of public sector reform across different levels and layers of government around the globe.

In the present paper, specific emphasis is placed on the new role of the public sector, which is characterized by waves of transformation in four categories of thinking, namely, design thinking, critical thinking, futures thinking and complexity thinking. The role of soft skills, including intuition, empathy and the mastery of deliberative mechanisms, is shown to be as critical to public sector effectiveness, inclusiveness and accountability as are logical reasoning and causal analysis of hard facts and evidence-driven policymaking. The importance of investment in public sector reform is also emphasized. The paper concludes with several policy recommendations for policymakers contemplating smart sustainable governance reform towards implementing the Sustainable Development Goals.

I. A call for capacity-based public sector reform

1. Most public sector challenges that the world faces at present are highly interdependent. The quality of education, for instance, is highly correlated with that of health care, as well as with poverty reduction, urban development and gender equality. The conditions that bring about sustainable cities correlate with such varied development and governance factors as the clean and efficient use of energy, access to decent employment, industrial innovation, clean water and capable institutions. Sustainability requires holistic views of all these and related issues and of their interconnectedness.

2. The 2030 Agenda for Sustainable Development and its Sustainable Development Goals provide an opportunity for key governance actors, including decision makers, to investigate those interdependencies – not only among the Goals themselves, but also between organizations and stakeholders at all levels of governance.

3. Interdependencies of issues and organizations extend beyond national borders. It is difficult to imagine any country or Government acting independently of global norms without facing resistance, in one way or another, from stakeholders both inside and outside their jurisdictions. The vast majority of public policies, including laws, regulations, codes of conduct, issue-based policies, programmes and projects, will almost always have connections to broader issues at the global level. Examples of such policies include those relating to Internet regulation, human rights, education, transportation, migration, investment, trade, and traditional and non-traditional areas of security, including cybersecurity.

4. Governments and the public sector workforce in any given country need to realize that their policy decisions and actions are most likely to have implications for other countries, and vice versa. The Sustainable Development Goals present the opportunity to think and act consciously to align policies horizontally and vertically, as well as subnationally, nationally and transnationally. Such conscious alignment may be instrumental to making strides towards solutions to complex problems that often arise as a result of common flaws in collective action. Taking stock of these and related challenges, the Committee of Experts on Public Administration formulated 11 principles of effective governance for sustainable development, which were endorsed by the Economic and Social Council in July 2018, in its resolution 2018/12. The principles are shown in table 1 (see also E/2018/44, para. 31).

Table 1
Principles of effective governance for sustainable development

- ■ Effectiveness

  - • Competence

  - • Sound policymaking

  - • Collaboration

- ■ Accountability

  - • Integrity

  - • Transparency

  - • Independent oversight

■ Inclusiveness

- Leaving no one behind

- Non-discrimination

- Participation

- Subsidiarity

- Intergenerational equity

5.   The principles of effective governance can be vital in the implementation of the Sustainable Development Goals. Governments can use them to consider new directions in public sector reform while abiding by their cultural, economic, social and political attributes. Public sector reforms grounded in those principles can help to accelerate the pace of progress towards the realization of the Goals.

6.   Public sector reform encompasses such manifold issues as restructuring institutions or organizations and introducing new public values, laws or guidelines, changing human resource policies and revamping decision-making processes, including policy, plans and budgetary decisions. A useful way to help guide the direction of such public sector reforms is to focus on the essential capacities currently needed for public administrations to work effectively towards the achievement of the Goals. In this regard, the effective governance principle of sound policymaking can be pivotal.

7.   Sound policymaking is particularly important. In order to produce their intended results, public policies must be coherent with one another and founded on true or well-established grounds, in full accordance with fact, reason and common sense. In addition, sound public policies can be judged on the basis of the principle of inclusiveness as outlined in table 1 (leaving no one behind, non-discrimination, participation, subsidiarity and intergenerational equity). It is also commonly accepted that if policies are designed with integrity and transparency and there is adequate independent oversight to ensure accountability, they are more likely to be sound.

II.   Enduring challenges in the public sector

8.   It is important to outline some of the key factors that may hamper the design and execution of sound public policies. First, many public sector workforces have grown considerably, both in size and in the scope of their authority and mandates, to the point where citizens have come to view the Government and decision-making processes as a black box, an opaque process that involves many people and committees and that involves piles or gigabytes of documents.

9.   The public sector is often viewed as being too hierarchical, too bureaucratic and too slow to respond to the changing needs and wants of the public. It is often perceived as putting too much emphasis on processes rather than results and as out of touch with realities on the ground. Many countries do not fully achieve their potential for progress because of excessive centralization. Citizens often feel distant from policymaking processes, and most do not comprehend how policies affect their everyday lives. Moreover, people are not fully empowered to take responsibility for working towards the Sustainable Development Goals. Often, decisions are made from the top down without thorough analysis of all the possibilities and without surveying citizens as to their priorities. This is an immense challenge for effective governance and the realization of the 2030 Agenda.

10.   Second, many Governments complain of a lack of integration and the inability to work across agencies, functions and jurisdictions. There is an inherent culture of working in silos in many bureaucracies. Often, data are not shared, and key performance indicators are divided among agencies, rendering it difficult to collaborate across agencies towards common goals. Agencies often end up competing for budgets, power and validation for their performance. Such a situation often contributes to perceptions that Governments lack leadership, direction and innovation and that they are overly political. It also constitutes a fundamental obstacle to designing and executing policies that are integrated, coherent and sound.

11.   Third, the public sector workforce in many countries – public employees, civil servants and others working in public agencies – are still not aware of the Sustainable Development Goals. If the Goals are considered the starting point, even before any thinking about policy integration and coherence takes place, it becomes critical to disseminate information on the Goals to all actors at all levels of governance and to all key stakeholders active in public policy domains across the board. Everyone in the public sector should be educated about the Goals and appreciate how their day-to-day work is related to the achievement thereof.

12.   In order to achieve the Sustainable Development Goals, there is a need to carefully examine the level of consistency across policy goals, policy instruments and their relations at the operational level. As bureaucracies may face myriad limitations, including the aforementioned challenges, new institutional arrangements are needed to foster deliberative mechanisms and tools, in particular to interlink policies consciously and systematically. Policy coherence, policy integration (vertical and horizontal) and multilevel governance should be part of a comprehensive public sector reform to reshape decision-making processes and reorient the role, culture and mindset of the public sector towards the fulfilment of the Goals.

13.   A checklist to examine the degree of consistency in policy matters could be one of the first steps in promoting policy integration. For instance, one item on the checklist could be whether or not a new urban development plan pays attention to the environment. The present paper explores new sets of tools and capacities, in particular technology, that are collectively dubbed "smart sustainable governance" and that the public sector urgently needs in order to design and execute sound policymaking and effective governance to realize the Goals.

III.   New technologies and the public sector

14.   Technology has become one of the most important factors in determining possibilities in the field of development. It is also one of the most disruptive factors that may affect Governments and societies. A successful transition to the fourth industrial revolution now depends on the proliferation of technology and how the process is managed.

15.   Governments that have the expertise to foresee how new technologies can be used to make public policies and services more effective, inclusive and accountable have an advantage over those that do not. Similarly, Governments with such expertise often also have the capacity to protect their citizens from potential harm caused by, or from the negative externalities of, technologies. They are quick to initiate the sandboxing of new technologies in order to design the appropriate policies to enable and regulate them.

16.   There is ample room for all public sectors to embrace technology so as to achieve higher productivity and efficiency. However, owing to the unevenness of adaptability and adoption rates, the digital divide is now characterized not only by

marginal gaps in society at the national level, but also by gaps among countries at the international level.

17. Smartphones, laptops and tablet devices are readily available, worldwide, at increasingly affordable prices and with an increasing variety of functions. A smartphone, for instance, is not just a phone, but a still and video camera, a calculator, a calendar and a device to use apps such as online banking and to control other devices. The potential of smartphones continues to grow, and they have become a necessity in most people's lives. While the smartphone has narrowed the digital divide, Governments have yet to use this potential to the fullest in order to improve citizen engagement, service delivery, accountability and the provision of and access to information, among other things.

18. Social media has considerably shifted the ways in which people communicate. Instant messaging that allows the transfer of text, audio and video is a powerful tool of communication between the Government and citizens, and vice versa. Many Governments and public agencies now have social media accounts and use a variety of instant messaging apps to communicate with their constituents.

19. E-government has made significant strides across the globe, but developments are still strikingly uneven across regions and countries, as demonstrated by the United Nations e-Government Survey. For example, Estonia has allowed non-citizens to obtain e-residency status, empowering many to easily join the digital market ecosystem. The country is aiming to end all paperwork for public services. The Government of Singapore provides virtually all its services online, ranging from tax-related transactions, police services and public housing to central provident funds. Since 2016, Denmark has mandated that all citizens use online public services and receive emails rather than paper mail as proof of transactions.

20. The Internet of things is a sensor network of smart devices or any objects that connect to each other without human intervention. They can range from household devices, such as coffee machines, alarm clocks, digital calendars, smartphones, wearable devices, lamps and washing machines, to large-scale city transportation and parking systems, car navigation systems, garbage collection systems and energy and security systems. Cloud-based platforms of this type allow the mass storage of data that enables big data analytics. Such information helps Governments make better-informed policies. Smart city projects are examples of how some local governments are integrating the Internet of things into their city infrastructure systems and are generating big data to better monitor and design city services. Some areas of application may include workforce analysis, traffic, emergency responses and the detection of anomalies in financial transactions and travel patterns.

21. Blockchain technology has immense potential to overhaul the processes and our understanding of authenticity, asset ownership and the role of Governments as mediators and verifiers of information. Mostly known as the technology behind cryptocurrencies, the blockchain is a digital ledger that can be programmed to record everything of value and resembles a spreadsheet that is duplicated numerous times across a network of computers. Once recorded, the transaction is permanently available in the blockchain system, thereby making the transaction forever public and unchangeable. Private companies, civil society groups and Governments are experimenting with this technology in a variety of fields. Private banks, including Standard Chartered, and central banks, such as the Bank of Canada, the Monetary

Authority of Singapore, the Bank of Japan, the Bank of England and the European Central Bank, have begun to pilot projects using this distributed ledger technology.[1]

22. Artificial intelligence is also developing at a phenomenal speed, thanks to big data generated online in recent years, improvements in machine learning algorithms and the advancement of cloud-based services. There are five broad applications for artificial intelligence:[2] (a) reasoning, or the ability to solve problems through logical deduction; (b) knowledge, or the ability to present knowledge about the world; (c) planning, or the ability to set and achieve goals; (d) communication, or the ability to understand spoken and written languages; and (e) perception, or the ability to infer things via sensory outputs such as sounds and images.

23. Artificial intelligence has been applied in many fields, including health, education, security, entertainment, business, finance, manufacturing and the automobile industry. In the case of the automobile industry, autonomous vehicles or driverless cars are being tested in some cities. This new way of travelling will require a redesign not only of the physical infrastructure, but also of laws, regulations, insurance and the provision of services related to commuting and mobility. For instance, Singapore has been testing autonomous vehicles and the associated data management systems, thereby paving the way for generating new clusters of digital services that go beyond simply solving traffic problems and extend to lessening energy consumption and promoting economic development.

24. There are numerous other potential uses of artificial intelligence technology. China, for instance, has a national artificial intelligence strategy and is upgrading infrastructure, research and development and skills development accordingly. According to research published by the International Telecommunication Union, it is predicted that artificial intelligence will result in more of a skills shift than a labour shift.[3] In sum, there is enormous room to utilize artificial intelligence to reach the Sustainable Development Goals, and some Governments are moving faster than others in this respect.

25. The key new technologies mentioned above can be used positively to their fullest potential only when the public sector and reforms of the public workforce shape existing beliefs, cultures, practices and rules to accommodate them. A simple example is how most Governments still require the production of paper documents or how many government bodies lack certain online services, citing the restriction of regulations such as the need to have ink-based signatures for verification. In such contexts, local governments and certain agencies may be more flexible and adopt new technologies to become trailblazers of progress and innovation.

26. The unevenness of adoption of such technologies among countries, regions, cities and agencies may further worsen inequality. Thus, it is important to ask why some Governments or agencies are faster at adopting new technologies than others. One answer is the capacity of the public sector and its workforce. The next section covers the new capacities needed to adopt the plethora of new technologies and harness their many applications, thus giving rise to the emergence of a new public administration paradigm that can be called "smart sustainable governance".

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[1] Garrick Hileman and Michel Rauchs, *2017 Global Blockchain Benchmarking Study* (Cambridge, United Kingdom of Great Britain and Northern Ireland, Cambridge Centre for Alternative Finance, September 2017).

[2] Hackerearth blog, "Applications of artificial intelligence (AI) in business", 20 July 2018.

[3] Jacques Bughin, "Marrying artificial intelligence and the Sustainable Development Goals: the global economic impact of AI", *ITU News*, 12 October 2018.

IV. New roles of the public sector

27.   Public administration literature refers to several paradigms, ranging from ancient public administration, traditional public administration and new public management to new public governance and, more recently, smart sustainable governance. There is no public sector that operates purely on the basis of just one of these models. Most countries operate with mixed paradigms. Some have public sectors that feature more characteristics of certain paradigms than of others. Needless to say, each country has its own pace and will adopt changes at different speeds.

28.   These paradigms are not meant to be normative. They are based on observations of transformations of governments over the past century. They each have pros and cons and best serve as guideposts for discussion and as directions for public sector reform. The aim of the newly proposed paradigm of smart sustainable governance is to highlight the increasing role of technology and the associated changing role of Governments in relation to the Sustainable Development Goals. The typology of paradigms illustrated in table 2 can be helpful in analysing the diversity and unevenness of public sector capabilities around the world.

Table 2
Paradigm shifts in public administration

	Ancient public administration	*Traditional public administration (1960s)*	*New public management (1980s)*	*New public governance (2000s)*	*Smart sustainable governance (2020s)*
Governance principles	Only government	Best government	Efficient governance	Good governance	Effective governance
Target audience	Commoners	Voters	Customers	Citizens	Public
Public services	Basic provision	Direct provision	Contracted provision	Co-produced provision	Customized provision
Role of Government	To rule	To row	To steer	To facilitate	To design
Leadership style	Autocratic style	Bureaucratic style	Competitive style	Collaborative style	Constructive style
Accountability	Leader	Hierarchy	Market	Network	Multilevel
Goal and focus	Obedience, loyalty-based	Law, rule-based	Indicators, results-based	Relationships, trust-based	Sustainability, justice-based

Source: Adapted from Michael Howlett, Anka Kekez and Ora-orn Poocharoen, "Understanding co-production as a policy tool: integrating new public governance and comparative policy theory", *Journal of Comparative Policy Analysis: Research and Practice*, vol. 19, No. 5, pp. 487–501. Additional input provided by Piyapong Boossabong of the Chiang Mai University School of Public Policy, Thailand. Ancient public administration and smart sustainable governance added by the author.

29.   Ancient public administration is a governance type that provides little choice for the people, who are seen as commoners to be ruled over. It provides minimal basic public services and operates on the basis of fear and threats. It is focused on ensuring obedience and loyalty from the people. This kind of Government is often preoccupied with surveillance and hard security issues. Power is passed on via kinship rather than merit. In places where people have evolved beyond being commoners (i.e., voters, customers, citizens and the public), public officials and leaders often feel vulnerable because their power is constantly being contested. Nation States often fell into this

paradigm in their early consolidation stages. Policies in this paradigm would be nationalistic in nature and inward-looking, and they would place emphasis on stability.

30. Traditional public administration is based on the Weberian model of bureaucracy. This kind of Government functions in rational and technocratic terms, separating the administrative from the political. In this paradigm, it is believed that the solutions to complex problems can be reduced to formulas and models for replication, with policymaking and implementation becoming scientific exercises. The paradigm operates on the belief that the Government knows best, thanks to its information base and accumulated expertise. Such a Government tries to appeal to its voters by directly providing all public services (i.e., education, health, environmental protection, development projects, etc.). This kind of Government relies on documentation, step-by-step processes and top-down hierarchical control. If taken to the extreme, however, it can lead to overreliance on procedures, thereby jeopardizing innovation and entrepreneurship in the public sector. It can pose the risk of culminating in a bureaucratic culture of "rule by law" rather than "rule of law".

31. The new public management paradigm is founded on the maxim that the smaller the Government, the better it functions. It involves trust in the market and in competitive styles of governance. It allows all types of actors, in particular the private sector, to deliver public services. The focus is on results and key performance indicators. Preferred policy tools in this paradigm include pricing mechanisms, privatization, performance-based pay and outsourcing. An important value in this paradigm is efficiency, that is, doing more with less. Efficiency, entrepreneurship and management are preferred over administration and rule-following. Critics of the paradigm have hinted at overreliance on capitalistic world views, measurable outputs and individualism at the expense of public values and community spirit.

32. In the new public governance paradigm, the focus is on building trust between the Government and the public. Networks of actors are at the centre. Power is shared among stakeholders, and accountability is distributed among members of networks. Decisions and actions are collaborative in nature. By involving civil society, this type of public sector aims to co-produce public services with citizens. It stresses good governance based on public participation, transparency, integrity and the rule of law. It is understood that this paradigm goes hand in hand with democratic principles. Concerns about this type of public sector include the diffusion of accountability, the inability to reconcile policy paradoxes, protracted decision-making processes and the potential capture of policy discourse by large non-governmental groups and other similar stakeholders.

33. The fifth paradigm is smart sustainable governance, which is introduced in the present paper. In this paradigm, Governments explicitly focus on sustainability and equality for all. The value of inclusiveness (leaving no one behind, non-discrimination, participation, subsidiarity and intergenerational equity) becomes the foremost criterion for public decision-making. The principle of effectiveness in working towards long-term sustainability is a key priority. In this paradigm, Governments can play the role of the platform provider, with online platforms for the purposes of data-sharing, peer-to-peer transactions, knowledge generation and meeting the needs of the people. Communicating in an inclusive manner, they can transform complicated data sets into visuals, diagrams and data infographics that are easily understandable to the public.

34. As blockchain technology becomes more widespread, the ability of any sector or actor to monopolize data and information may lessen. In addition, the need for verification of authenticity by the Government may no longer apply. In this paradigm, the public sector would design and manage large online and offline policy ecosystems

but would not have monopoly power over them. The public would be able to expand its role as data generator, knowledge manager, knowledge systems broker and platform leader for services, and in many other capacities.

35. In this new paradigm, the public sector is no longer restricted to certain roles. Leaders, public officials and the public are future-oriented and favour long-term thinking. Pragmatism becomes a fundamental way in which to operate in the public sector, since officials are comfortable mixing and matching policy tools and instruments for different needs and with various purposes in mind. With the availability of big data analytics and artificial intelligence technology, Governments can customize policies for communities, regions and specific issues, for instance. Public agencies can be enablers, providers, regulators, competitors, facilitators, designers, observers and collaborators, all at the same time. The capacity to mix these roles successfully is at the heart of customization for sound public policymaking and effective governance.

36. It is also important to ensure that adequate legal and regulatory frameworks are established and updated continuously to create an auspicious context for innovations to grow while protecting against abuse and concentration of power. For instance, the use of blockchain technology in financial markets should be accompanied by the necessary financial regulation to protect market participants and societies at large. Appropriate coordination between different jurisdictions and among key actors is also important in the fields of application of artificial intelligence and robotics. Balanced approaches to data privacy and transparency, cybersecurity and ethical governance overall are necessary for technology and connectivity to culminate in improvements in both governance and development outcomes.

37. A core function of the public sector is to design policies to achieve sustainable development. Many, but not all, public officials have broad knowledge – recognizing interlinkages between complex issues, seeing across functions and issues, being fully versed in the interdependencies among the Sustainable Development Goals – and can take a bird's eye view of complex problems while being able to delve into specific policy domains. In designing public policies, public officials have the responsibility to shape policy goals, policy content, policy management processes, policy learning processes and policy communication. They must understand the complexity of public problems, have high emotional intelligence and empathy and be knowledgeable about different policy instruments. Public officials must have critical mindsets and be able to construct policy narratives to achieve sustainability.

V. New skills and capacities needed

38. Public sector reform efforts in the past 30 years have focused mainly on trimming down the public sector workforce and restructuring agencies and processes. In the field of development, the term "capacity-building for public servants" has been used loosely, often without clear definitions of the capacities needed. In addition to technical expertise in different sectors, such as health, trade, industry, security and education, the most important capacities for public officials today are design thinking, complexity thinking, critical thinking, futures thinking, deliberation or facilitation skills and emotional intelligence. These are the skills needed specifically for the smart sustainable governance paradigm.

39. **Design thinking**. It is imperative to understand that today's public policy processes can no longer be neatly divided into the phases of policy formulation, implementation and monitoring and evaluation. Public sector employees play very important roles in all aspects of public policies. Public officials increasingly take on the role of policy designers. To design sound public polices, public officials need to

understand the policy landscape, policy systems and subsystems, policy networks, policy interventions, instruments, learning, evaluation and policy communication. More importantly, public officials need to have holistic views of problems and be able to manage deliberative processes effectively.

40. **Complexity thinking**. With today's computing and communications technologies, public policy should no longer be viewed as static interaction, but as continuous and dynamic interaction between stakeholders, ideas and actions. Public sector challenges are highly complex and interrelated, which makes complexity thinking a necessary skill set for public officials. This type of thinking is about recognizing and understanding that systems are inherently dynamic and adaptive. They are more than the sum of their parts and involve constant interactions among agents, networks and rules, as well as adaptation, non-linear dynamics and individual-level interactions, which can produce effects at macro levels. Complexity thinking therefore requires the consideration of alternative courses of action and foresight in addition to indicator-driven analysis and learning from the past (see E/C.16/2016/4).

41. **Critical thinking**. For public officials to see below the surface (i.e., past the tangible facts and figures) of problems, they need to possess critical thinking skills, which include the ability to analyse belief systems and the roots thereof, as well as the ability to critically reflect on their own beliefs, ideologies and world views. Examples include the ability to re-examine the role of women in society, to question education as a social engineering tool and to do the same vis-à-vis development models in use. With critical thinking, public officials carefully examine the sources of problems, such as those linked to deep structural violence, and embedded biases in beliefs.

42. **Futures thinking**. Future readiness requires training and action. The futurist movement is making an impact in some countries.[4] The adoption of design thinking and futures thinking can allow the public sector to implement sandboxes, prototypes or pilot projects aimed at making the public sector ready for the future. It also allows for effective risk management strategies. Tools for futures thinking include scenario planning and causal layered analysis. These tools, which are akin to critical thinking, allow a better detection of unconscious beliefs that may affect policies and their soundness. The ability to detect, transform and positively utilize this knowledge is a key success factor in effective governance towards the realization of the Sustainable Development Goals.

43. Futures thinking opens up the possibility of new narratives and new definitions of problems. For instance, it can help us to imagine and materialize the concept of smart cities. It can shed light on the future of energy consumption shifting from government-owned, centralized provision to off-grid, decentralized systems. It can point to the future of education shifting from degree-based courses to a skills-based process, to the future of mobility shifting towards driverless cars, and to the shift from the concept of disability to one of different abilities in which the diversity of human conditions is celebrated.

44. **Deliberation skills**. Many public problems have their deepest roots in the beliefs, world views and psyche of people and communities. For instance, traditional views about same-sex partnerships have inhibited true gender equality in many societies. Today, we are witnessing a rapid spread of LGBTQ rights movements around the globe. Those developments cannot be addressed by rational thinking alone. The narratives of problems must be opened for deliberation, and people's fears and world views must be examined closely. In order to navigate complex problems, in addition to critical thinking skills, public officials need to master various deliberative

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[4] See, for example, Sohail Inayatullah's work on futures studies at www.metafuture.org.

mechanisms to co-create and collaborate with diverse stakeholders with multiple interests. This is a significant skill to have in addressing dominant social constructs that may conflict with the Sustainable Development Goals.

45.   **Emotional intelligence**. As policy designers, public officials must take into account the capacity to empathize with people. Empathy is related to levels of emotional intelligence, or the ability to regulate one's own emotions and to understand others' emotions. Psychological factors and emotions play major roles in decision-making processes, public services and effective communication. This capacity ensures that the public sector is well balanced between intuitions, beliefs and world views ("system 1") and rational reasoning based on data, evidence, facts and causal analysis ("system 2").[5] Higher levels of emotional intelligence will allow public officials to better regulate their own emotions and respond to stressful events. Tools that many leading organizations use today include meditation, life-coaching and other activities for psychological well-being.

46.   In the digital age, the ability to interact effectively with citizens through the use of social media (social intelligence), to communicate policy information digitally (e.g., through infographics and web pages) and to use digital tools for the collection and analysis of data have all become basic capacities required by everyone in the public sector. Beyond those basic capacities are the new skills described above. Public sector reforms should consider using the paradigms of public administration illustrated in the present paper as a guide to determine what kind of skills are needed in the public sector. In order to achieve reform, intense capacity-building or long-term reskilling will be needed in many countries. This is one sure way to properly invest in human capital for the public sector workforce.

VI.   Conclusion

47.   In the present paper, a suggestion is put forward for a new paradigm of smart sustainable governance in which the role of the public sector becomes one of a designer of public policy and in which technology is used to its fullest potential to ensure the sustainability of our planet for current and future generations. The paradigm sees the importance of multilevel governance accompanied by several forms of accountability mechanisms.

48.   Being "smart" means having the capacity not only to use technology for sustainable governance purposes, but also to be pragmatic in finding solutions to problems. In the present paper, a list of skills needed for that capacity is proposed: design thinking, complexity thinking, critical thinking, futures thinking, deliberation skills and emotional intelligence.

49.   Public sector reforms should include an explicit focus on achieving the Sustainable Development Goals and making sound policies that are coherent with one another. Reforming laws, structures and processes without reforming human resources in the public sector will have less of an impact. Governments should invest adequately in, and provide continuous training for, the public sector workforce. They should continuously invest in infrastructure and human capital to harness the enabling power of digital technology to implement the Goals. This will help to ensure that the appropriate skill sets for digital transformation are built and expanded and bring the international community closer to achieving equitable and sustainable societies for all.

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[5] See Daniel Kahneman, *Thinking, Fast and Slow* (New York, Farrar, Straus and Giroux, 2011).

50.   The Committee of Experts on Public Administration is invited to consider smart sustainable governance as a new paradigm and to encourage its incorporation into the directions taken by Member States in respect of public sector reform. The Committee should also consider adopting and promoting this paradigm in its own work and deliberate on how the suggested skill sets could be further defined for different issue areas. Civil service commissions and public administration training institutes could consider including the related skill sets in their training programmes. In addition, universities and institutes with programmes on public policy, public affairs and public administration should provide education about the Sustainable Development Goals, as well as the smart sustainable governance paradigm and related skill sets.

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