

Survey Results:

New approaches to Capacity Development and Future Priorities

Draft Report

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1. Background

This survey, designed by PARIS21 in consultation with the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development (HLG-PCCB) and the support of the United Nations Statistics Division (UNSD), aimed at providing a better understanding of the current state of capacity development in National Statistical Offices, and more broadly across National Statistical Systems and the challenges, priorities and plans they have for the short and medium term.

For the purposes of this survey, capacity development refers to “the process through which individuals, organisations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time” (UNDP, 2009). In the context of NSOs, it involves improving processes, products and business models for the generation and utilisation of data and statistics.

This effort builds on previous surveys (both regional and international) on national capacities to monitor the Sustainable Development Goals, such as the ones from ECLAC (2017), UNECE (2017), OIC (2017), FAO (2017), UNSD (2016), as well as the Voluntary National Reviews submitted by countries (compiled by UN DESA, 2018). These exercises aimed at assessing, from different perspectives, national capacities for reporting and monitoring of the 2030 Agenda. While they provide a comprehensive overview on countries’ technical and financial challenges for SDG production, this survey sought to detect entry points for developing national capacities, by delving deeper into the needs and priorities of NSOs both related to SDGs and specific to their national context. These included the strengthening non-technical skills in staff, improving organisational practices and coordination between national agencies and mainstreaming of SDGs in national policies and reporting mechanisms.

Preliminary findings point out to the need of strengthening *coordination* within national statistical systems (NSS), and with providers of administrative data. Integrating new data sources is of utmost importance for NSOs, and the majority of them need to improve their capacity for doing so. Several NSOs reported being interested in establishing partnerships with the private sector to access big data and geospatial data, but not having the knowledge on how to do so.

Management skills are crucial for improving planning and reporting systems between producers of official statistics, as well as within the NSO itself (especially human resources management and strategic planning). Beyond the need for technical skills, respondents reported the need of cultivating leadership and strategic planning in their employees. Almost a quarter of them indicated having prioritisation issues at the time of deciding about which capacity development programmes to implement.

Finally, respondents conveyed needing *communication* skills to reach a better understanding within the NSS, with producers of administrative data and with users of statistics. Associated with this, teamwork and collaboration within the NSO itself are relevant soft skills needed to succeed in achieving national goals and producing the remaining SDG indicators.

The questionnaire was distributed in December 2017 to 193 UN member states and 2 non-members, out of which 75 submitted a reply (38% response rate) as of 25th January, 2018. In terms of regions, 19 respondents were from Africa, 20 from Asia and Pacific, 17 from Eastern Europe, 14 from Western Europe and others and 8 from Latin America and the Caribbean (see **Error! Reference source not found.**).

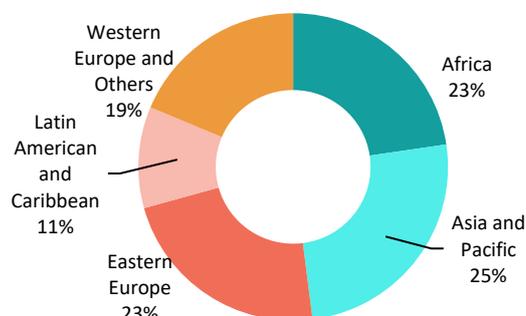


Figure 1: Distribution of responses by UN region

Immediate capacity development needs for SDGs

In order to prioritise international efforts for SDG monitoring, NSO heads were asked to identify the top ten tier I and II indicators for which they need the most immediate (i.e. over the next two years) support in capacity development. The results highlight the large heterogeneity among countries in terms SDG prioritisation. However the indicator “2.1.2 Prevalence of moderate or severe food insecurity in the population” was identified by 24% of the respondents as the one requiring the most immediate capacity (see Table 1).

Table 1: Top ten Sustainable Development Goal indicators (Tier I and II) that require the most immediate capacity development

SDG indicator	Absolute frequency
2.1.2 Prevalence of moderate or severe food insecurity in the population	18
1.3.1 Proportion of population covered by social protection floors/systems	13
1.2.1 Proportion of population living below the national poverty line	13
7.2.1 Renewable energy share in the total final energy consumption	10
1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	9
2.2.2 Prevalence of malnutrition among children under 5 years of age	8
5.4.1 Proportion of time spent on unpaid domestic and care work	8
2.2.1 Prevalence of stunting among children under 5 years of age	8
6.5.1 Degree of integrated water resources management implementation	8
2.1.1 Prevalence of undernourishment	8
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated	8
2.c.1 Indicator of food price anomalies	8
3.9.1 Mortality rate attributed to household and ambient air pollution	8

and the Caribbean.

Table 2 displays the top three indicators by region (following UN classification), showing that there is no unique indicator for which all respondents need capacity development (this could be either due

to national interests or varying levels of statistical capacity). There are possible synergies to this question, for example, for indicator 2.1.2 in Africa, Eastern Europe and Latin America and the Caribbean.

Table 2: Top 3 SDG indicators by region

Region	1st	2nd	3 rd	# of respondents
Africa	1.2.1 national poverty line	2.1.2 food insecurity	2.5.1 recycling rate	13
Asia and Pacific	1.2.2 multidimensional poverty	1.3.1 social protection systems	2.1.2 food insecurity	14
Eastern Europe	2.1.2 food insecurity	7.2.1 renewable energy	8.1.1 GDP growth rate	13
Latin America and Caribbean	2.1.2 food insecurity	3.7.1 family planning	1.3.1 social protection systems	7
Western Europe and others	16.1.3 population subjected to violence	1.3.1 social protection systems	3.9.1 mortality by household pollution	6

In terms of sector distribution, environmental statistics were identified by 19% countries who responded to the survey as the sector requiring more immediate capacity building efforts and within the top three by 47%. Since most environmental indicators are currently categorised as Tier III, there is a divergence between the previous results and the ones in Figure 2. Notwithstanding environmental statistics being Tier III, 31% of respondents reported needing capacity development for income and poverty statistics, which matches the answers presented in Table 1 and the Caribbean.

Table 2.

Regarding data sources, 77% of all respondents identified administrative sources as the sources needing the most immediate capacity development. Forty per cent of respondents identified capacity developed for administrative sources to be the most urgent need. The need for capacity development for, big data and geospatial data were selected by 42% of respondents, although not as the top priority (Figure 4). Disability status was chosen by 57% of the respondents as the type of disaggregation needing the most immediate support, followed by geographical location (Figure 3).

The main obstacles identified by respondent were challenges related to communication and coordination with data providers (69% of all respondents), followed by IT challenges, as Figure 5 depicts.

When asked to identify possible actions for improving the use of such data sources, several actions were proposed related to resources, skills, and coordination and cooperation. Concerning *resources*, mobilising financial support and upgrading the technological infrastructure (especially IT) for the NSO were proposed, as well as reforming laws to enable access to administrative data sources (including identifiers) and big data. Regarding *skills*, respondents highlighted the need to increase knowledge on how to integrate new data sources with traditional ones, such as for producing small

area estimation. This should apply not only for NSOs, but also for data providers. Building statistical registers and defining a methodology for diagnosing the usability of administrative records for official statistics were identified as necessary steps for such integration. For improving the *coordination and cooperation* between administrative record owners, respondents mentioned the need for establishing memorandums of understanding and setting up systems for data exchange (machine-to-machine).

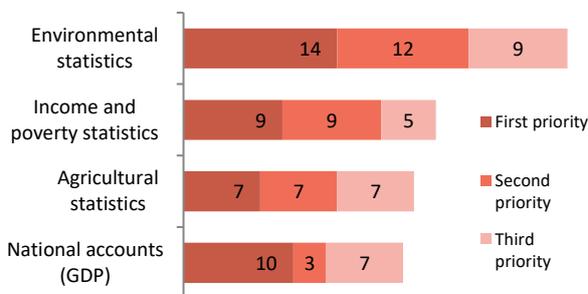


Figure 2: Sectoral statistics that require immediate capacity building efforts. (Absolute frequency)

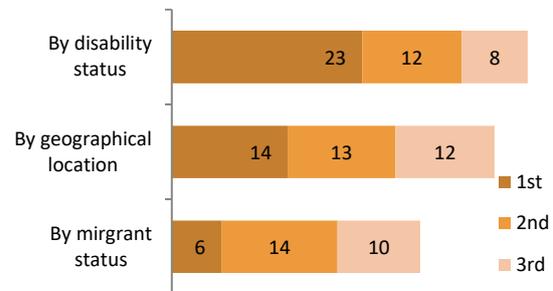


Figure 3: Types of data disaggregation require the most immediate support. (Absolute frequency)

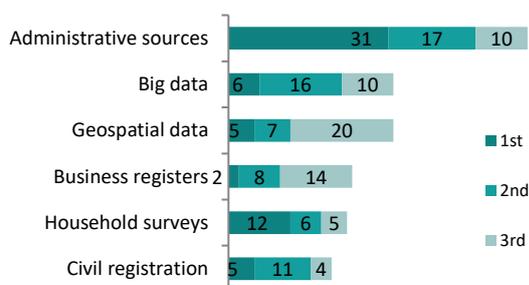


Figure 4: Data sources that require immediate capacity development. (Absolute frequency)

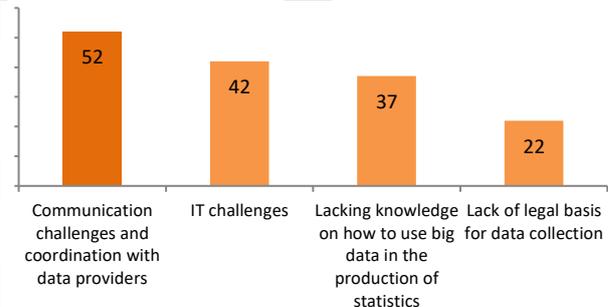


Figure 5: Major obstacles in using the required data sources. (Absolute frequency)

2. Entry points for the Cape Town Global Action Plan on Sustainable Development Data

Along the findings described in previous section, almost half of all respondents identified *integrating new data sources* (ie. call detail records) to produce official statistics as a main concern. Out of these, 54% do not possess the capacities to do so, but the majority (75%) are planning to develop these capacities in the next five years. This action corresponds to CT-GAP Objective 2.3 “Facilitate the application of new technologies and new data sources into mainstream statistical activities”. Similarly, 41% of the respondents relate *integrating new technologies* (e.g. geospatial) to their national priorities, an activity associated to the CT-GAP Objective 3.4 “Integrate geospatial data into statistical production programmes at all levels”. Establishing *partnerships with the private sector* was selected as a main concern by 39% of respondents, and most of them are seeking to do so in the next five years. Remarkably, implementing an *open data policy* had a more moderate interest among respondents, with only 23% selecting this option. See Figure 6.

Most of the respondents (91%) identified their own government as a source of funding to develop the capacity for the implementation of the CT-GAP. International cooperation, both from international (69%) and bilateral (45%) organisations is also relevant for the majority of respondents

(see Figure 7a). Out of the ‘southern’ countries looking for bilateral funds, 70% expect ‘south-south’ cooperation. Regarding regional differences in funding sources, it is noticeable that public-private partnerships are more important sources for certain regions (i.e. Western Europe and Africa). Other funding (e.g. academia) is limited across regions (see Figure 7b).

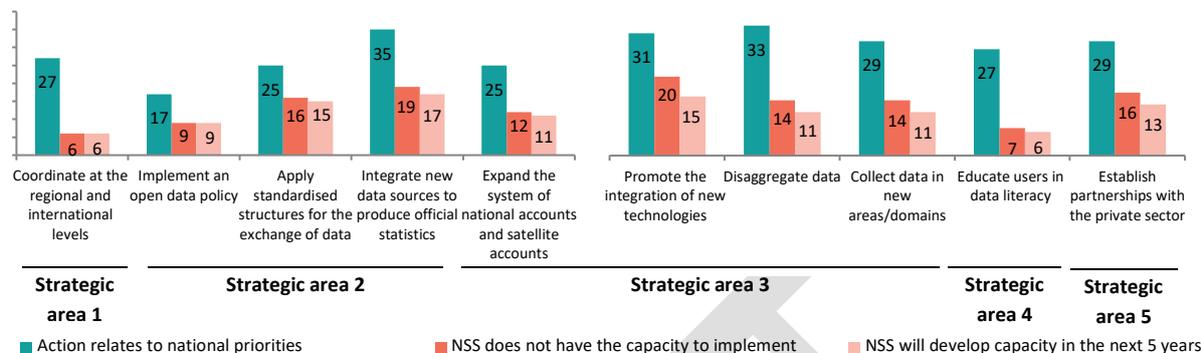


Figure 6: Relationship between actions mentioned in CT-GAP and national priorities (Absolute frequency)

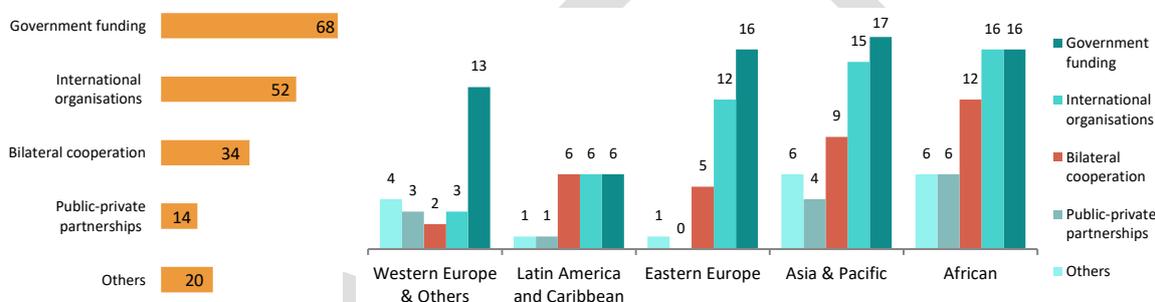


Figure 7a and 7b: Sources of funding to develop capacity for implementing CT-GAP actions (absolute frequency)

3. National capacity development planning

a. Medium term plans for National Statistical Systems (NSSs)

To explore possible synergies between international and national efforts in capacity development, the survey enquired about the priorities established by the NSS over the medium term. These priorities provide an assessment on how NSOs engage with different mandates at the national level, which range from modernising the NSS and improving coordination, to maximising the value statistics among users. NSO’s strategic planning is an important step in this direction, with 79% of respondents mentioned having established strategic goals for the next five years (Figure 8).

Delivering quality statistics was selected as the most relevant goal by 31%, followed by improving the coordination of the NSS (15%) and its modernisation (9%) (Figure 9). Developing relevant products for users was a less relevant goal for NSOs in their medium-term strategy. This result suggests NSOs strategies could better align their products to user needs in the future.

The capacity development priorities for NSS seem to focus on coordination, technology upgrading and quality control (Figure 10). About 44% of respondents point out that strengthening coordination between data producers and data providers is a priority. Noticeably, a quarter of respondents highlight infrastructure and technology acquisition as one of their main priorities today. Quality

frameworks are also on the agenda, with almost a quarter of countries (24%) setting it as a priority for the NSS.

Modernisation is broadly defined as applying common statistical production processes, standards and tools between statistical systems (national, regional and international), enabling international comparison and exchange, and the integration of non-traditional data sources to deliver statistics in a timely and cost-efficient way. More than half of the respondents consider that modifying the planning and reporting systems between producers of official statistics would be crucial to modernise the NSS (**Error! Reference source not found.**). Integration with regional and international statistical systems was selected by 42% of the respondents as a relevant aspect for modernisation.

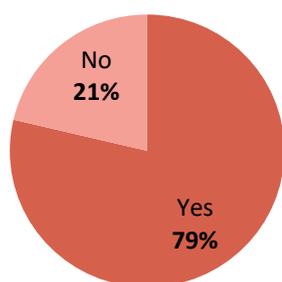


Figure 8: NSS establishment of medium term (five years) priority goals (Relative frequency)

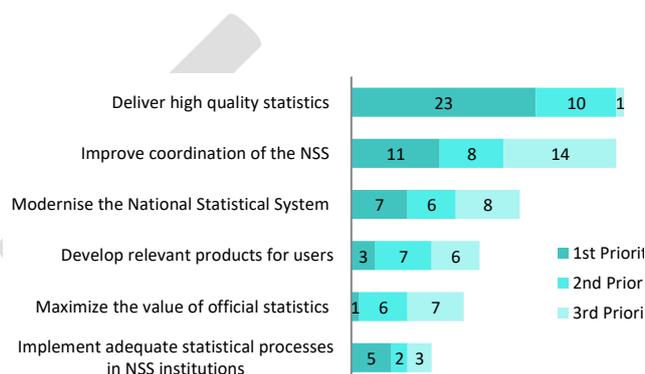


Figure 9: NSS goals for the next five years (Absolute frequency)

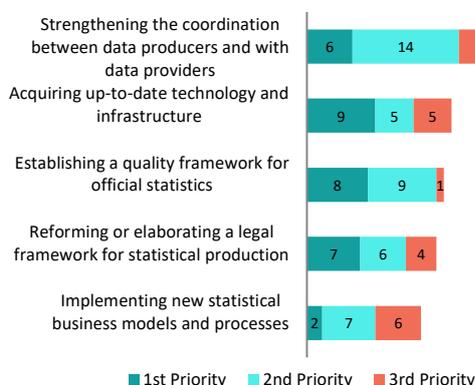


Figure 10: NSS Capacity Development Priorities (Absolute frequency)

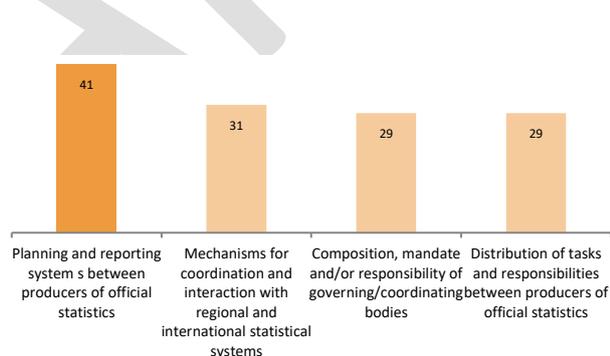


Figure 11: Aspects of NSS governance that should be modified to enable modernisation (Absolute frequency)

b. Capacity development priorities for NSOs

Following Figure 12, in terms of capacity development needs, there are four broad areas that NSOs are mainly interested in enhancing. The first of them is *coordination*: improving cooperation with providers of administrative data (selected 53 times) and improving coordination with other producers of official statistics (47 times). Following the work of the Task Team on Capacity Development 4.0, a concept that was first introduced by PARIS21 at the United Nations World Data Forum in January 2017 in the session on rethinking capacity development, coordination refers to “establishing direction and planning, monitoring and evaluating, as well as setting procedures, standards and methodological criteria with the aim of ensuring consistency and efficiency of outputs” (PARIS21, 2018).

The second area emerging from the survey results is *management* that involves the arrangement and matching of skills and knowledge (both organisational knowledge and technical skills of employees) and physical resources to produce an output and to achieve organisational goals: strengthening human resources management (71%) and enhancing strategic management/planning (40%). The last one is *communication*: intensifying interaction with users of statistics (47%) and enhancing the communication of statistics to the broader society (41%). For the purposes of this survey, communication is the ability of the organisation “to convey official statistics in such a way that they become meaningful and persuasive for external stakeholders/organisations by adapting the messages to specific audiences” (see Figure 12) (PARIS21, 2018).



Figure 12: Capacity development priorities for NSOs (Absolute frequency)

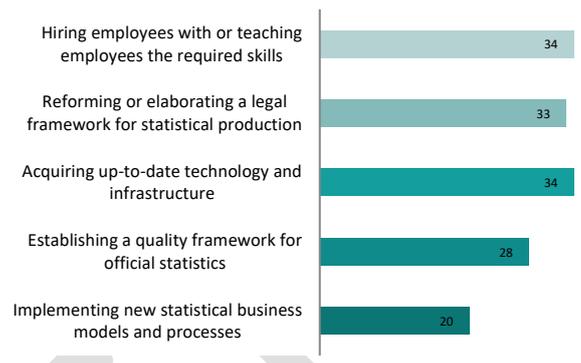


Figure 13: Actions that would help to achieve priorities (Absolute frequency)

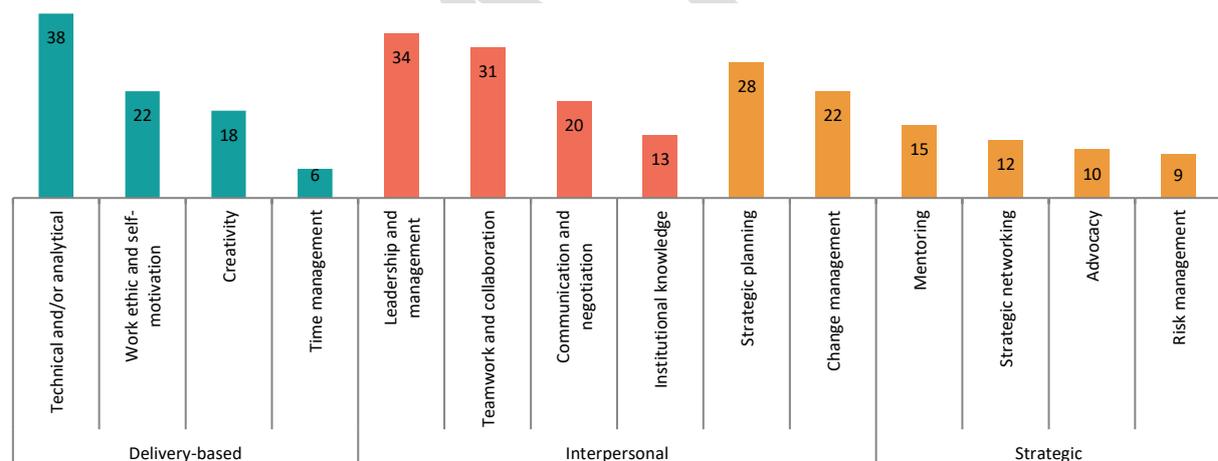


Figure 14: Skills NSOs consider relevant to develop in their employees (Absolute frequency)

Developing individual skills is at the core of capacity development for NSOs, and the range of required competencies is broad. When asked about what actions are needed in order to comply with the capacity development goals for the NSO over the next five years, most countries reported action referred to employees’ skills (Figure 13). NSOs, which responded to the survey, identified a large set of competencies, beyond the traditional characteristics common to most National Statistical Offices. These results suggest that, while technical skills continue to be important for NSO heads, a new set of skills may be required to respond to the current tasks and needs of NSOs.

Within delivery-based skills, those aimed at achieving results, half of respondents highlighted technical skills, as shown in Figure 14, such as improving the knowledge on statistical packages, on dealing with large datasets (big data, administrative data), e.g. small area estimation, geospatial analysis, and statistical literacy (including data analysis). In the case of Latin America, work ethic and self-motivation were considered the most relevant skills needed to be developed in employees.

Regarding interpersonal skills, many countries (45%) identified leadership¹ and management skills as relevant to their organisation. Teamwork and collaboration, this is, the ability of a group to work effectively with common values and norms, are also relevant, with 41% of countries identifying them as important for their employees' profile. Remarkably, for Western European countries, teamwork, together with communication and negotiation are the most relevant interpersonal capacities to develop in the staff.

Concerning strategic competencies, 'strategic planning' is one of the most sought after characteristics (37% of respondents). It refers to the process by which the organisation defines a vision, which is followed by a sequence of steps to achieve the vision. In the case of Western Europe and others, change management topped the list of strategic capacities. Finally, it is also noticeable that NSOs do not identify advocacy (13%) and risk management skills (12%) as essential to their organisation. This may reflect NSO Heads do not identify these activities as central to the work of statistical agencies.

c. Current capacity development programmes

The majority of NSOs who responded (65%) mentioned they selected capacity development programmes following their medium term plans. "*Responding to opportunities offered by international organisations or donors*" was indicated by almost 44% of respondents as a reason for implementing a programme (Figure 16). More than half of the respondents indicated that these included sufficient consultation, responded to their needs, were nationally led, received enough financial support and included clear and measurable targets (Figure 17).

When asked to identify the major obstacles to the success of capacity development initiatives, financial resources emerged as the dominant factor (selected 79 times in total, both as shortage from external and internal sources). Lack of skilled personnel to implement programmes emerged as the second most important factor constraining statistical capacity development. Other critical issues related to management capacities, such as staff turnover, prioritisation issues and unclear relationship between career development and training were also pinpointed by several NSOs. These results are in line with the findings of the two previous questions. See Figure 18.

¹ Leadership in this context refers to the "ability of senior management staff to provide direction to others" (PARIS21, 2018) and providing the necessary means to realise it.

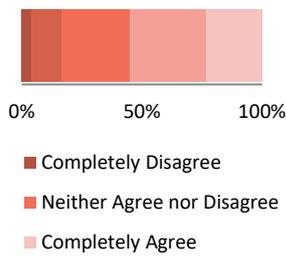


Figure 15: Agreement with “The existing technological infrastructure of NSS efficiently supports statistical activities” (Relative frequency)

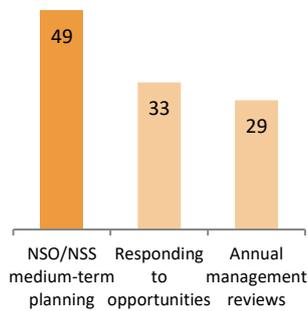


Figure 16: Identification of need for programmes (Absolute frequency)

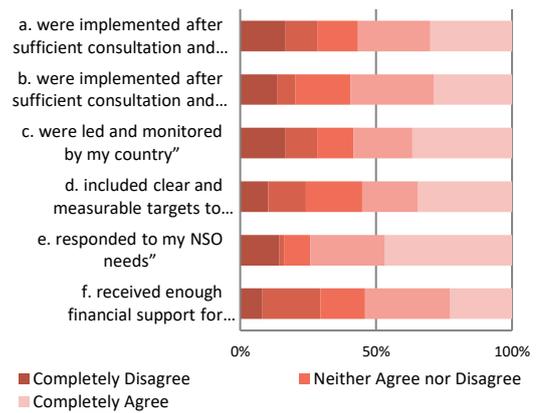


Figure 17: Agreement with “these programmes encompassed...” (Relative frequency)

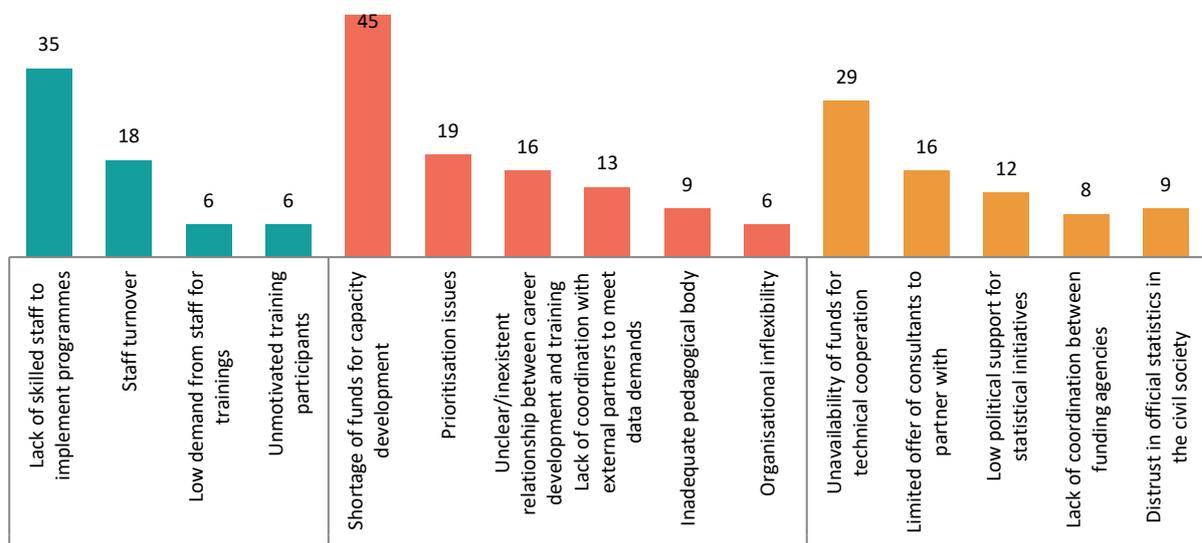


Figure 18: Obstacles to the success of capacity development programmes (Absolute frequency)

d. Human resources development

Overall 52% of NSO employees were trained in the past year, although there was a large variation between regions (Figure 19). NSOs devoted 2.6% of their budget to training, out of which more than half was national; again there was a large variation between regions (Figure 20). The most common instrument for training employees over the past 3 years were workshops or other face-to-face events, followed by on-the-job trainings (Figure 21). NSS staff (whether NSO employees or from other agencies) were the most common facilitators, followed by international agencies (Figure 22).

The budget to attend trainings outside of NSOs is small, according to survey results. Most regions report that less than 32% of their training funds are sourced from outside their budget. In addition, financial resources for training differ significantly across regions. While in Africa more than 80% of non-budget resources come from external providers, the proportion is significantly different for

other regions. In Asia-Pacific and Latin America and Caribbean, around three-thirds of training funds come from national sources (Figure 20).

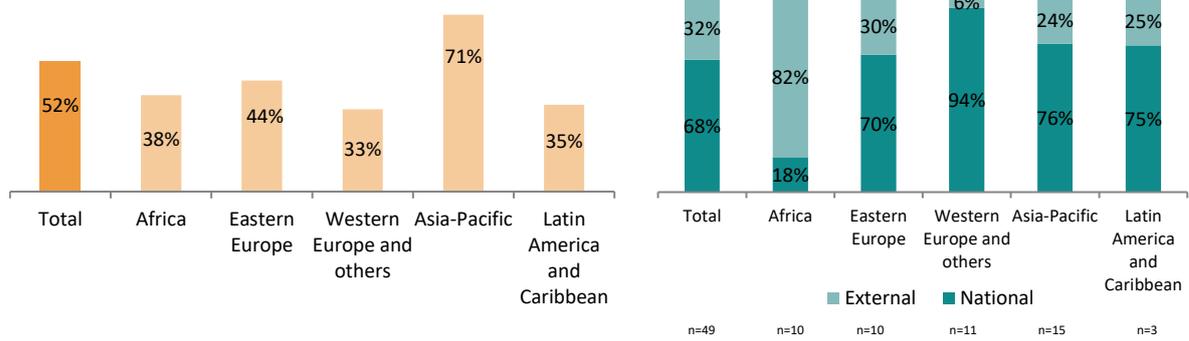


Figure 19: Percentage of NSO employees trained in 2017

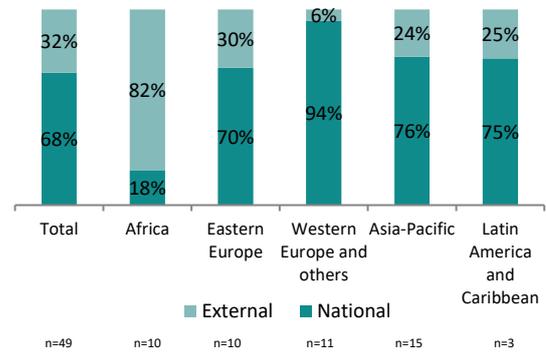


Figure 20: Sources of budget for training (relative distribution)

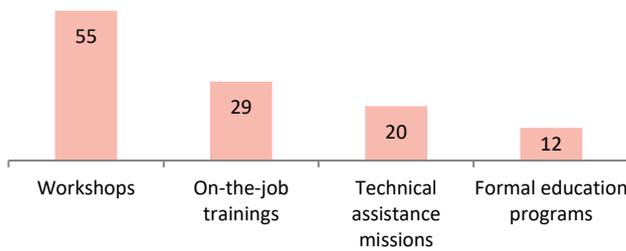


Figure 21: Most frequent methods of HRD in the past 3 years (absolute frequency)



Figure 22: Most frequent training facilitators in 2017 (absolute frequency)

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