

**Economic and Social Commission for Western Asia (ESCWA)**

Statistical Committee
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**A CONCEPTUAL FRAMEWORK FOR MEASURING THE IMPACT
OF STATISTICAL CAPACITY-BUILDING ACTIVITIES****Summary**

This paper proposes a conceptual framework for measuring the impact and effectiveness of capacity-building activities, taking into consideration the pre-requisites, challenges and other elements that contribute to achieving that impact. The conceptual framework also serves as a tool to define critical gaps, assist in making better choices and decisions and guide planners in developing a strategy to enhance the impact of capacity-building activities through monitoring and evaluation.

Moreover, the proposed framework facilitates clarifying objectives, assessing existing capacity factors and guiding the design of effective learning activities. It encourages the articulation of a complete result chain that bridges the gap often found between broad objectives and specific outcomes, with a view to enhancing organizational performance and achieving better impact.

The Statistical Committee is requested to discuss this paper, express its views on the proposed framework and make recommendations for its future development.

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A. INTRODUCTION

1. Capacity-building is one of the main three expected accomplishments of the Statistics Division work programme within the Economic and Social Commission for Western Asia (ESCWA). The Division firmly believes that investing in capacity development is critical for achieving sustained improvement in national statistical systems in the ESCWA member countries. However, there is little consensus on approaches to measuring and evaluating the effectiveness and impact of capacity-building activities.

2. Capacity is defined as “the ability to carry out stated objectives”; it reflects the ability or power of an organization to make use of its skills, assets and resources to achieve its goals and sustain its quality outputs and outcomes over time. Capacity-building is a process and an outcome that improves the ability of a person, group, organization or system to meet its goals, to create measurable and sustainable results or to perform better. It is well recognized that capacity-building develops in stages and that it is a multidimensional and dynamic process.

3. Communicating the impact resulting from capacity-building activities is equally important to both the organizer(s) of those activities and the participating agencies: the national statistical offices (NSOs). Organizers need to communicate on the impact of their activities and on the enhancement of the skills and knowledge of individuals and the upgrade of NSOs and national statistical systems at large. It is equally needed for NSOs to declare their benefits from those activities in order to be fully acknowledged as implementing standardized international guidelines and definitions.

4. Measuring and evaluating the impact of a capacity-building activity goes beyond self-evaluation, peer assessment or competency testing. ESCWA has been conducting evaluations of its capacity-building activities through the self-evaluation of participants in meetings or through the evaluation by countries of technical advisory services received upon request.

Why measure outputs, outcomes and impact?

- **Improved** programme management
 - More effective planning
 - More effective evaluation
- **Increased** understanding of the impact of one’s work
- **Stronger** communication of the value of one’s work to ‘the people that matter’ (internal and external stakeholders)
- **Enhanced** attention to the value created by one’s organization.

(Sources: Adapted from “Measuring social impact”, LSE 2004)

5. The Statistics Division of ESCWA has also been monitoring and assessing the self-reporting of member countries on the progress made in implementing the Fundamental Principles of Official Statistics. The assessment of results allows ESCWA to define the needs of countries for capacity-building activities; to highlight country-specific achievements and to share good practice. The assessment also defines gaps and lags in progress in specific areas, and raises important questions on how to be more effective as organizers, delivering good service with limited resources; how to ensure that the countries receiving those services will implement the skills and knowledge acquired to improve their statistical systems; how to measure the outputs; how to determine the targets of capacity-building activities or who needs to learn; etc. In general terms, assessments aim at measuring and evaluating the interests of both ESCWA and the stakeholder NSOs in the capacity-building field.

6. This paper proposes a conceptual framework for measuring performance and impact, aiming (i) to improve future plans, to make them more effective and to meet the objectives of each capacity-building activity; (ii) to measure and communicate the value of outcomes, demonstrating the importance of the efforts exerted by both the organizer(s) of an activity and the participating agencies. It is expected that such a framework will make better use of available resources by determining what and who could make an impact and achieve results through the implementation of outputs and outcomes. The long-term goal of this work is

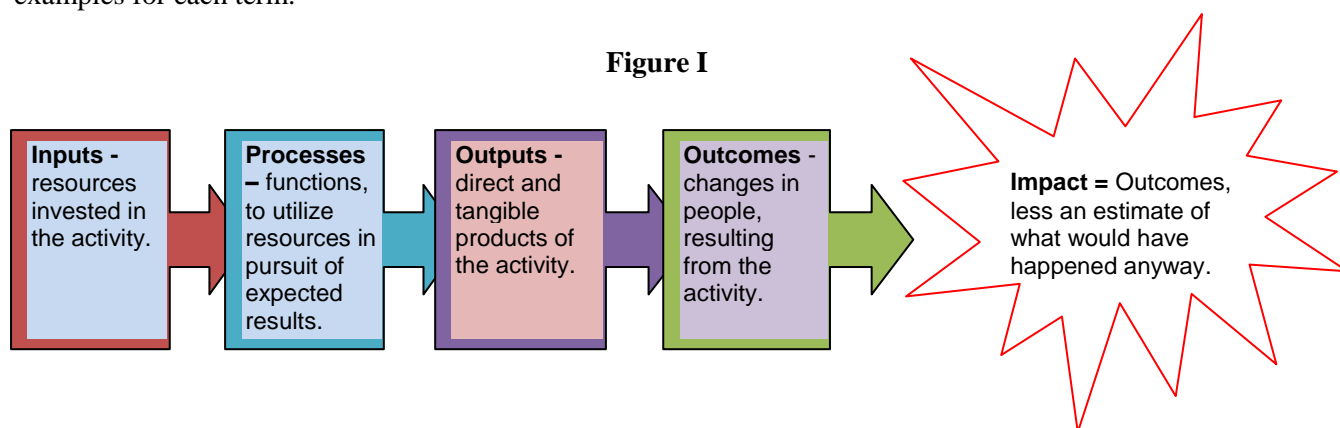
to develop guidelines for planners that reflect "good practice" in designing and assessing capacity-building activities, in order to improve national and regional statistical outcomes and achieve impact.

7. It is important to note that the main stakeholders of the ESCWA capacity-building programme are NSOs in member countries. The priorities for capacity-building activities in the region are defined through a process of consultation, such as the current session of the Statistical Committee.

B. ELEMENTS OF IMPACT

8. Due consideration should be given to four elements that contribute to the process of achieving impact. Those elements are: inputs, processes, outputs and outcomes. Therefore, to ensure the effectiveness of an activity in meeting its objectives and achieving change, including a better use of resources, consideration should be directed to each of those four elements.

9. Figure I provides an illustration and the definitions of the four elements needed for a capacity-building activity or programme to make an impact. The following paragraphs provide further definitions and examples for each term.



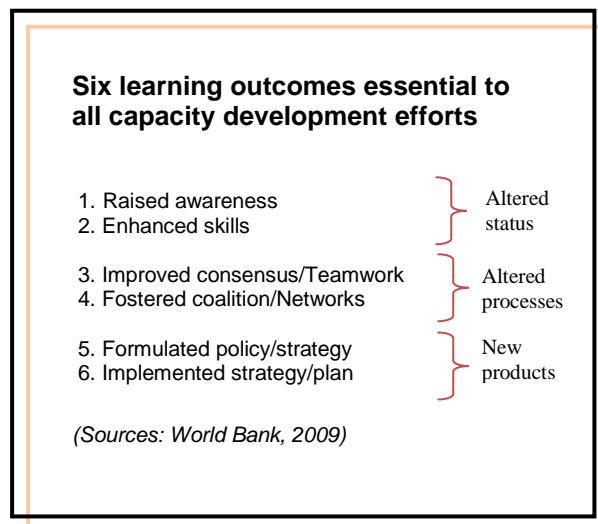
10. Inputs are the financial and human resources, the infrastructure and the information and communication structures that may enable or hinder the implementation of a capacity-building programme. For example, the organization budget resources are part of the inputs of meetings and workshops. The budget usually includes the cost of travel of participants, the fees of resources, advisors and interpretation, and other logistic items needed to implement an activity.

11. Processes include a set of activities or functions by which the resources are utilized in pursuit of the expected results. Processes transform resources (inputs) into capacity outputs and outcomes. They include strategic and operational planning, policy, regulations, management of financial, human and logistic resources, multi-sectoral coordination and collaboration, and finally advocacy and information coordination and dissemination.

12. Outputs are a set of products and the direct results of the objective of the capacity-building activity, for example: training 30 government officials on DevInfo. Participants have acquired new skills or enhanced their knowledge as a result of the training. Results of outputs can be measured by monitoring the participation rate and the qualifications gained from the course.

13. An outcome is a change that occurred over a longer period of time and that contributes to improved personal and agency performance as a result of a capacity-building programme. An outcome can be measured by the value of personal gain - such as increased individual income or recognition for a delivered output as a result of training - or by agency enhanced performance - such as implementing a software and disseminating it to the public, issuing a new publication or making improvements on a regular one, implementing a new classification or collection tool, designing a website as per recommendations or sharing good practice, etc. An outcome could also be measured by other stakeholders, for example when women machineries make use of gender statistics for policymaking. Outcomes could be identified in relation to the objectives of different stakeholders. An

example of that would be the changes in data dissemination practices in a number of countries, where DevInfo software would be used instead of excel or pdf documents, after a training course on DevInfo. The percentage of trainees who apply the skills learned through training to their subsequent work can also be measured. A learning outcome may entail improvements in knowledge and skills, or changes in motivation and attitude with respect to a particular issue, or changes that occur in interactions at the organizational level, which are embodied in improved processes or in new products and services.



14. In order to measure impact, we need to identify first what would have happened anyway as an outcome and what changes were instituted to sustain that outcome. Impact is usually measured by allowing a period of time to elapse after the outcome has been achieved. The aim is to monitor whether the outcome achieved have made an impact on the agency with regard to its institutional arrangement or delivery of outputs. Example: some countries have programmed the production of DevInfo with every issue of the report on the Millennium Development Goals; it is not anymore an ad hoc outcome of the training. NSOs would be impacted by training if they are triggered to make an adaptation or an innovation in response to the application of new information or new requirements deriving from a new learning.

C. CHALLENGES AND CONCERNS

15. The Commission often faces the challenge of having to restrict its capacity-building programme due to available resources vis-à-vis the demand for a large array of statistical areas to be covered. Another challenge is to fund the participation of its member countries with a limited budget which, in many instances, proves to be impossible.

16. While the participation of countries in a capacity-building activity provides information on their readiness to enhance local professional skills, it does not provide information on whether the performance of those countries would improve in the future, nor on their commitment to implement the activity objectives.

17. The improved performance of NSOs depends on the capacity level of their organization and programme, including the developmental level. Capacity-building activities would have different outputs, outcomes and impacts on the different statistical development levels of each country. The challenge is to define the capacity and developmental levels of each country in any given area. Effective use of resources would require selecting those countries that would benefit from the programme and are committed to implement the objectives of a capacity-building activity as per their work programme.

18. The performance of any system is defined by its effectiveness, access, quality, efficiency and innovation, in line with the Fundamental Principles of Official Statistics. The organizational and the individual performance are key elements in measuring the system performance. The National Strategy for the Development of Statistics (NSDS) is an important tool to improve the performance of the statistical system and its employees, achieving a sustainable impact. Lack of NSDS allows for ad hoc improvements to the system that may not contribute effectively to achieving a sustainable impact.

19. Among the critical factors that determine improved performance is defining the criteria for choosing the right participant to the right activity. The process of selecting the personnel who will participate in a capacity-building activity is not only crucial to the success of that activity, but also to ensuring the successful transfer of knowledge and skills acquired back to the NSO. In many instances, countries nominate personnel whose job descriptions do not match the requirements for participating in a particular activity, even when criteria of selection have been clearly defined by organizers.

20. The outcome of an activity depends on whether there are organizational processes instituted to receive the newly acquired skills and information, and to share knowledge. In many instances, this information stays with the entrusted messenger, which breaks the critical chain of the transfer of knowledge and skills to NSOs.

21. The motivation of participants to practice, share and deliver the skills and knowledge they have acquired during the activity is another concern, so is the high turnover of experts in NSOs. There are also obstacles in keeping up with developments in statistical fields, especially at the international level, and in consulting with focal points to share good practice, due to limited access to resources, the Internet, etc.

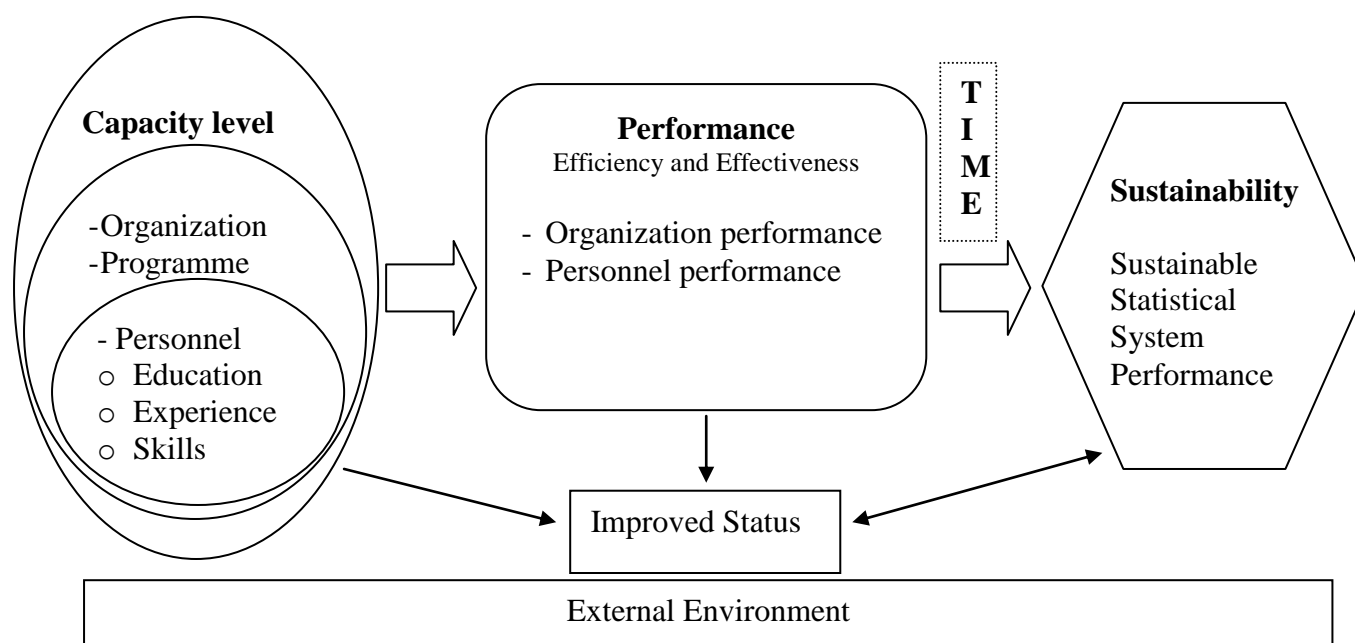
22. Challenges and issues pertaining to capacity-building activities are very much the same in many regions. It is therefore crucial to identify weakness and gaps, and to provide solutions and mechanisms to implement each element of the process successfully. It is important to enable all stakeholders to safeguard their mutual objectives, recognize their efforts, improve their performance and reap the benefits of a sustainable impact.

D. CONCEPTUAL FRAMEWORK

23. Taking note of the elements that contribute to the process of achieving an impact (inputs, processes, outputs, outcomes) and of challenges and issues at stake, a conceptual framework linking capacity for development to capacity-building activities will now be presented. Moreover, the key elements that play a significant role in determining the scope, design and ultimate success of any capacity-building activity and approaches to measuring its impact will be reviewed.

24. The World Bank defines capacity for development as “*the availability of resources and the efficiency and effectiveness with which societies deploy those resources to identify and pursue their development goals on a sustainable basis.*” The availability of resources is a necessary but not sufficient condition for achieving the development goals of an administrative entity. The manner in which the resources are acquired and used to perform effectively and efficiently and to achieve a sustained developmental goal is essential. Moreover, the overall performance of a system is influenced by the capacity of its internal components and the external environment.

Figure II



25. Figure II above illustrates the relationship between the levels of statistical capacity and their link to maintaining or improving the performance of the statistical system. It is conceived that stable or increased performance over time leads to the establishment of a *sustainable* system capable of providing continuous and effective services. Eventually, over a period of time, a sustainable system should lead to an improved status of the statistical system. However, the status could also be improved by a “well - performing” statistical system that is not yet sustainable. The influence of environmental or contextual factors, including cultural, social, economic, political, legal and environmental variables, on capacity and performance at all levels may be crucial to the success of capacity-building, yet those factors are difficult to control or change.¹

26. The main components of capacity for development, at the organizational and programme level, are thus laid down. Capacity-building also needs to be institutionalized and taken into account in the output and outcome objectives of a statistical system. The strategy of NSOs should include a training plan to produce and maintain qualified personnel, providing them with an adequate environment in which they can perform effectively. To have personnel with capacity who perform effectively and contribute to organizational and system performance, there must be sufficient funds both for training and remuneration, physical space and access to resources for professional education.


27. It is important to note that there are four key elements that play a significant role in determining the scope, design and ultimate success of any capacity-building activity: (a) the desired outcome or defining goal; (b) the change strategy selected to help realizing that goal; (c) the stakeholders guiding the efforts; and (d) the resources (time, money, etc..) invested in the process.

28. To measure impact, i.e. success, a combination of qualitative and quantitative approaches may be used. It is important to assess the results achieved in the short, medium and long terms (table 1). The short-term results are identified by the immediate outputs of a capacity-building activity, such as the number of trainees participating in a course (quantitative indicator) and the quality of the training (qualitative indicator). Similarly, the medium-term results or outcomes need to be monitored to assess, for example, whether the new skills were applied by the participants. Impact comes after a longer period of time, when a change of

¹ Adapted from the paper on measuring capacity-building.

behavior at the institutional level takes place. As an example, mainstreaming newly acquired concepts in current tools of data collection requires adjustments and improvements to the system.

TABLE 1



Short-term	Output	<ul style="list-style-type: none"> • No. of trainees/courses • Quality of the training
Medium-term	Outcome	<ul style="list-style-type: none"> • Use of new capacities/skills • New products and services
Long-term	Impact	<ul style="list-style-type: none"> • Change in behavior • Mainstreaming newly acquired concepts in current tools of data collection

29. As a first step, before designing a capacity-building programme or activity, it is fundamental to conduct a diagnosis to determine the true scope and nature of challenges in achieving a desired outcome at the national and regional levels. Therefore, need assessment is important to validate the developmental goal, assess capacity factors and decide which capacity factors can be facilitated by capacity-building. Thereafter, the programme design would depend on the objectives and targeted indicators for change, on who and how processes would change as a result, and on what would be the intended outcomes. It is equally important, as a final step after the completion of an activity, to recognize at least three levels of chained outcomes: a) were the immediate objectives of the activity met? b) Did the activity improve the functioning or performance of its targeted participants? And c) did their engagement in that activity allow them to serve their mission more effectively?

30. Current practices focus on evaluating outputs: the short-term objectives. In order to measure impact, the focus should extend to outcomes: strategic organizational plans should be examined, but also the difference they made in terms of organizational functioning and performance. Therefore, greater rigour is needed in developing measures of performance to assess how certain capacity-building activities are expected to contribute to organizational effectiveness or sustainability.

31. Therefore, to ensure a well-planned capacity-building activity, we need to define a set of requirements/guidelines that need to be taken into consideration and implemented, where possible, by both stakeholders. Those requirements should be detailed under each element that would contribute to achieving enhanced performance and impact. This decomposition by stakeholder and by element would facilitate the process of identifying gaps and challenges, and enhance transparency and accountability.

Impact assessment should be seen as an investment that can add genuine value, rather than a burdensome cost.
(Hailey et al., 2005)

32. Table 2 presents the proposed framework, which offers a structure that connects inputs to observable results. It includes guidelines and indicators – a checklist - that both stakeholders, ESCWA and NSOs, should consider. The checklist may not be exhaustive, and therefore can be further completed by each stakeholder from their own experience and perspective.

TABLE 2. CONCEPTUAL FRAMEWORK FOR IMPLEMENTING AN EFFECTIVE CAPACITY-BUILDING ACTIVITY

	Inputs	Processes	Outputs	Outcomes	Impact
ESCWA	<ul style="list-style-type: none"> - Sufficient resources (funds and in kind) - Consideration given to beneficiaries /venue needs - Provision of appropriate logistics (interpretation, etc.) - Adequacy and quantity of training materials, access to those materials 	<ul style="list-style-type: none"> - Coordination with UNSD, UN agencies and regional organizations - Collaboration with other organizations - Ensuring training methodology is appropriate for transfer of skills/knowledge - Identifying criteria for the selection of NSOs participating in training according to their development level, or tailor-made training workshops and field courses - Identifying criteria for the selection of government personnel to participate in training - Identifying requirements for preparing inputs by government personnel before and after training, where applicable - Follow-up support to enhance training impact 	<ul style="list-style-type: none"> - Training site - Number and level of personnel trained by area (participation rate) - Number of personnel expressing benefits from training - Outputs of workshops such as guidelines, classification, strategy, etc. 	<ul style="list-style-type: none"> - Increased number of personnel with improved knowledge and skills - Increased new changes applied by NSOs to improve processes or produce new products and services - Increased new services or products applied by NSOs 	<ul style="list-style-type: none"> - Realized operational targets - Ability to adjust services in response to evaluation results or emergencies

	Inputs	Processes	Outputs	Outcomes	Impact
NSO	<ul style="list-style-type: none"> - Existence of clear statistical strategy for development of statistics/training strategy - Clearly defined organizational structure - Presence of detailed job descriptions - Sufficient funds (i.e., for training and remuneration) - Access to resources for professional education (library, Internet, etc) 	<ul style="list-style-type: none"> - Synergize and map training with NSO programme of work - Define contribution of personnel to training - Define mechanism of feedback and communication of knowledge and skill to NSO team after attending training - Appropriately select the personnel who will attend training, to serve the objectives of the training and of NSO - Adhere to the criteria of personnel selection set forth by organizer(s) - Provide personnel with the NSO programme with which the training will be synchronized - Establish institutional processes to receive new skills/information, to share acquired knowledge and to implement the training objectives - Provide resources and adequate local capacity to use those resources 	<ul style="list-style-type: none"> - Implement training objectives and provision of resources and local capacity to use those resources - Share and transfer knowledge and skills acquired to NSO 	<ul style="list-style-type: none"> - Improvements in knowledge and skills or changes in motivation and attitude with respect to a particular issue (% of trainees who apply the skills learned through training to their subsequent work) - Changes that occur at the organizational level, which are embodied in improved processes - New products and services 	<ul style="list-style-type: none"> - Percentage of trainees competent in acquired skill (i.e. who meet set standards when applying the skill learned in training) - Percentage of NSOs who adopted and/or instituted the knowledge into their regular programme of work

E. CONCLUSION

33. The conceptual framework defines the elements that must be present for a systematic approach to implementing an effective capacity-building activity. It enhances understanding and good practice in different contexts, and improves comparability across different capacity-building programmes and organizations.

34. That framework can also be used to guide the development of a monitoring and evaluation strategy to measure the success of capacity-building efforts and possibly provide evidence of their impact on the ultimate goal.

35. It is important to note that the framework offers guidelines and minimum standards which may not be applicable to all capacity-building activities. The framework remains a work in progress.

F. ACTION REQUIRED OF THE STATISTICAL COMMITTEE

36. The Committee is invited:

(a) To discuss and express its views on this paper;

(b) To make recommendations with a view to further developing the framework for effective capacity-building activities.

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