

# NATIONAL NUTRITION INFORMATION SYSTEM

The  
Fundamentals  
Series

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## Module 02

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**How does a  
national nutrition  
information  
system support a  
country's nutrition  
programmes?**

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PDF versions of these modules can be downloaded from the following website:

<https://data.unicef.org/resources/nutrition-nnis-guides/>

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Module 2: How does a national nutrition information system support a country's nutrition programmes?

Module 3: What is needed to build a useful national nutrition information system?

Module 4: What are the main attributes of a national nutrition information system?

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## Module 02

How does a national nutrition information system support a country's nutrition programmes?

A national nutrition information system (NNIS) built around relevant and reliable data provides tangible support for every aspect of a country's overall nutrition programme, ranging from policies and planning to implementation and assessment. The consistent collection, analysis and use of these data will give stakeholders a better picture of the nutrition situation and enable them to make informed decisions about the country's nutrition programmes.

The ongoing challenge is to align the data in the NNIS with the priorities and realities of the nutrition situation at national and subnational levels and to ensure valid data are drawn from multiple and representative sources reflective of those priorities and realities.

In addition to the overall value of an NNIS as an accessible repository of valuable data about a country's nutrition programmes, the data can also be used to support specific aspects of nutrition programming, including:



**Priorities**



**Implementation**



**Policies, strategies and plans**



**Quality improvement**



**Planning processes**



**Monitoring and evaluation**



**Resource mobilization**



**Advocacy**



**Budgeting**



**Emergencies**

### THE PRIORITY PARADOX

The NNIS should include various data on the nutrition priorities in a country (i.e., the most important issues; the ones that should be addressed with the greatest urgency and/or effort). In most cases, these priorities will be identified in existing nutrition strategies, policies and plans, which are typically updated on multi-year cycles (e.g., 5–10 years). However, priorities can evolve faster than strategies are updated, and it is possible that some of the priorities in these documents may not reflect the current understanding on the situation and/or the current political climate, which means that the NNIS may not include data on some critical issues. In these cases, it will be important to implement a rapid and/or interim process to ensure sufficient data are available for stakeholders to use to support existing and/or planned nutrition programmes. These data may not be fully or formally included in the NNIS from the outset, but that does not diminish their value. If they have value, they can and should be added to the NNIS.





## PRIORITIES

Data in an NNIS can be used to demonstrate how well the country is doing in addressing its designated nutrition priorities. For example, if micronutrient deficiencies are identified as a priority, the information system should show the status of the situation, including data on micronutrient status and related risk factors, as well as the coverage and effectiveness of different interventions. In this context, the NNIS is a useful way to monitor key aspects of the country's nutrition programmes (see 'Monitoring and evaluation' below).

NNIS data can also be used to determine if designated priorities are, in fact, the most important nutrition issues facing the country. For example, if the data show a priority in the

national strategy is not actually a problem or that changes or improvements in the situation have made it significantly less of a problem, there may be a need to adjust or refine the strategy. The adjustment may mean the issue is no longer identified as a priority and that other more pressing nutrition issues should be highlighted. In addition, NNIS data can be used to identify nutrition issues that could or should be priorities. For example, as improvements are made on some priorities (e.g., declines in micronutrient deficiencies), it is likely other issues are becoming more significant (e.g., food insecurity during times of crisis). As mentioned in **Module 1**, it is important to regularly assess the content of the NNIS to ensure it includes the right data on the right issues.



## POLICIES, STRATEGIES AND PLANS

An NNIS is a powerful tool to support the development of evidence-based nutrition policies, strategies and plans at national and subnational levels. Access to the NNIS gives stakeholders the ability to make data-driven decisions about what is included and what is prioritized in these types of documents, making them more realistic, more credible and more likely to succeed.

In addition to helping identify and confirm the importance of big-picture issues and/or concerns (e.g., micronutrient deficiencies, food security, overweight/obesity), NNIS data can also be used to highlight more specific challenges that can and should inform policies, strategies and plans (e.g., gaps in service availability and quality, coverage and unmet need).

Data-driven decision-making — particularly around high-level agreements, such as nutrition

policies and strategies — can be a challenge to implement because it requires stakeholders to think and work based on what the data in the NNIS and from supplemental sources are telling them. It also requires stakeholders to move away from decision-making based on instinct or gut feelings, which are unsupported by evidence.

The use of the NNIS for data-driven decision-making also has the potential to make the development and monitoring of nutrition policies, strategies and plans a more inclusive and transparent process. The data in the NNIS are a validated and objective resource designed to be used by the full range of stakeholders involved in the development of policies, strategies and plans. In addition, the NNIS data can help hold officials accountable for the contents and integrity of their plans, including limiting the influence of vested interests.



## PLANNING PROCESSES

One of the most important uses of NNIS data is to support and strengthen planning processes at different levels (e.g., from national level to district level). Specifically, making the NNIS an integral part of nutrition planning is a way to promote data-driven thinking and decision-making throughout the process, including using data to help determine programmatic targets. The use of the NNIS in planning is also a way to identify data that should be added to the information system.

Planning can be influenced by a number of challenging factors, including a lack of consensus on priorities, political agendas, entrenched interests and historical approaches. Ensuring the planning process is data-driven can help mitigate the influence of these factors and, as mentioned above, make the process more inclusive and transparent.

Countries already using evidence-based planning will recognize the importance of

NNIS data when making their nutrition plans. A key strength of evidence-based planning is its underlying premise that achieving good

outcomes requires using objective information to decide how best to address a problem.



## RESOURCE MOBILIZATION

The ability to mobilize funds for nutrition is increasingly linked to results. When allocating financial resources, domestic and international funders want to know that support for nutrition is a good investment for the country. They want to see the data that makes the financial case for nutrition. The NNIS can and should be a source of data to help make this case, potentially providing insights on issues ranging from resource allocation and spending efficiencies to coverage and outcomes.

Stakeholders in nutrition can also use NNIS data to take a more proactive stance on resource mobilization by proposing programmes beyond the types historically implemented in the country. For example, data show that nutrition can both prevent and treat non-communicable diseases (NCDs) such as heart disease and diabetes. With the growing burden of NCDs, this creates an opportunity to mobilize funds by making a data-driven case to invest in nutrition interventions to address NCD risks, disease burden and health sector costs and capacity.



## BUDGETING

The data in an NNIS should input directly into the development of national and subnational nutrition budgets. For example, it can support critical decisions about the target population size, service-delivery costs, coverage gaps, commodity needs and other budget parameters. The value of a strong data-based budget is that it demonstrates to decision makers that the programme is carefully planned, managed and implemented.

country. In many countries, people with these responsibilities (e.g., officers in the Ministry of Finance) may have limited knowledge of the issues. Consequently, NNIS data, along with other supporting data, can be an effective way to educate these decision makers and make the case for allocating funds for nutrition.

Good data also play an important role in improving knowledge and awareness about nutrition issues among the individuals and organizations responsible for developing budgets for nutrition programmes in a

With ongoing decentralization in many countries, critical budget decisions are often made at local levels (e.g., districts, counties), which increases the value of including local data in the NNIS, if it is available. In some cases, local data may not be part of the NNIS, but the aggregated data in the information system can still provide vital context for budget decisions.



## IMPLEMENTATION

Access to an NNIS is essential for implementers (e.g., health facilities, schools and community organizations) because it gives them ready access to data relevant to their nutrition activities. For example, the NNIS can give them a better understanding of what is happening locally and nationally. It can be used to compare performance across implementers and/or geographic areas. In addition, the NNIS data can be used by implementers to better understand and leverage the multisectoral nature and effects of nutrition programmes, including the connections between different issues (e.g., the link between food security and social protection). NNIS data are also an effective tool for the individuals and organizations responsible for the management and oversight of programme

implementation, including government ministries and departments at national and subnational levels, as well as donors and technical assistance partners. The data can be used to track specific types of programmes (e.g., micronutrient supplementation, infant and young child feeding counselling) or they can be used to create an integrated picture of the implementation of different programmes and projects in a country.

NNIS data on implementation are also essential for monitoring the performance and progress of different programmes and projects (see 'Monitoring and evaluation' below).



## QUALITY IMPROVEMENT

Every quality improvement initiative is driven by the use of data, both to identify opportunities for quality improvement and to test possible improvements. For example, the basic PDSA cycle (Plan-Do-Study-Act), which is at the core of many quality improvement initiatives, uses data throughout the process. Data are used to develop the plan for what changes will be tested, and they are collected while the change is being tested. Data are then studied to assess the effects of the change and used to determine if and how additional modifications should be

made to further improve the effectiveness of the change.

An NNIS should be a rich source of data for quality improvement initiatives, particularly at the subnational/local level. The ability to use different types of data from multiple sources enables quality improvement teams to take a more integrated and inclusive approach to their work, increasing the likelihood that they will identify practical ways to improve quality and outcomes.



## MONITORING AND EVALUATION

Monitoring and evaluation (M&E) are inherently data-driven activities. Consequently, the availability of relevant data in an NNIS is an invaluable resource for the full range of M&E activities, including performance tracking, accountability, evaluation and reporting. For example, the core of an NNIS should include a set of indicators selected to capture data relevant to the country's nutrition priorities. These indicators are vital for monitoring the performance of programmes and projects at national and subnational levels, including progress towards targets and goals.

Additional and/or contextual data in the NNIS on multiple issues can be used to explain and understand the 'how' and 'why' of the performance of nutrition programmes. Data on inputs, outputs, coverage and key factors/determinants are examples of the types of data that can be used by M&E professionals and programme implementers to assess what is and

is not working and to identify ways to improve performance (*see 'Quality improvement' above*). NNIS data can also be used to support internal and external evaluations of nutrition programmes at national and subnational levels. Providing evaluators with access to the integrated data in an NNIS will strengthen their ability to plan and conduct constructive evaluations, including baseline, midterm, final and impact evaluations.

In many settings, a significant component of monitoring and evaluation is reporting results to key stakeholders, especially funding partners. Data in the NNIS can likely be used to meet various reporting requirements, while also being used for planning, implementation and quality improvement, among other purposes. In addition, the development and use of an NNIS can be an opportunity to work with different stakeholders to harmonize reporting requirements around key data included in the system.



## ADVOCACY

As mentioned above, an NNIS is a powerful tool for developing evidence-based nutrition policies, strategies and plans. The data in the NNIS are an equally powerful tool to use for advocacy on behalf of nutrition. Evidence-based advocacy is a highly effective way to make a strong case for action.

A challenge of evidence-based advocacy is to ensure the right data are presented in ways that are relevant and compelling to the target audience. For example, officials in the

Ministry of Finance, the senior management of a food processing company and a hospital administrator are likely to be influenced by very different messages. The range of data in an NNIS makes it possible to tailor evidence-based messages to specific audiences, which significantly enhances their value as an advocacy tool. In general, the ability to efficiently pull different data from the NNIS makes it possible to build a more integrated and credible story about the nutrition situation.



## EMERGENCY PREPAREDNESS AND RESPONSE

An NNIS can be a valuable resource during emergency situations. It can provide vital baseline data that can be used to help determine the nutrition effects and impacts of an emergency (e.g., *increased food insecurity linked to the COVID-19 epidemic*). NNIS data can also be triangulated with data collected as part of an emergency response, including data from rapid assessments, household surveys and emergency interventions.

In many emergencies, the most affected people and communities already face various nutrition challenges. Existing NNIS data about these individuals/communities and the programmes that serve them can be leveraged to both

prepare for and respond to emergencies. For example, in countries facing severe drought conditions, nutrition status and programme data for vulnerable communities can be combined with location, weather and crop data to help determine what assistance may be required in coming months.

The diverse effects and impacts of emergencies require a multisectoral response (*see 'Implementation'*), and NNIS data can be used to better understand and leverage the multisectoral nature of nutrition programmes, including the connections between different issues.

An NNIS should become a repository for nutrition data from past and/or current emergencies to improve the availability and access to relevant data for planning, implementation, monitoring and evaluation. Long-standing gaps in nutrition data from emergency situations, combined with the increasing frequency and scale of emergencies — both natural and human-made — has increased the need for data to improve preparedness and response. Country commitments to use their NNIS to collect and analyse these data can contribute to better emergency preparedness and response.



## KEY TERMINOLOGY

<b>Data</b>	Facts and/or figures; pieces of quantitative or qualitative information
<b>Database</b>	An organized collection of data stored electronically for rapid search and retrieval
<b>Data provider</b>	An organization that produces data; may be referred to as a data generator; see also data source
<b>Data source</b>	Type of data and/or modality of data collection (e.g., routine data, survey data); can also be synonymous with data provider
<b>Data value chain</b>	A framework used to guide the transformation of raw data into a valuable resource to better understand situations and improve decision-making
<b>Disaggregated data</b>	Data that have been broken down into detailed sub-categories (e.g., by age, gender)
<b>Indicator</b>	Indicators make collected data understandable and useful for monitoring performance, assessing achievement and determining accountability. They can be used to determine a proportion (e.g., prevalence) and are often designed to track inputs, outputs, outcomes and impact.
<b>National data</b>	Data that are common to or characteristic of a whole nation; see also subnational data
<b>Qualitative data</b>	Data collected using qualitative methods, such as interviews, focus groups, observation and key informant interviews; generally expressed in narrative form, pictures or objects (i.e., not numerically)
<b>Quantitative data</b>	Data that are measured on a numerical scale, can be analysed using statistical methods and can be displayed using tables, charts, histograms and graphs
<b>Routine data</b>	Data continuously collected as part of a regular activity/procedure
<b>Sentinel site</b>	A dedicated location (e.g., facility, community) where surveillance data are collected
<b>Subnational data</b>	Data disaggregated by administrative units below the national level (e.g., provinces, districts, counties); may also include other breakdowns below the national level (e.g., urban, peri-urban, rural)
<b>Surveillance data</b>	Data collected on a recurring basis from designated locations (see sentinel sites) to provide insights on trends into a broader area and/or larger population



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