European Commission

Inspiring the shift from nutrition policy to implementation:

how existing data can support nutrition decision-making in Guatemala

NiPN National Information Platforms for Nutrition

CATIE Solutions for environment and development / Soluciones para el ambiente y desarrollo

Proyecto PiNN
PLATAFORMA DE INFORMACIÓN NACIONAL SOBRE NUTRICIÓN

SESAN

Inspiring the shift from nutrition policy to implementation: how existing data can support nutrition decision-making in Guatemala

This brief analyses Guatemala's progress in implementing multisectoral stunting reduction strategies, specifically the National Strategy for the Prevention of Chronic Malnutrition (ENPDC) 2016-2020. It demonstrates the potential of the National Information Platforms for Nutrition (NIPN) approach for tracking country-level progress and informing decisions using existing data. It is based on a larger national report published in Spanish in Guatemala, used ahead of the 2019 elections to advocate for better implementation of nutrition actions and, where appropriate, to consider adjustments to implementation or budget allocation[1].

The implementation gap

In recent years, a growing number of countries such as Guatemala have developed comprehensive multisectoral nutrition policies and strategies to accelerate the reduction of malnutrition. These national frameworks encompass improved sectoral commitment, financing and programming and are translated into plans of action. Despite this increased attention and the evidence on cost-effective interventions, progress towards global nutrition targets remains limited in many countries[2]. Huge challenges persist in translating national policy frameworks and action plans into effective implementation at the scale and quality needed to achieve impact across the population[3, 4, 5]. Indeed, to achieve impact as measured by nutrition indicators, national multisectoral policies, frameworks and action plans for nutrition must be translated into improvements at each step of the impact pathway (see ***diagram***). Monitoring, evaluation and learning are key to overcoming this 'implementation gap' and generating the necessary know-how for planning actions in real-world conditions, thus improving policies, programmes and investment decisions. Analysing information comprehensively and purposefully enables a deeper understanding of how implementation of the action plan progresses along the impact pathway. In turn, this can lead to course correction and improved decisions related to programmes and investments. Making better use of data and information to improve decision-making through a nutrition policy dialogue is the ultimate purpose of the EU-funded initiative National Information Platforms for Nutrition[a] (NIPN).

NIPN in Guatemala

The NIPN in Guatemala aims to support the efforts of the Secretariat of Food and Nutrition Security (SESAN) in strengthening information systems on nutrition through better management and use of existing multisectoral information for decision-making.

The project focuses on optimising analysis and reporting of available information in order to inform revision of multisectoral policies and programmes, strategic and operational planning, and tracking and reporting on progress towards the ENPDC strategy targets. The information is also used to hold stakeholders accountable.

In Guatemala, NIPN is implemented by the Tropical Agricultural Research and Higher Education Center (CATIE) in close collaboration with SESAN, the national institution responsible for multisectoral coordination of food and nutrition security.

Diagram: *To achieve impact as measured by nutritional indicators, national multisectoral policies, frameworks and action plans for nutrition must be translated into improvements at each step of the impact pathway*

[a] *The National Information Platforms for Nutrition is an initiative funded by the European Commission, the UK Department for International Development and the Bill and Melinda Gates Foundation (http://www.nipn-nutrition-platforms.org)*

Methodology

The findings summarised in this brief arose through a study carried out by NIPN[6]. Four multisectoral national stunting prevention strategies were analysed, namely:

- Programme for the Reduction of Chronic Malnutrition (**PRDC 2006-2016**)[7]
- National Strategy for the Reduction of Chronic Malnutrition (**ENRDC 2008-2011**)[8]
- Zero Hunger Pact Plan (**PPH0 2012-2015**)[9]
- National Strategy for the Prevention of Chronic Malnutrition (**ENPDC 2016-2020**)[10]

Mixed quantitative and qualitative methods were used, including a review of key documentation, stakeholder interviews and trend analyses of budget implementation related to food and nutrition security. The analysis involved the following steps:

1. Reviewing the different national multisectoral strategies in terms of their alignment with global evidence on nutrition and with higher level national policy commitments and frameworks, with a focus on stunting.
2. Describing the evolution of the strategies and analysing the progress in implementation of the current strategy (ENPDC) within a wider historical perspective.
3. Analysing quantitative data using food and nutrition security-related budget allocations and expenditures to:
   - estimate the potential progress made in implementation of stunting prevention strategies over time;
   - assess whether this implementation is going in the right direction to achieve national targets.

Quantitative analyses are shown from 2012 onwards, when comparable data started being available across sectors, i.e. spanning both PPH0 and ENPDC strategies.

National multisectoral strategies for stunting reduction

Given Guatemala's long experience of developing policies for stunting reduction, the study looked at the evolution of the strategies' design over time to understand how the efforts put into the design itself may have affected the ability to reduce stunting. The main findings are summarised here.

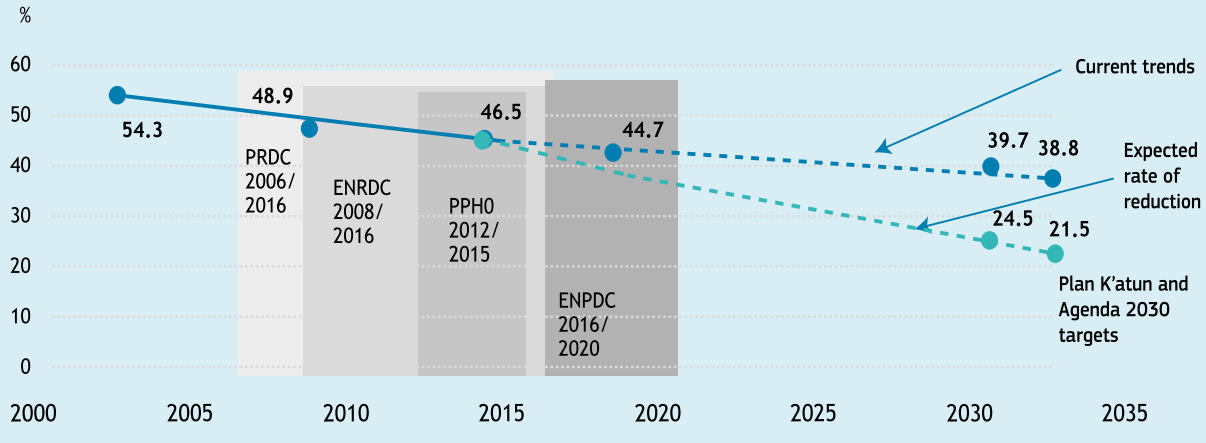
1. The design of the different strategies has remained virtually unchanged over time with respect to the package of interventions.

All strategies addressed the immediate causes of malnutrition in Guatemala to the same degree, prioritising health (through interventions such as antenatal care, supplementation, disease prevention and management) and, to a lesser extent, the underlying causes at the household level (including through cash transfers, improved water and sanitation, and strengthening household food security through support to local food production). Unfortunately there is little dovetailing with those strategies that address the key structural causes of stunting in Guatemala through interventions such as income generation and women's education, although the ENPDC mentions these in its pillars[11,12].

Stunting prevalence in Guatemala

Guatemala has had a consolidated legal and institutional framework to address stunting in place since 2005. But it is yet to follow through on the implementation of its multisectoral nutrition policies and strategies. Despite its long history of frameworks for reducing stunting, high stunting rates persist, with half of children under five suffering from chronic malnutrition. It is clear from ***Figure 1*** that, **if the country is to achieve the nutrition targets in K'atun Plan[b] and the 2030 Agenda, it needs to triple its average annual rate of stunting reduction, starting now.**

Figure 1: *Stunting prevalence (DHS/ENSMI national surveys), projected trends and trajectory required to achieve national targets in 2030 and 2032*



[b] *The National Development Plan, K'atun: Our Guatemala 2032, was approved in 2014 and encompasses all national development priorities, including food security and nutrition, climate change and agriculture.*

2. The strategies differ mainly in the target population and the scope of the intervention package.

Compared to the PPH0 strategy (2012-2015), the current ENPDC strategy narrowed its focus in three ways:

- reduced geographic coverage, with fewer priority areas identified by high stunting rates (139 municipalities in ENPDC vs. 166 in PPH0);
- reduced target age group of children (under-two in ENPDC vs. under-five in PPH0);
- reduced number of interventions included in the essential package (14 interventions in ENPDC vs. 24 in PPH0).

This prioritisation followed the recommendations for impact achievement from the PPH0 final evaluation[13].

3. The current ENPDC strategy is only partially aligned with global evidence-based recommendations.

It includes five of the ten recommended nutrition-specific interventions and only three of the nine recommended nutrition-sensitive interventions[c,14,15]. Out of 14 interventions proposed in ENPDC, eight are recommended at global level and the rest are mainly basic health services.

Lessons learned

Lesson 1: Funding must match strategic commitments and priorities if targets are to be met

Financial and human resource investments need to match the commitments made in the strategy if a tripling of the rate of stunting reduction is to be achieved.

National stunting reduction strategies need to be translated into investments that are sufficient for implementation of programmes at the scale needed. As financial and human resource inputs have yet to align with the ambition of any of the strategies, including the current one, it is unrealistic to expect increases in intervention coverage and a corresponding reduction in risk factors that would lead to an acceleration of the rate of stunting reduction.

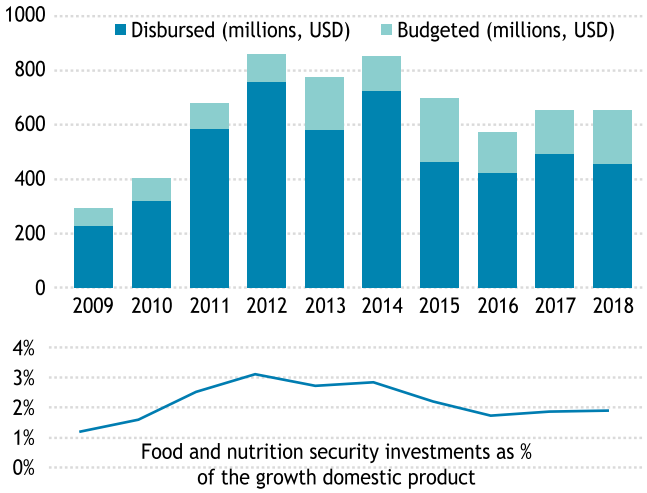
The allocated financial and human resource inputs in Guatemala are not well aligned with the priority setting in the consecutive nutrition strategies, independently of 'how well' the strategy has been designed.

Investments have been insufficient for implementation of nutrition actions at the planned scale and for achieving the expected multisectoral convergence. After a steep rise in domestic investment from around 1% in 2009 to 3% in 2012, public investments in food and nutrition security policy have decreased since 2012 in absolute terms, remaining at around 2% of Gross Domestic Product[16,d] as shown in ***Figure 2***.

A study by the Central American Institute for Fiscal Studies assessed the funding gap for nutrition interventions, both specific and sensitive, and estimated that domestic investment amounted to only one-third of the funding that would be required for adequate service delivery[17].

Except for a peak in funding around 2012-14, attributable to the Zero Hunger Pact Plan, most strategies have generally fallen short in terms of resources and have lacked specific budget allocation.

Figure 2: *Domestic investment in food and nutrition security annual operational plans from 2009 to 2018*



[c] *As per 2008 and 2013 Lancet Series on Maternal and Child Nutrition and the SUN Movement/the first 1,000 days window. New evidence in Lancet 2018 has emphasized the role of pre-conception health for infant nutrition indicating the need for interventions to ensure adequate health in other groups such as adolescent girls.*

[d] *The 2018 SUN Nutrition investment snapshot for Guatemala provides similar overall trends in budget allocations, however with the following differences in: 1) study objectives: the SUN snapshot looks only at total investments, instead this study analyses both budget allocations and expenditure; 2) categorisation of interventions: the SUN global methodology applies the same categorisation for cross-country comparison, whereas this study uses the same categorisation as in the national nutrition strategies; and 3) observation period: the SUN snapshot analyses trends within sectors starting from 2015, while this study considers trends across sectors starting from 2012. (Knechtel W, SUN Secretariat, personal communication, 11 March 2019).*

Stunting reduction strategies have to some extent helped only to spur sectoral investments towards prioritised interventions and to facilitate their monitoring. This has mainly been achieved for the health sector's '1000 Days Window' programme, while for other sectors, tracking of financial resources allocated to high-priority actions of the strategy only started in 2017. In this regard, a positive development under ENPDC is the recent incorporation of related budget lines in two new line ministries (agriculture and social protection), which will ensure that sectors allocate resources to ENPDC's priority interventions.

Lesson 2: Budget allocations are uneven and inadequate across sectors

Budget must be allocated to all components of the national multisectoral strategy to allow implementation of interventions across all sectors, not just health. Weak systemic capacities in programme planning and implementation in most sectors also need to be addressed so that allocated budget can be used effectively.

Budget allocations and expenditures have been uneven across sectors, with most investments going to basic health and nutrition-specific interventions. These have the potential to affect only a small proportion of the stunting burden: even if the ten globally recommended nutrition-specific interventions were implemented at 90% coverage, stunting prevalence would only reduce by 20%, according to the *Lancet*.

Some sectors and interventions have not received regular funding, or were not funded at all, particularly those that address the underlying causes of malnutrition related to poverty (i.e. those that would impact on the remaining 80% of the burden).

At the disaggregate level, implementation appears to have continued in a 'business-as-usual' way since the current strategy was introduced, without significant changes in response to the new framework.

Some sectors face persistent weaknesses in implementation capacities which have hindered progress on the ground.

1. Budget must be allocated to all components of the national strategy to achieve its targets.

a) Despite the strategies' emphasis on a multisectoral approach, by far the greatest share of budget allocation went to the health sector, with much smaller shares, or none at all, going to interventions in other sectors.

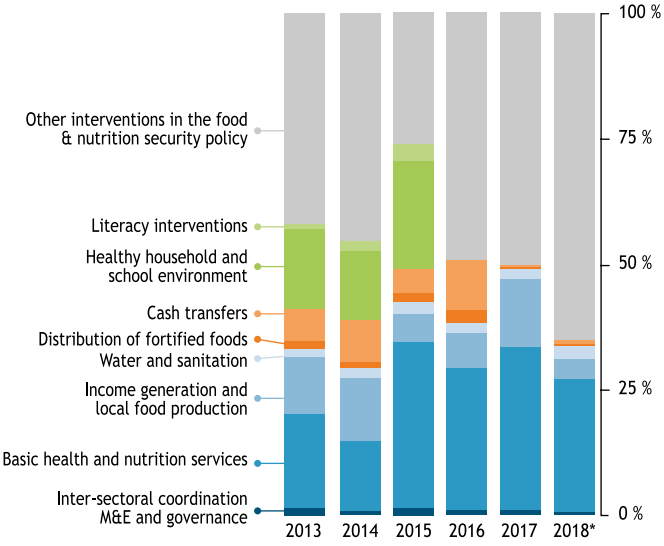
Analysis of budget expenditure across the components of the nutrition strategies in relation to the total allocated budget to food and nutrition security since 2013 shows the following (***Figure 3***):

- the vast majority of investments went to basic health services, including some nutrition-specific interventions;
- a significantly lower share was allocated to income generation or local food production: the agriculture and food sector has not benefited from a regular budget allocation over the years;
- very few investments were allocated to water and sanitation, throughout the years (less than 3%);
- the 'distribution of fortified food' through health services networks and, even more so, 'cash transfers', both suffered from significant budget cuts after 2016;

- 'food and nutrition education' did not receive any budget at all across all years, while 'healthy household and school environment' and 'literacy programs' stopped being tracked after 2015 as they are not part of the ENPDC (though these interventions continued to be implemented as part of the food and nutrition security plan).

As a consequence, the availability, quality and coverage of these interventions have been low, particularly for those interventions addressing the underlying causes of chronic undernutrition. The likelihood of populations in the target municipalities receiving the full intervention package is therefore very small.

Figure 3: *Trends in budget expenditure (as a weighted % over total allocations) in national stunting reduction strategies from 2013 to 2018*

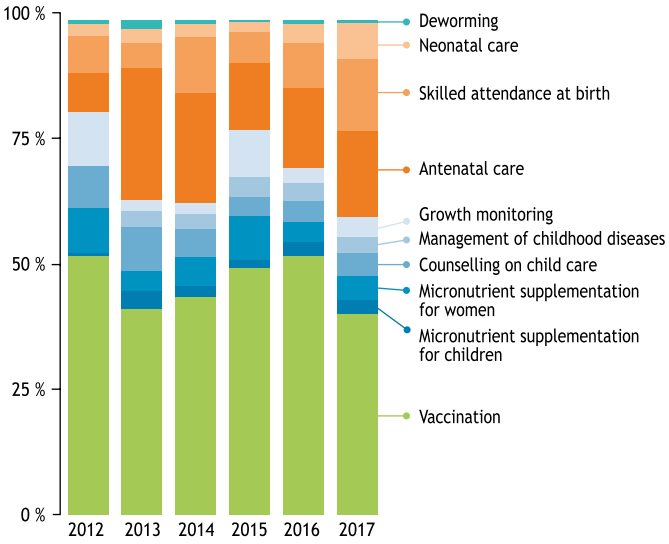


*2018 budget implemented up to 30 September

b) Investments in the health sector went mostly to basic health services rather than globally recommended nutrition-specific interventions.

Within the basic health sector package, half of the investments went to vaccination and almost a quarter to antenatal care (***Figure 4***). Only about 15–20% of investments went to the five evidence-based nutrition interventions included in the strategy: supplementation (children and women), behaviour change interventions, prevention and management of childhood diseases and growth monitoring.

Figure 4: *Trends in budget expenditure (as % of total) across basic health and nutrition services, from 2012 to 2017*

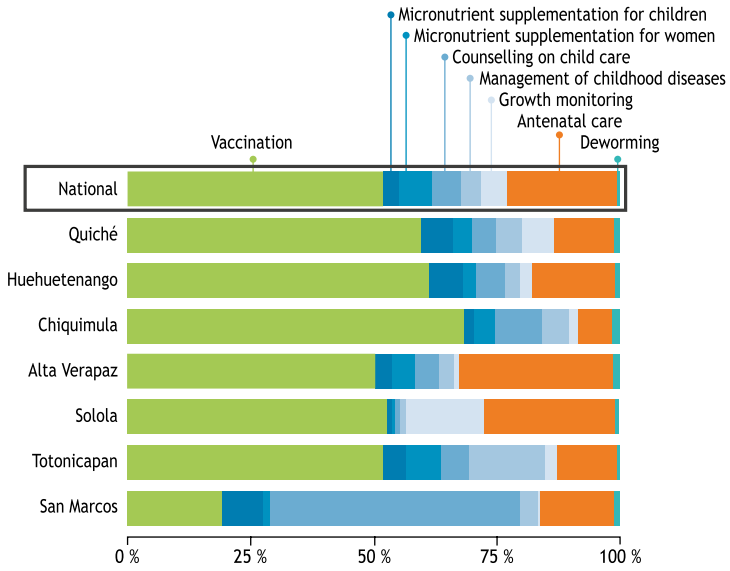


There was no significant change in the distribution of health investments between 2013 and 2017, indicating that implementation of the health package has continued in the same way regardless of changes to the nutrition strategies.

In general, the 139 municipalities prioritised by ENPDC did not benefit from greater intensity of financial or human inputs for the implementation of the comprehensive intervention package, as might have been expected from the strategy.

Budget data disaggregated at the subnational level were only available for the health sector and not for other sectors, which limited analysis at this level. ***Figure 5*** below shows that the 2017 budget implementation structure for basic health and nutrition-specific interventions at departmental[e] level followed the same pattern as the national level, where the largest share of investments was on vaccination. The only exception is the department of San Marcos where infant and child feeding counselling received the largest share of investments, although whether this reflects reality – or whether it could be due to a reporting error – could not be verified. Differences in investments across the seven departments indicate some degree of prioritisation and tailoring of budgets to context-specificities.

Figure 5: *Budget implementation for the basic health and nutrition services component across seven departments, ENPDC 2017*



c) Planning, programming and budgeting decisions at subnational level need to be aligned with the strategy and the real problems of target groups if the multisectoral approach is to work in practice.

Based on observations in a sample of departments[f], investments at the subnational level did not change substantially over time from one strategy to the next. There are indications that budgeting processes tend to take place outside a review mechanism that would ensure interventions are relevant to the strategy and to the real problems of target groups (based on interviews with key stakeholders[18]).

[e] *Departments are subnational administrative units.*
[f] *Comparisons between PPHO and ENPC across 2015, 2016 and 2017 for two districts (Sololá and Totonicapán)*
[g] *The national management system platform (SIGES) and Results Based Management were introduced in Guatemala only recently in 2012. The Health sector was the first to adhere to the new system, other sectors such as Agriculture and Social Protection joined later.*

In other words, while the multisectoral approach is well established in design, in practice, planning and programming decisions continue to be made independently of the strategies i.e. primarily through an aggregation of sector activities, without a clear process of prioritisation by results[g].

These findings resonate with the 'implementation science' literature on multisectoral nutrition strategies[19,20,21,22]. While a shift towards multisectoral approaches in nutrition has translated into new policies and plans, there is less evidence of how these developments are being operationalised on the ground. This is in part due to differences in understanding of multisectoral approaches. For some actors, it simply requires that 'every sector "does its bit" for nutrition largely through business-as-usual in implementation of activities' rather than embedding nutrition into sectoral plans or changing the way programmes look on the frontline. As highlighted in the study by ICEFI (2014)[23], the importance of linking efforts in planning, programming and implementation needs proper recognition if national nutrition objectives and targets are to be achieved.

2. Systemic barriers to implementation such as weak financial execution capacities need to be addressed in some sectors.

The budget expenditure analysis in the present study found that, in general and for all strategies, the financial execution capacity – the capacity to actually use the finance provided to implement programmes – was consistently high for basic health and nutrition interventions but was variable and lower in other sectors, in particular those responsible for implementing interventions aimed at the underlying causes of malnutrition[24].

A case in point is the water and sanitation component in ENPDC. Low financial execution (below 30%) by the Institute for Municipal Development (INFOM) was linked to limited strategic and management capacities at municipality level as well as other bureaucratic constraints[h,25]. It is important to understand and address these implementation barriers persisting in some sectors and components because they may impact the drive towards multisectoral nutrition programming[26].

Weak systemic capacities in programme planning and implementation have been highlighted as a key constraint to the pace and quality of implementation of national plan in other countries[27,28].

Overall, it seems clear that the intense levels of effort that have gone into the design of multisectoral nutrition strategies since 2005 have not been matched when it comes to funding or implementation. This explains why the successive changes introduced to improve the design of the strategies have not translated into the expected impact on malnutrition in Guatemala. The nutrition situation will not change unless the commendable efforts put into strategy design are shifted to implementation.

Lesson 3: Monitoring systems need to be strengthened

Implementation of multisectoral stunting prevention strategies can only be tracked with effective monitoring systems that collect and analyse data on outputs and intermediate outcomes.

The limited availability of multisectoral monitoring information prevented an assessment of the results and quality of implementation. Particular constraints were the lack of service coverage data, the absence of monitoring of outcome indicators and the lack of disaggregated subnational information for retrospective trend analysis.

Guatemala has advanced integrated monitoring systems, but they need to be strengthened for the implementation of national multisectoral stunting prevention strategies to be tracked effectively and for decision-making to be informed by evidence.

Monitoring systems in Guatemala

Guatemala has progressed more than its neighbouring countries in the development of its monitoring systems. It has put in place a set of advanced and integrated systems, of which the main ones are:

- the routine monitoring systems of sectoral ministries;
- the financial system SICOIN (Integrated System of State Accounting);
- the national information system on food and nutrition security (SIISAN)[29].

The latter represents SESAN's commendable efforts to integrate variables from the various systems (routine monitoring and financial, as well as surveys) and to analyse data periodically with the support of government sectors and non-governmental institutions.

The financial tracking system has featured in global reports as a model of accountability and monitoring of food and nutrition security[30,31]. It has daily updates on budget, expenditure and other management information data and is publicly accessible. The system allows the tracking of achievements against physical and financial targets by ministry, by programme and by municipality.

[h] The water and sanitation component of ENPDC involves three actors namely, INFOM, municipalities and the Ministry of Health (the latter only for surveillance of water-quality). INFOM is responsible for the management of the water and sanitation infrastructure budget and disburses the funds to municipalities. The ultimate responsible for project implementation are the municipalities. The qualitative analysis confirmed there were capacity related bottlenecks at the municipality level (Lovon 2019).

The national information system faces the challenge of harmonising the routine monitoring systems of different sectors, in particular with respect to inconsistencies and the compatibility of scarce data across sectors and even within the same sector.

1. There are weaknesses in the multisectoral monitoring systems that hinder analysis, despite the progress outlined in the ***text box*** «Monitoring systems in Guatemala» on the previous page.

For example, intervention categories are not always comparable for the purposes of monitoring multisectoral stunting prevention strategies. Issues related to centralisation, collation, analysis and interpretation of data are common in countries that seek to promote intersectoral action for nutrition[32,33].

Furthermore, each multisectoral nutrition strategy creates different monitoring requirements, which may not necessarily be captured by the prevailing monitoring systems of sectoral ministries. Changes in target population and interventions from one strategy to another make it more difficult to compare indicators such as intervention coverage over time.

2. Routine information systems in the sectoral ministries also need strengthening in order to track the implementation and progress of national stunting prevention strategies. Except in health, most sectors do not systematically collect or analyse data on the coverage of their interventions across the population.

3. There is also a shortage of disaggregated information on indicators of outputs and outcomes related to nutrition. For instance, agriculture sector plans have yet to adopt nutrition-sensitive indicators such as dietary diversity indicators, although recent developments are encouraging in this regard[34]. Filling these gaps will be important to improve priority-setting and budget allocation as well as planning.

The weaknesses in monitoring systems limit the opportunities for generating comprehensive data and analysis along the impact pathway. This in turn limits the ability of decision-makers to unpack the 'implementation bottlenecks' and make relevant data-informed adjustments during the implementation of strategies in order to accelerate the stunting reduction rate.

Thus, even if budget allocation and repartition across sectors were to improve in Guatemala, the country would not have the means to monitor how these investments translate into improved human resources and skilled capacity, into increased availability and quality of interventions, into better utilisation of interventions and coverage of the target population, and ultimately into improved outcome indicators.

Conclusions

The conclusions reached through this case study yielded three main lessons:

1. Commitments and priorities under each successive stunting reduction strategy were not matched by required financial inputs.
2. Adequate and balanced budget allocations as well as repartitions across and within sectors have not been optimally assured for every component of the strategy. The implementation of key components has been affected by the low financial execution capacities of some actors/sectors.
3. The absence of coverage data and outcome-level indicators means that it is not possible to track whether progress is made against the strategic and operational plans, and to course correct where necessary.

With insufficient and unevenly distributed financial and human inputs, it is unlikely that adequate intervention coverage of the target population could have been achieved (although the lack of coverage data prevents confirmation of this). Combined with the unsuccessful integration of interventions, improvements in the determinants of undernutrition were unlikely to have occurred at the desired pace. This may explain why stunting reduction in Guatemala is not taking place at the rate planned in the most recent strategy.

As shown in the ***diagram*** below, the analysis identified where efforts along the impact pathway are needed to accelerate the stunting reduction rate; that is, where to start taking actions to course-correct the actual implementation of stunting reduction strategies.

The conclusions were drawn on the sole basis of analysing financial inputs along the impact pathway, using budget allocation and expenditure data. This shows that even suboptimal information system(s) yield valuable information that can be used to assess the progress of successive nutrition strategies and the likelihood of timely achievement of national stunting reduction targets.

Unfortunately, similar analyses could not be carried out for the other elements of the impact pathway – outputs, outcomes and impact – because disaggregated data on implementation and intervention coverage were not consistently collected, available or easily comparable.

While efforts to improve nutrition monitoring information systems are taking place, existing data can generate relevant lessons if analytical capacities are strengthened. The NIPN in Guatemala has the ability to continue analysing nutrition-relevant indicators along the impact pathway to inform decisions on policies, programmes and investments among policy makers; the platform is thus relevant and highly strategic. NIPN can support national institutions in tracking progress in the implementation of national multisectoral strategic frameworks and indicating where concrete actions are needed in order to achieve nutrition targets.

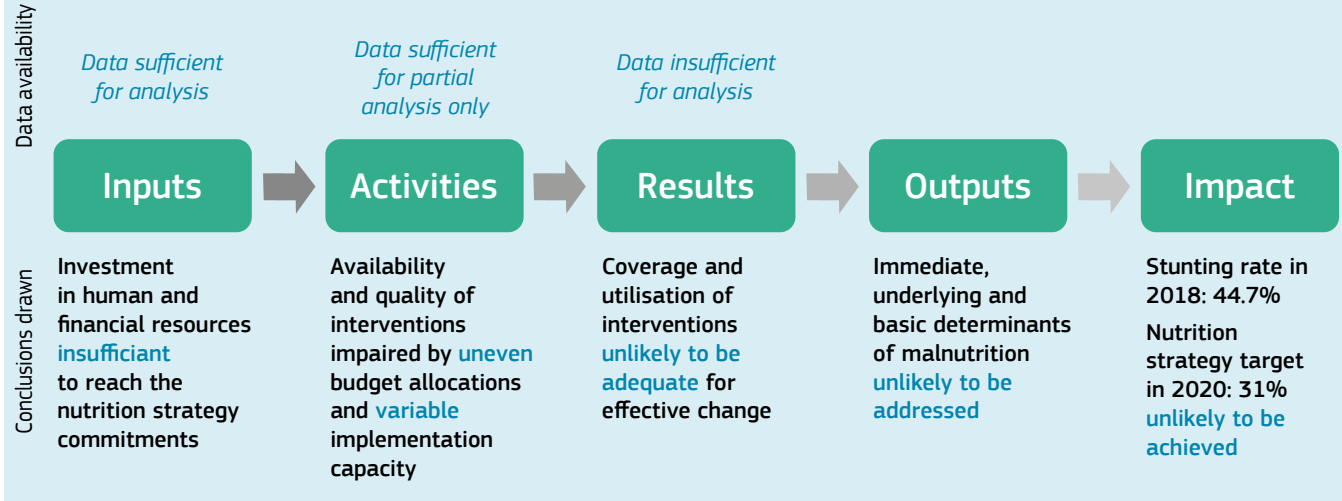
The case study demonstrates that it is possible to provide meaningful analysis with the limited data available. Even in the absence of regular output or outcome indicators or data on interventions coverage, information relevant to decision-making can be generated and used to course-correct the implementation of strategies.

If Guatemala wants to make steady progress in reducing malnutrition and achieve its targets, three actions are needed, based on the results of this study:

1. expand efforts to increase financial and human investments so that they meet the strategic commitments;
2. align budget allocation with the needs and contributions of the various sectors, especially for nutrition-sensitive interventions that address the underlying causes of malnutrition related to poverty; and address implementation bottlenecks in some sectors caused by weak systemic implementation capacities;
3. strengthen the monitoring of indicators of outputs and intermediate outcomes in order to track progress in the implementation of the stunting reduction strategy.

The results of this study were presented at a national meeting to government and non-government stakeholders of national and decentralised levels. It has been used for advocacy at a high political level, seizing the opportunity of the 2019 elections, to recommend that the next government include the actions above in the national nutrition agenda.

Diagram: *Using existing data to identify implementation bottlenecks along the impact pathway*



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