SOCIAL INNOVATIONS Journal

*We **inspire** leaders and organizations to **dream.** We **create** the space for leaders to tap into their own creativity to **innovate.** We **endow** leaders with the tools and knowledge to **launch and grow** their ideas. We **challenge** leaders to **become better versions of themselves.** We **transform** leaders and their companies.*

Multi-sectoral Mapping for Nutrition (MS4N) in Sindh, Pakistan

By Zahra Ladhani, PhD.

Summary and Issue

Service mapping has gained increasing significance in development work during the last decade, partly due to growing public demand for measurement and accountability in the use of resources. The idea of service mapping is tested in few countries for example in Ethiopia where the IYCF (Infant and Young Child Feeding) program offered by multiple partners was mapped, and it helped in revealing more than 400 duplications and complementarities among the implementing partners. In Egypt (2019), the Ministry of Health and Population carried out a scoping exercise to prepare a nutrition landscape of country which helped in preparing a service package for nutrition to children and women. The innovation discussed in this paper is around multi-sectoral service mapping for nutrition.

In Pakistan, childhood stunting (42%), acute malnutrition (23%), anemia (53.7%), and other micronutrient deficiencies among the women and children of Pakistan remain persistently high. In response to this crisis-like situation, each provincial government for the first time drew up multi-sectoral, integrated nutrition programs. In 2016, Sindh, one of the four provinces, designed an "Accelerated Action Plan (AAP) for Reduction of the Stunting and Malnutrition," whereby nutrition specific and sensitive strategies of eight sectors (Agriculture, Health, Education, Social Welfare, Population Welfare, Livestock, Fisheries and WASH) are integrated at all levels starting from the province to district. This multi-sectoral framework is supported by the European Union and The World Bank. It is important to highlight that the AAP is not only multi-sectoral but the multiplicity is across departments, partners, levels, and interventions within sectors, each of these layering and adding complexity to the framework and implementation plan.

To support AAP implementation, the European Union Delegation (EUD) with its largest share of grant, is implementing the program a.k.a PINS (Programme for Improved Nutrition in Sindh) which has three components: "Technical Assistance (TA) for Capacity-Building and Systems Development"/PINS1 by ConseilSante); direct "implementation of nutrition specific and nutrition sensitive interventions" -- PINS 2 by Action Against Hunger (ACF), and PINS 3 by Rural Support Programme Network (RSPN) respectively in the 10 selected districts of the province. The innovation described in this paper is designed, financed, and executed by the TA component/PINS1.

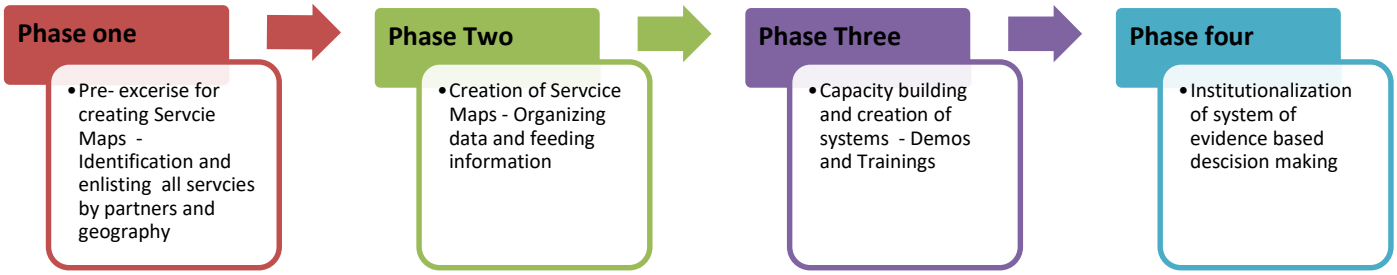
In this context, it was observed that, a Monitoring & Evaluation (M&E) framework and a Management Information System (MIS) was missing which not only monitor outputs and outcomes of nutrition interventions, but also opportunities to improve the performance and evidence-based decision-making. To address this gap, a Nutrition Management Information System (NMIS) was proposed by the implementing partners. However, this solution was not of much help. NIMIS was based on manual feeding of information and was limited to interventions at the district level only. It was also recognized that the input related indicators and its collection mechanisms was not taken care of, because there was no way to trace overlaps and/or missing activities, services, and inputs by various partners. To address these shortcomings, PINS1 proposed Multi-Sectoral Mapping for Nutrition (MS4N) -- a computer-based interactive system.

Objectives and Expected Outcomes of MSM4N

The primary objective of the MSM4N is to strengthen nutrition surveillance systems and to streamline services (input) by each implementing partners under all participating sectors under AAP. MSM4N is expected to be user friendly, robust, and capable of fostering multi-sectoral collaboration and complex system-wide problem solving. Specifically, it will help in identifying gaps and duplication of inputs within districts by mapping services (input) at all levels from province to village, and visually presenting these by sector and by implementing partners. Hence, offering a detailed mapping of stakeholders, their interventions, geographical, and population coverage. Moreover, it will complete the NMIS loop by providing information at the input level as well as by institutionalizing the M&E system at the highest level of decision making within the province.

Implementation Phases
The MSM4N implementation was planned over four phases:

Figure 1: MSM4N phases of implementation



The implementation remains a work in progress and so far, the first two phases (Pre-exercise and Creation of Service Maps) are completed. The first phase was a “pre-exercise” or rather setting the stage for creating service maps. This phase started with document reviews and consultations with all stakeholders and implementing partners, individually and collectively. Upon completion of the initial consultations, a workshop was organized representing the AAPSecretariat, line departments, and key members of the implementing partners. The focus of the event was (a) to introduce the need for service mapping, (b) to orient participants on the work entailed, and (c) to solicit cooperation in collecting the required data. One significant outcome of the workshop was that participants acknowledged the need for multi-sectoral service mapping which came in handy while collecting data at all levels.

The second phase -- creation of service maps -- was initiated with visits to the provincial and district coordination offices, to meet the MIS staff and district-based officers and to appraise the data collection mechanisms. During these field-based meetings, major gaps were identified especially pertaining to the capacity of human resources (HR); timely release of funds against approved allocations; lack of coordination within all sectors and levels leading to a weak flow of data and information; lack of uniformity of data coding; un-synchronized collection methodology, and, undocumented overlaps in the “who-when-where” of service delivery. Another reported challenge was the availability (lack) of geospatial tracking of service delivery and difficulty in collecting geo-coordinates, mainly because of "restrictions imposed" by security agencies.

It was quite obvious that given the challenges, we were heading for a disaster; we had to quickly find an alternate, simpler, and readily acceptable service mapping system without compromising on the quality or the (expected) outcome. With this realization we set out to revise the plan and the design. The modified plan included a two-pronged approach: First, the formulation of the Service Tracking Indicators (STIs) and second, to launch a sector wide data collection exercise ensuring as much detailed information as possible. For the STIs, the exiting indicators provided in NMIS were used to develop new input indicators and reclassify output indictors to more precise input-output indicators. Moreover, we took another important decision, which was to create a pilot prototype, first in one district only, which could later be replicated to the entire province (29 districts). The revised plan worked, and we were able to generate exhaustive data sets ready for creating the service maps.

The two remaining phases were capacity building of the government officers and institutionalization of the system. The capacity building will involve the actual hands-on training sessions on "how-to" part with emphasis on maintaining and continuation of the established system. The final phase "institutionalizing" will help ensure the system sustainability and continuity. It is hoped that the institutionalization will lead to the evidence-based decision making critical for the successful implementation of the program and to make inferences that are crucial for attaining the goal of stunting and malnourishment.

Lessons Learned

Despite that the innovation is still a work in progress; we were able to document several key lessons. Firstly, sustainable solutions are only possible when these are (a) socially desirable, (b) economically feasible, and (c) institutionally viable. Second, the quality of service delivery also suffers from inadequate attention to legislative obligations and compliance control. The specific lessons in relation to Management Information Systems include standardization, particularly in nomenclature, data coding and classification systems enables accurate capturing of data and leads to good reporting, thus making the content more beneficial. Finally, users -- in this case province and district-based program staff and managers -- must drive MIS, not the data collectors. This means that users need to be educated and enabled in demanding both control, administrative, and inferential tabulations, that inform decision-making.

Works Cited

Hawkes, Corinna, Rachel Turner, and Jeff Waage. (2012). Current and Planned Research on Agriculture for Improved Nutrition: A Mapping and a Gap Analysis. N.p: Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH), University of Aberdeen, Centre for Sustainable International Development https://assets.publishing.service.gov.uk/media/57a08a69ed915d3cfd00074e/

Herbst, C. H., Elshalakani, A., Kakietek, J., Hafiz, A., Petrovic, O., Bhutta, Z. A., ... & Horton, S. (2019). Global Targets 2025 Tracking Tool: Country Progress Report 2017—Egypt. Washington, DC, and Rome: Preliminary Summary Report

National Nutrition Survey 2018: https://www.unicef.org/pakistan/reports/national-nutrition-survey-2018-key-findings-report

Radwan, G., & Adawy, A. (2019). The Egyptian health map: a guide for evidence-based decision-making. *Eastern Mediterranean Health Journal*, *25*(5).

World Health Organization. (2016). Accelerating Nutrition Improvements (ANI): mapping of stakeholders and nutrition actions in three scaling-up countries in sub-Saharan Africa: report of the second meeting, 10 February 2015, Kampala, Uganda.

UNICEF. Division of Communication. (2009). *Tracking progress on child and maternal nutrition: a survival and development priority*. Unicef.

Author bio

Dr. Zahra Ladhani, MPH, PhD, is working as Nutrition Consultant with the EU funded Programme for Improved Nutrition for Sindh, Pakistan.