SEPTEMBER 4, 2023

A CASE STUDY ON SARANGANI'S NUTRITION PROGRAM IMPLEMENTATION

FINAL REPORT

MA. ESMERALDA SILVA, PHD
PRINCIPAL INVESTIGATOR

Table of Contents

Background

The province of Sarangani has been a recipient of various health leadership and governance intervention from Zuellig Family Foundation since 2012. In 2020, the province in partnership again with ZFF, embarked on a new leadership and governance program, but now focusing on Nutrition.

In 2015, based on the National Nutrition Survey result, Sarangani's stunting prevalence rate was 20.7, the highest in the whole region 12. Since then, several interventions were implemented by the province to address malnutrition and in 2018, nutrition was one of the priority programs of the former Sarangani governor, Hon. Steve Solon under the ZFF-USAID partnership program. The province's fight against malnutrition even strengthened when the province underwent the Provincial Nutrition Governance Program in 2020. Since then, continuous improvement of both systems indicators as well as nutrition outcomes were noted. Latest stunting prevalence rate of the province is at 3.7 (Operation Timbang Result, n.d.)

Statement of the problem

The trend in malnutrition in Sarangani province from 2000 to 2006 is characterized by continuous and steep reduction in the prevalence of underweight children 0-71 months old (Figure 1). From 2000 to 2002, the province's malnutrition rate was reduced from 32% to 26% based on the Operation Timbang (OPT) result using the Philippine Reference Standard (PRS) (Figure 1). PRS was developed by the Food and Nutrition Research Institute-Department of Science and Technology in coordination with the Philippine Pediatrics Society (PPS) and adopted in the country in 1992 (NNC, 2012).

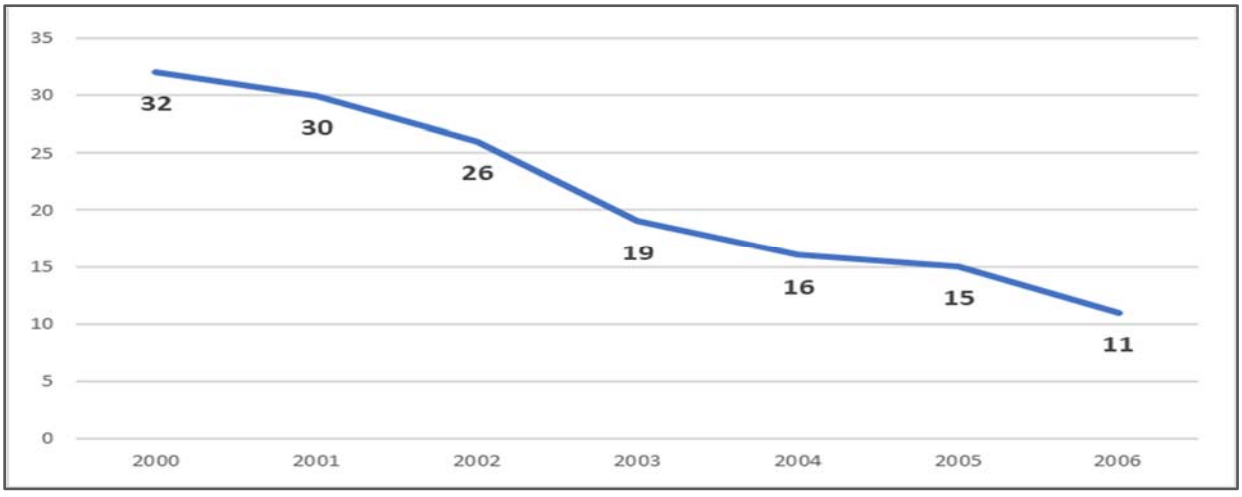

Figure 1. Prevalence of Malnutrition Among 0-71 Months Old Children in Sarangani, 2000-2006. Data from Sarangani Provincial Investment Plan for Health 2008-2012

In 2003, the National Nutrition Council Governing Board issued Resolution No. 5 Series 2002 adapting the International Reference Standard (IRS) which reflects the maximum growth potential of children, provide a more realistic and accurate estimate of the prevalence of undernutrition, and enable comparison among countries following the adoption of the World Health Organizations' New Child Growth Standards for children 0-5 years old by the National Nutrition Council. Further increase in malnutrition rate was expected considering the maximum growth standard used by the IRS. However, the data from the OPT in 2003 indicated a 7-percentage point reduction from 26% in 2002 to 19% in 2003. Malnutrition rate was further brought down to 11% or 9-percentage point reduction in 2006.

Despite the decreasing trend in the prevalence of underweight children, four of Sarangani's municipalities reported malnutrition rates that were higher than the province's and the Millennium Development Goals target of 13.6%. Based on the 2006 OPT, Malapatan reported a 17.78% malnutrition rate followed by Kiamba (15.80%), Glan (14.08%), and Maitum (13.42%). On the other hand, Malungon (10.25%), Maasim (7.05%) and Alabel had the lowest prevalence at 6.7%.

By 2010 to 2014, there was a gradual reversal and eventual plateauing in Sarangani province's malnutrition rates. (Figure 2). The sustainability of the initial gains was challenged by a slight increase in the malnutrition rate of the province from 9.18% in 2010 to 10.3% in 2014 (Figure 2). While the 1.12-percentage point increase seems minimal, the decreasing trend in other provinces in the region puts Sarangani in second place, next to Sultan Kudarat, in terms of the highest prevalence of malnutrition in the region. The figure was also 2.5-percentage points higher than the regional malnutrition rate. Unfortunately, by 2015, Sarangani was third in the country and first in the region with the highest prevalence of stunting among children 0-5 years old at 25%. It was also among the highest in the region, not just in terms of stunting but also in terms of prevalence of wasting and underweight children.

The increase from 2010 to 2014 was brought about by the increasing malnutrition rate in five of Sarangani's municipalities. In 2014, Kiamba reported the highest malnutrition rate in the province with 15.59%, followed by Alabel (15.43%), Malapatan (13.19%), Glan (13.05%), and Maasim (9.01%) respectively (Figure 3). In contrast, Maitum and Malungon showed a decreasing trend. The remarkable reduction in Malungon's malnutrition rate has earned recognition from provincial, regional and national governments which include Outstanding Barangay Nutrition Scholar, Green Banner Award (2006-2008), and Consistent Regional Outstanding Winner in Nutrition (CROWN).

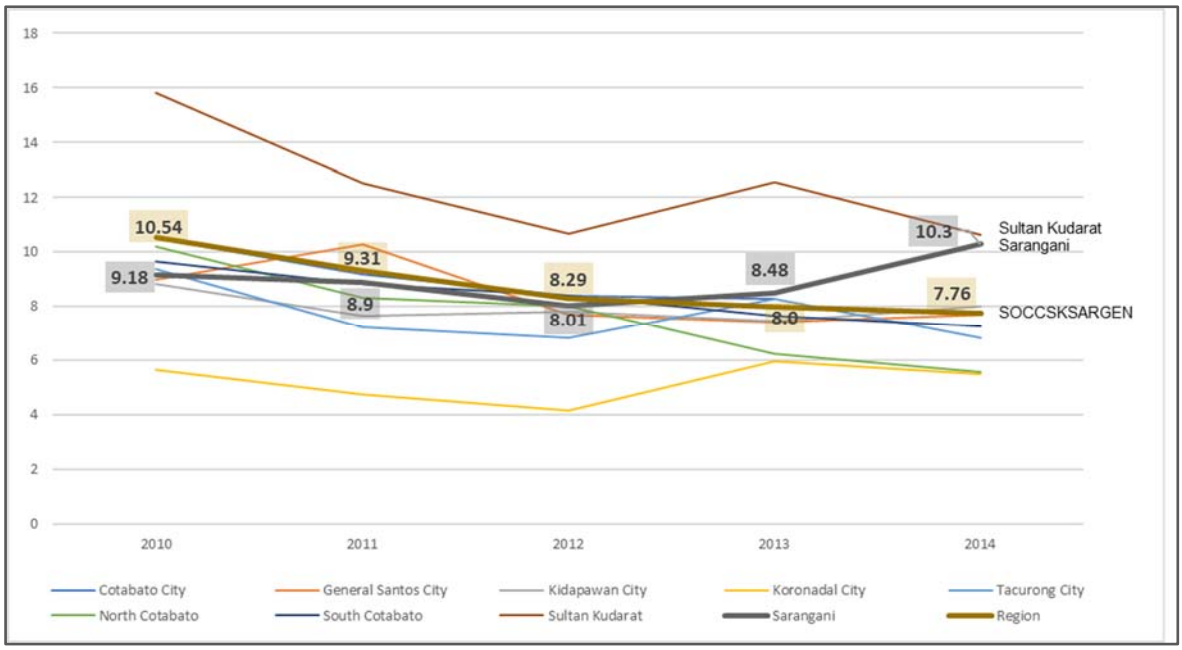

Figure 2. Prevalence of Malnutrition Among 0-71 Months Old Children in SOCCSKSARGEN, 2010-2014. Data from National Nutrition Council Region XII Facts and Figures. OPT comparative report 2010-2014 (0-71 months)

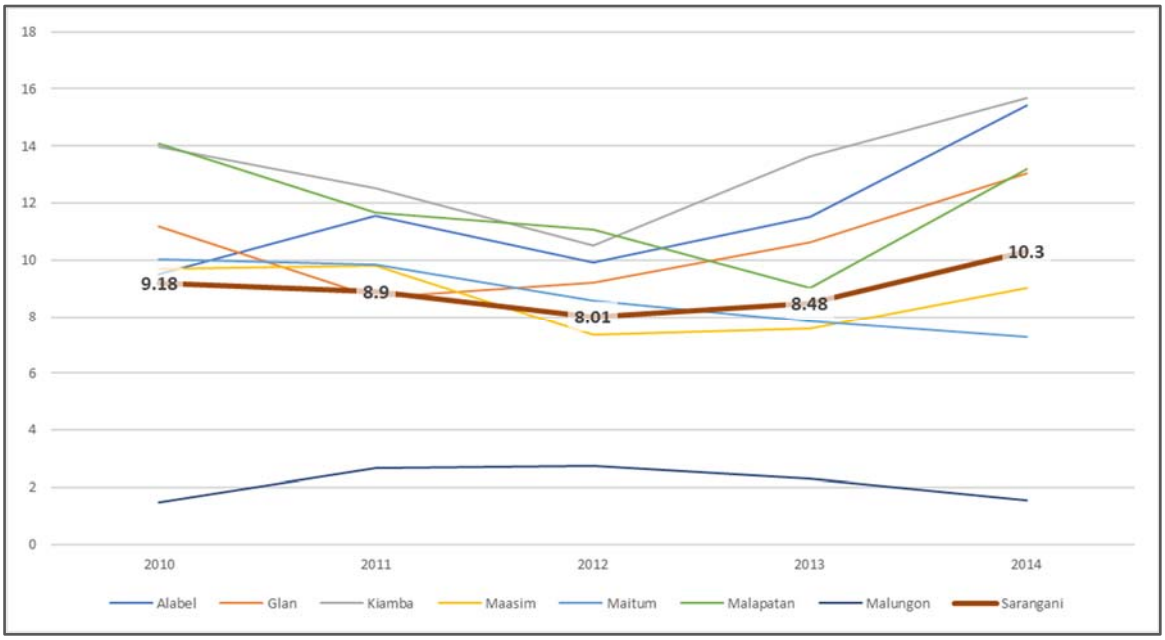

Figure 3. Prevalence of Underweight and Severely Underweight Children 0-71 Months Old, in Sarangani and its Municipalities, 2010-2014. Data from National Nutrition Council Region XII OPT comparative report 2010-2014

By 2015, Sarangani ranked third in the country with the highest prevalence of stunting among children 0-71 months old at 20.14%. It was also among the highest in the region, not just in terms of stunting but also in terms of prevalence of wasting and underweight children (Figure 4). Across all three indicators, Sarangani is worse than the regional average. Moreover, four of its municipalities were among the top 100 municipalities with the highest prevalence of stunting: Kiamba (30.61%), Maasim (27.40%), Alabel (25.44%), and Malapatan (25.05%). Such conditions posed dire consequences considering the irreversible effect of stunting and wasting on child survival, physical and mental development, and productivity in the long run.

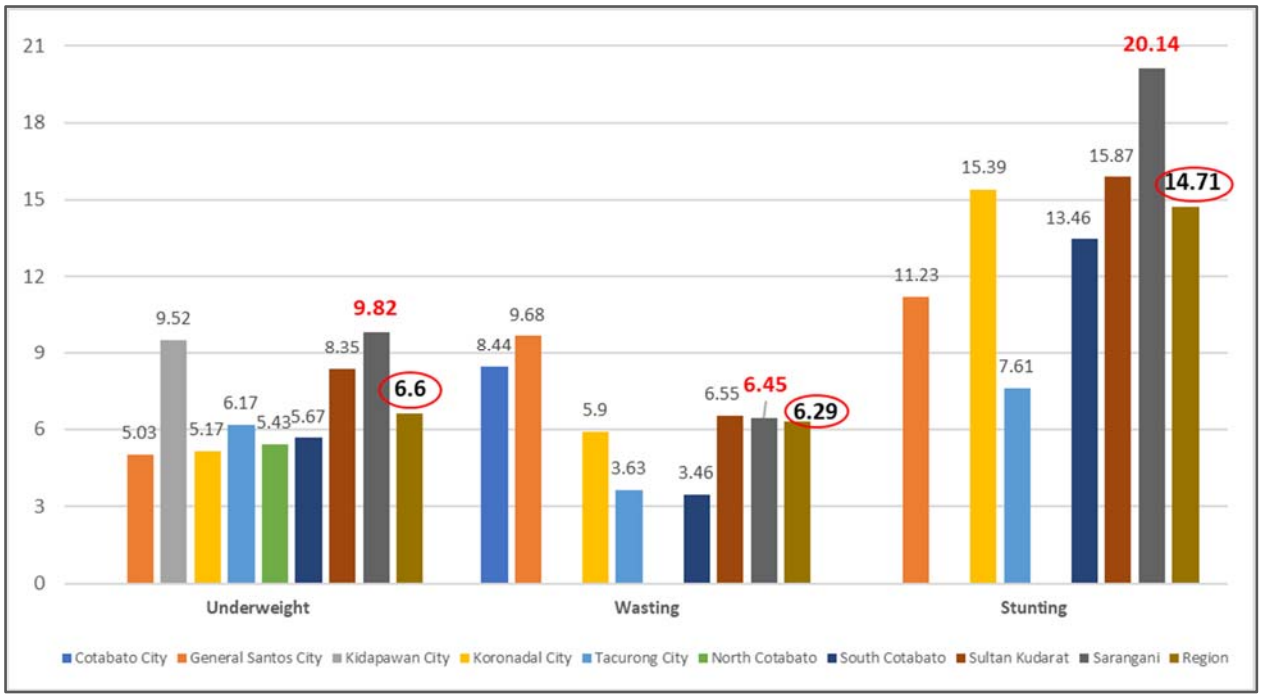

Figure 4. Prevalence of Stunting, Wasting, and Underweight Children 0-71 Months Old, in SOCCSKSARGEN in 2015. Data from 2015 OPT Report (0-71 months)

Conceptual framework

In response to the slow-paced improvements in the nutritional status of women and children over the past decade, Zuellig Family Foundation sought to strengthen the province's nutrition governance by introducing a package of interventions designed to strengthen the F1KD service delivery network. Key program deliverables and target nutritional outcomes are illustrated in Figure 5. Figure 6 shows the ZFF Nutrition Governance Results Framework.

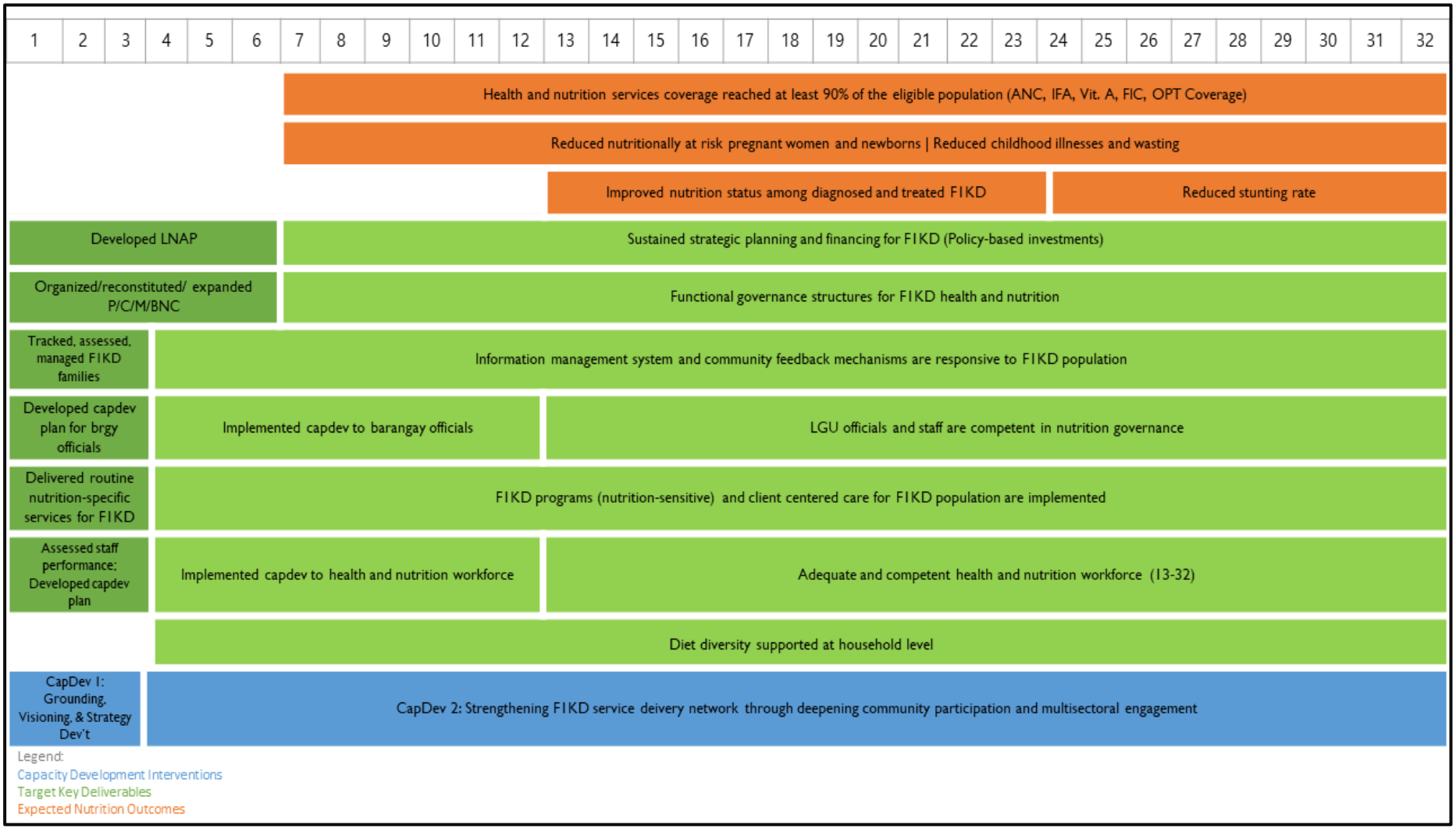

Figure 5. Nutrition governance program operational framework and runway. Figure taken from project documents of Zuellig Family Foundation, 2023

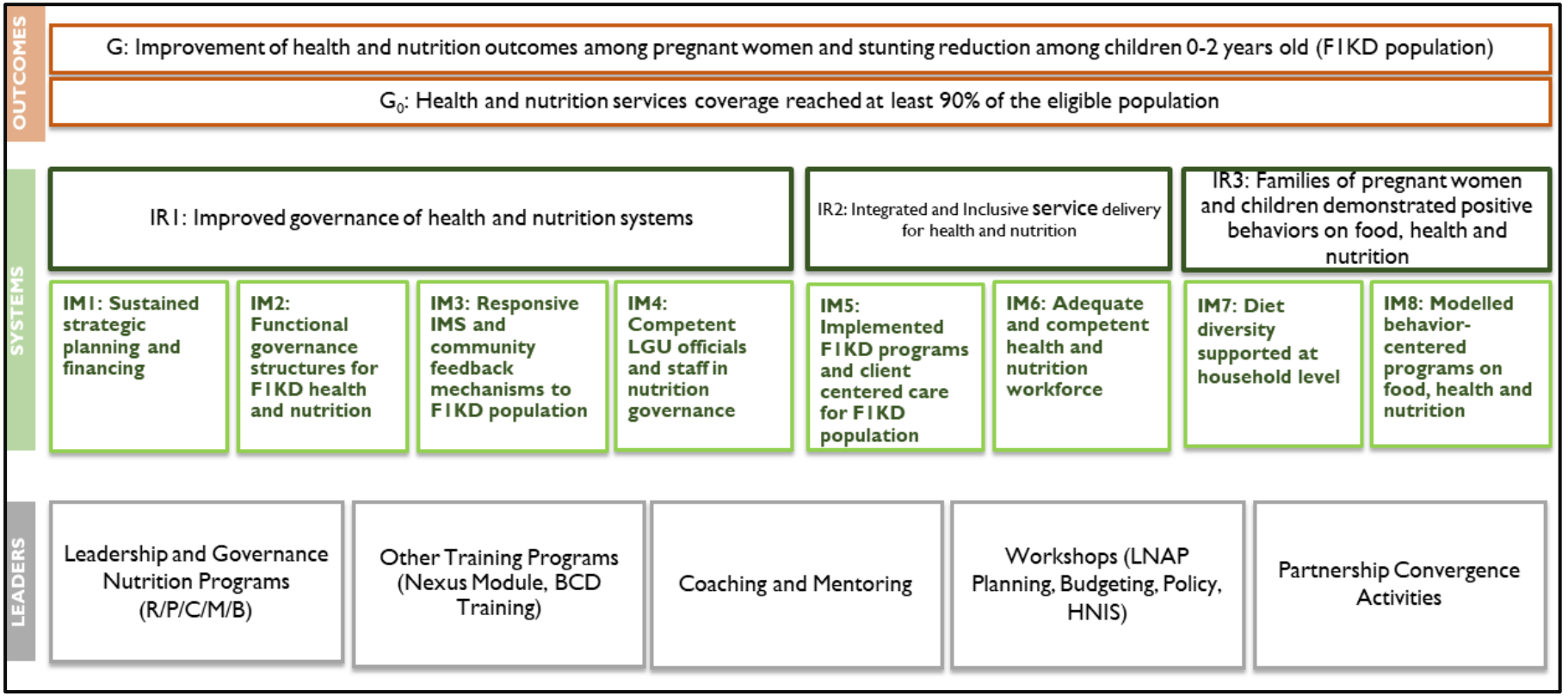

Figure 6. Results Framework for the Nutrition Portfolio. Figure taken from project documents of Zuellig Family Foundation, 2023

Based on the Health Systems Dynamics framework (Van Olmen et al., 2012) developed by Van Olmen, et al (2012), the conceptual framework for this study is presented in Figure 7.

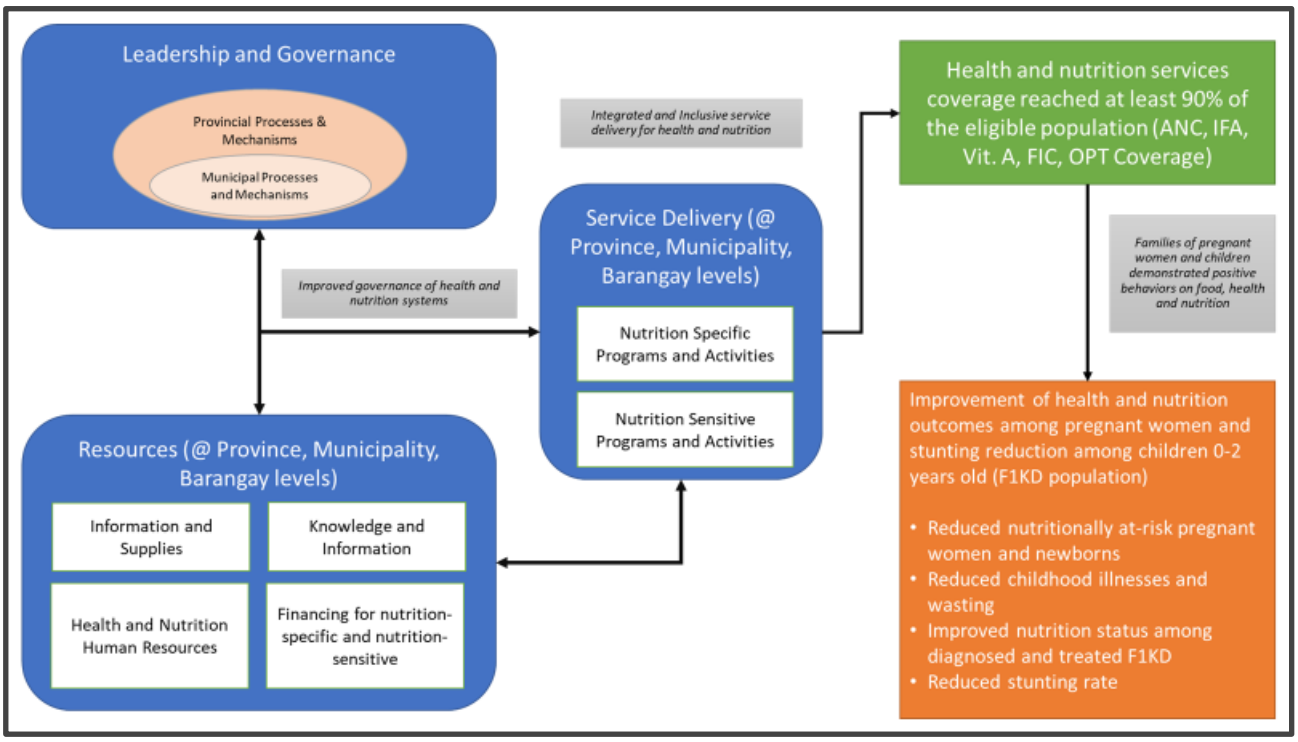

Figure 7. Conceptual framework

Leadership and governance play a critical role in guaranteeing that resources are placed as well as ensuring that the delivery of health services are responsive, equitable and universally accessible. Like an orchestra, the leadership and governance component set the direction, intensity and integration of the health and nutrition programs. The nutrition-related processes and mechanisms at the provincial and municipal levels are levers or control knobs that health and nutrition leaders use to improve the governance of health and nutrition systems and, ultimately, towards integrated and inclusive delivery of more nutrition-specific and nutrition-sensitive programs and activities. Likewise, these processes and mechanisms also ensure that resources are in place to support the delivery of nutrition-specific and nutrition-sensitive programs and activities.

The improvements in the governance as well as the level of integration and inclusiveness of the health and nutrition systems is reflected in the coverage of health and nutrition levels. With changes in the behavior of women and their children when it comes to food and nutrition, improvements in the nutritional status can be expected.

Objectives

This study sought to analyze the factors that contributed to the improvement of Sarangani Province's nutritional outcomes from 2018 to 2022. Specifically, this study was designed to:

1. Describe the changes in nutritional outcomes in Sarangani Province and its 7 municipalities from 2018 to 2022.
2. Determine the strategies, processes and mechanisms that contributed to the improvement of the province's nutrition outcomes, specifically those related to the different health system building blocks.
3. Analyze the influence of the leadership and governance interventions provided to the provincial and municipal leaders to the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and services.
4. Examine the practices and lessons learned when it comes to the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and services

Methodology

The study was a descriptive cross-sectional rapid assessment study. This study employed both qualitative and quantitative techniques.

Data was collected at three levels: provincial, municipality and barangay levels. A review of records from provincial and municipal levels was conducted. These included but were not limited to policy-related documents (e.g. ordinances, guidelines, MOPs, SOPs), annual reports, reports submitted to national government agencies (e.g. DOH, NNC). When possible and available, nutrition data from the provincial and municipal nutrition database for the years 2018-2022 were gathered.

A series of in-depth interviews were conducted. The provincial governor and the municipal mayors were invited to participate in the study. The Provincial Nutrition Action Officer (PNAO), Municipal Health Officers (MHOs) and the Municipal Nutrition Action Officers (MNAOs) were interviewed as well. They are involved in the planning, implementation and monitoring of the various nutrition-specific and nutrition-sensitive services being implemented in Sarangani Province and its municipalities.

Selected Barangay Nutrition Scholars in each municipality were invited to participate in a FGD. Invited BNSs were those who were involved in the delivery of nutrition programs in barangays with a substantial number of indigenous people, particularly those belonging to the B'Laan tribe and barangays who have shown substantial improvements in its nutritional outcomes. A short, self-administered survey questionnaire was also administered to those participating in the FGDs.

Listing all nutrition-specific and nutrition-sensitive interventions/ services, the FGD participants were asked to identify the services where they are a part of. This provided the research team with insights on the level of participation of the participants in various nutrition-specific and nutrition-sensitive programs. Unfortunately, previous LCEs and health and nutrition officers were not interviewed due to time constraints.

Significance of the study

The result of the study hopes to provide national and other local decision-makers with a blueprint on strengthening the implementation of nutrition-specific and nutrition-sensitive programs at the provincial and municipal levels. It also seeks to show the critical role that leadership and governance plays in ensuring that these programs are implemented well. But, over and above this, it is also imperative to show how the local leaders were able to harness and leverage their resources to improve the province's nutritional outcomes over the past 5 years.

The findings of this study offer policy and programmatic recommendations that would strengthen the implementation of nutrition-specific and nutrition-sensitive programs and service at the provincial and municipality levels. These recommendations would also ensure the sustainability of the gains made over the past 5 years.

This study also hopes to generate high value insights and lessons from Sarangani's experience that can inform future nutrition program implementation strategies, particularly on the nutrition leadership and governance it has shown over the past 5 years. These insights could also generate recommendations that could help strengthen the implementation of nutrition programs under the umbrella of universal health care.

Recommendations generated from this study could also help inform LGU mechanisms that could harmonize and move towards the integration of nutrition-specific and nutrition-sensitive programs.

Scope of work

The study sought to understand and gain in-depth knowledge on the strategies, processes, and mechanisms that Sarangani Province and its municipalities put in place to improve their constituents' nutritional status. It identified and analyzed the critical factors that contributed to these efforts. Lastly, the study also investigated the influence of the leadership and governance interventions provided to the province.

Results and Discussion

Profile of respondents

Table 1 shows the number of respondents and groups that participated in the study. Unfortunately, not all invited LCEs and the health and nutrition officers were able to participate. This was due to either scheduling conflicts with existing commitments (e.g. DOH-sponsored training, preparations for the Colloquium) or non-response from their offices.

Table 1. Number of respondents and groups who participated in the study.

Respondents	Total Number of Respondents/ Groups	Number of respondents/ groups who participated in the study
Governor	1	0
PHO	1	1
PNAO	1	1
Mayor	7	5
MHO	7	6
MNAO	7	6
BNS	7	7

Nutritional Status in Sarangani

Nutritional status reflects how the body meets the nutritive and protective substances obtained from the food consumed which is then manifested by physical, physiological, and biochemical characteristics, functional capability, and health status of an individual. Determining nutritional status is of prime importance since it identifies people at risk for malnutrition for early intervention or referral. It also detects those who are currently malnourished which needs immediate intervention before ill effects may happen.

In Sarangani, assessment of nutritional status is routinely done by the Barangay Nutrition Scholars. Children aging 0-23 months as well as those classified as malnourished are assessed monthly using anthropometric parameters. Operation Timbang (OPT) was regularly conducted once in every year for children aging 0-59 months old, while pregnant mothers are being weighed during their monthly visit to the Rural Health Unit and/or Barangay Health Center for prenatal consultation.

A remarkable declining trend was reported on the prevalence rates of undernutrition, specifically low birthweight infants, stunting and wasting among 0-59 months children and nutritionally-at-risk pregnant mothers. There were varied nutritional outcomes observed across the target populations (pregnant mothers and 0-59 months children). The prevalence of low BMI among pregnant mothers during the first trimester from 2020 to 2022) is exceptionally good considering its difference from the national target in PPAN 2017-2022 (4.57% versus 20%) (Appendix A.1). Nutritional requirements before and during pregnancy influences the nutritional status of the fetus in the womb. It is important for pregnant women to be nutritionally adequate because it will have a direct impact on their health as well as on the developing fetus. Yet, it is alarming to note that the number of pregnant mothers who have high BMI are increasing, with the Municipality of Maasim recording to have 32.17% in 2022 (Appendix A.2). High BMI during pregnancy can cause complications that may lead to serious health problems affecting the mother and the developing fetus. **The province has been giving nutrition interventions to pregnant mothers who have low BMI, but no documented intervention to those having high BMI.** The physiology of the mother and the growing fetus is affected by obesity (Carlson et al, 2018), thus there is a need to also give priority to pregnant mothers who have high BMI, particularly those who are obese so pregnancy and delivery complications can be prevented.

The gains achieved in improving the nutritional status of children 0-59 months bodes well for the province. Among the newborn, the prevalence rate of low birthweight shows an increasing trend from 9.36% in 2020 to 18.24% in 2022 (see Annex 2, Figure B.2) which is higher than the national target set in the PPAN 2017-2022 (16.6%). Infants who suffered low birthweight (LBW) experienced intrauterine growth restriction, prematurity, or both. LBW contributes to poor health conditions of the growing infant because it is known to be associated with fetal and neonatal mortality and morbidity, poor growth and cognitive development and the tendency to suffer non communicable diseases in the later age. Low birthweight infants are 20 times more likely to die compared to infants that are heavier (UNICEF-WHO, nd).

A notable declining trend was also reported on the prevalence rates of stunting and wasting among 0-59 months children from 2019-2022. Defined as having low height-for-age as the result of chronic or recurrent undernutrition, Sarangani province had 9.13% stunting prevalence but went down to 3.96% in 2022 (Annex 2 C.1 and C.2). It is usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care during the early state of life. It may cause higher risk of death among young children and may prevent children from reaching their physical and cognitive potential. Similarly, the prevalence of wasting (low weight-for-height indicative of recent and severe weight loss) was pegged at 2.59% in 2019 but dropped to 0.74% by 2022 in Sarangani (Annex 2, Figure D.1 and D.2). A drastic decline was also observed in the prevalence of overweight and obesity among 0-59 months-old children (from 2.82% in 2021 to 0.82% in 2022) (Annex 2, Figure E.1 and E.2). This can be considered as a positive nutritional outcome since prevalence of childhood obesity is continually increasing at the national level.

It should also be noted that the nutritional status of adolescents and adults, particularly among women (lactating or not) is neither routinely assessed nor reported, which may have implications in the monitoring of the nutritional status of these population groups. The lack of nutritional status assessment makes it difficult to establish the pre-pregnancy nutritional status of women, which is a factor in determining the nutritional needs during pregnancy. At present, the baseline value being used is their BMI during the first trimester, although this is available (taken during ANC), it has its limitations. Pre-pregnancy assessment is relatively more stable because it shows the "true" status of the woman. Interventions can also be done to make her healthier during pregnancy because maternal pre-pregnancy weight is a strong predictor of infant's weight (Oken et al., 2008). It will be better if the pre pregnancy weight and BMI will be known so appropriate nutrition management starting 1st trimester can be implemented to make her healthy while ensuring that her child is also healthier. The absence of data on the nutritional status of adolescents, especially among girls, hampers the ability of the MLGUs to address the nutritional needs of teenage pregnant women during the first trimester. This is particularly troubling given the high incidence of teenage pregnancy at the municipality levels which further increases the vulnerability to undernutrition of adolescent girls who might get pregnant early.

Further, the absence of structured and routine nutritional assessment among adults, both male and female, is also a concern since nutrition plays a big factor in the primary and secondary prevention of non-communicable diseases which are increasing among adults. Lack of nutritional assessment among adults may be a big handicap in the disease prevention efforts of the MLGUs, since the only opportunity for adults to connect with nutrition services is when they are diagnosed with NCDs and in need of nutrition counselling.

Perceptions on Nutrition goals and outcomes

The nutritional goals set for the Province of Sarangani, and its municipalities are (a) the improvement of the health and nutrition outcomes of pregnant women and (b) the reduction of the prevalence of stunting among 0-2 years old children. The nutritional outcomes were centered on the (1) reduction of nutritionally at-risk pregnant women and low birth weight newborns; (2) reduction of childhood illnesses and wasting; (3) improvement of the nutrition status of those ill and treated children aging 0-23 months and (4) reduction of stunting among 0-59 months. **It was evident that all nutrition-specific intervention programs for pregnant mothers and for children from newborn to 59 months old were being implemented by all MLGUs through its RHUs and BHCs to achieve its desired goals.**

In the focus group discussions (FGDs) and in-depth interviews (IDIs) conducted, participants narrated the various health and nutrition services given by the Rural Health Center and the Barangay Health Center of each respective municipality/barangay to achieve the nutrition goals and outcomes. They were also asked to rate the performance of the municipality/province in the implementation of health and nutrition services to pregnant women, children (under 5 years old)

and mothers. The most common programs and services, particularly nutrition-specific programs, and services, reported by the respondents were those given during the prenatal consultation until the postpartum period as well as programs and services for the newborn and children 0-23 months and 24-59 months old. It was observed that activities related to overweight and obesity management were least mentioned. The nutrition sensitive programs and activities that were frequently mentioned were gardening and incorporation of health and nutrition topics during the Family Development Sessions (FDS) of 4Ps beneficiaries.

Participants believed that the positive nutritional outcomes were achieved mainly due to the changes in the behavior of the target population. The main factor which contributed to such changes is the committed human resources, the presence and visibility of health and nutrition personnel and other workers in the barangay; "*tungod sa health personnel na makita na nila sa barangay (visible presence), doctor ug mga health personnel (nga mubusita sa balay sa malnourished), midwives, BHWs, CHTs, and BNSs nga mo-counsel na dayon inig makakita ug mothers nga in-need for knowledge".* Further, they perceived that the human resources (HRH) augmented by the Department of Health Regional Office, specifically the nurses, midwives and the nutritionist-dietitians were very helpful in the implementation of the health and nutrition services in the barangays. Commitment was also seen among BNSs who the primary movers of nutrition in the barangay levels have been, despite the meager honorarium (in some LGUs), limited budget allocation for nutrition activities, and dilapidated and heavy anthropometric equipment. Most of the BNSs managed to continue their tasks because they knew that they were obliged to pass reports of their performances. It was also noted that aside from the DOH's Human Resources for Health (HRH) augmentation (nurses, midwives and nutritionist-dietitians), there are also contributory workforce seen to aid in the implementation. These included the Day Care Workers (DCWs) and the Supervised Neighborhood Play (SNP) workers of the Department of Social Welfare and Development (DWSD) who also helped in weight and height monitoring and in dissemination of information about health and nutrition services.

Another factor thought to contribute to the achievement of desirable goals and outcomes is the strong political support of the local government officials, specifically the Local Chief Executives/ mayors and the barangay officials. These officials helped strengthen the implementation of various health and nutrition services. Most of the participants expressed that their respective mayors and other municipal and barangay officials were very supportive in the implementation as such, whenever some supplies were insufficient, the MLGUs through its stipulated budget allocation would provide what was lacking. Indeed, the support of the local chief executives and other MLGU officials really surfaced, as such participants commented "all-out *support ang MLGU para sa health ng buntis at bagong panganak; "awas-awas" ang serbisyo"* . The commitment of their LCEs in facilitating the increase of the honorarium of BNSs, stipulating local ordinances ensuring the availability of logistics such as vehicles during implementation of intervention programs and working towards increasing the budget allocation for health and nutrition programs really helped the health and nutrition workers. Moreover, the participants

believed that the achievement of facility-based delivery and reduction of the prevalence of LBW infants were outcomes of both the MLGU support and augmented manpower of those working tenaciously at the barangay level.

The strong support of the Provincial Local Government Unit (PLGU) of Sarangani played a vital role in achieving the nutritional goals for the province. The PLGU made significant investments in medical equipment, supplies, manpower support, augmentation of the honoraria of health and nutrition workers and other logistics for the municipalities. Regular consultations were also done with Public Health Nurses of each municipality as well as actively involving them in the preparation of plans for health and nutrition (LIPH, AOP, PNAP, etc).

In 2017, the province launched “Tutok Buntis”, a program designed to provide a complete package of prenatal services and micronutrient supplementation to all pregnant women in the province. It is the province’s own initiative aimed at reducing the stunting prevalence among children by focusing on the 57 GIDA barangays. Intended for pregnant women, the target beneficiaries receive “buntis” kits containing alcohol, maternal diapers, sanitary napkins and other essentials for pregnants. During this activity, oral and dental services are also given along with prenatal consultation of pregnant mothers.

Another contributing factor is the increased access to health and nutrition services. To increase access to health and other MLGU services and to bring these services to their constituents, some municipalities implemented "Lingap sa Barangay " which was done every first and last Fridays of the month in a barangay. During this activity, all MLGU services (health and nutrition, local civil registry, animal services, etc) were brought to the people in the barangay so that they may be able to avail and participate. Such action was perceived to increase the access to basic services not just in health and nutrition but also agriculture, civil registry, and other legal services. Participants perceived that, compared to the previous years, health and nutrition services are now more accessible to the target beneficiaries. These are being done on top of the “Lingap sa Barangay " initiatives of some MLGUs. Likewise, the provincial government through the initiative of the Office of the Governor, conducts outreach occasions in various municipalities, this is one of the activities done in achieving the new governor’s goal of not having new cases of stunting among children by 2025.

The commitment of barangay officials also emerged, as they are the LGU counterparts in the barangay levels. They have been instrumental in the implementation of nutrition services. Barangay local government units (BLGUs) also allot a budget for health and nutrition services and programs. Most of the barangay officials in the different municipalities were increasingly involved in the delivery of health and nutrition services, especially during emergency and immediate situations. Aside from the budget allocation, they also provide allowances to the BNSs during OPT

and during meetings. Some barangays and barangay officials provide vehicles or transportation allowances to BNSs during weight and height monitoring and other activities, as such participants said *"ang mga supportive barangay officials, especially ang health committee makatabang jud sila sa mga activities, kay ang ilang presensiya maka dani sa participation sa mga tawo kay nakita nila ang commitment sa mga opisyales".* It was also shared that some barangay captains would take time to share ordinances and policies governing health and nutrition and encourage his constituents to participate in all services, whenever they will have the chance to talk during gatherings and meetings.

Furthermore, most barangays have their own legislations and ordinances that were supportive of health and nutrition services which were perceived to be helpful in the implementation of nutrition programs and services. An example of this is a barangay resolution ordering sanctions for mothers/households with young children who are not participating in various health and nutrition services; *"naay barangay intervention kay ginapatawag sa barangay ang dili mutuo labi na ang manganak sa balay"*.

Participants believed that the improved knowledge of the LCEs, health and nutrition workers and mothers could also be a factor which contributed to the nutritional outcomes. A notable comment emerged telling *"evident na ang acceptance ng MLGU counterparts being partner stakeholders in the implementation the nutrition programs because their perception on malnutrition issues changed; they are now more knowledgeable and they realized that malnutrition entails multisectoral approach, na madami pa palang pwedeng gagawin, hindi lang puro feeding, di lang puro education, there are still other things that should be done para ma-address ang malnutrition"*. The respondents shared that they were grateful to ZFF for equipping them because it empowered MLGUs in bridging leadership, in taking ownership, co-ownership and co-creation. They also appreciated ZFF for giving support in the formulation of MNAP in some MLGUs and in giving ideas and insights about nutrition intervention which enhanced and widened their perspective about nutrition.

A multi-layered integrated approach to creating positive behavior change was adopted on the ground. The nutrition knowledge of mothers is enhanced because of the hard work of the health and nutrition workers who have been tediously conducting nutrition information and education campaigns. The constant reminders through mothers' classes and one-on-one counseling by the BNSs, midwives and other health personnel were perceived as reasons why mothers became more knowledgeable about health and nutrition leading to better feeding practices of their young children. Participants narrated "*kay grabe ang effort namong mga BNS bisan layo kaayo, amoang ginaadtuan para maaware na sila tapos magparticipate".* Conversely, if mothers will not heed to the invitation, the BLGU intervenes. These non-compliant households/ mothers will be summoned to explain to the barangay captain the reason for such behavior/ decision. The Barangay Captain calls the attention of the mother and ask her/ the father to sign a waiver of right,

indicating that the household will be the sole responsible for the health and nutrition related illness that will inflict to their child considering that they refused to avail the health and nutrition services given to them like routine immunization, feeding program etc. Additionally, they also waive the opportunity to be chosen as beneficiaries to government programs such as food security, economic enterprise, etc that may help uplift their living conditions. Information matters because, when mothers are informed, they will be empowered and will make decisions for themselves, thus establishing ownership.

While this approach tightens the adoption of positive behavioral change, it also has its drawbacks. Households that need these services the most get turned away because of the waiver. So, they have no chance at all to receive interventions that would benefit them just because they don't know any better. It is important to remember that the approach above is anchored in the adults in the household to make informed, well-thought-out decisions. But health literacy plays a critical part in this process. It is important that efforts to increase health literacy in the communities be pursued and supported.

The existing government programs particularly on poverty reduction and hunger mitigation also contributed to the achievement of nutritional outcomes. This is particularly referring to the Pantawid Pamilyang Pilipino Program (4Ps), since its implementation mothers/ households have been participative and compliant to health and nutrition services because they fear that if they will not participate, they will be disqualified. Further, the government programs also facilitated the participation of some indigenous peoples of Sarangani; *"Ang mga IPs sauna kung magkasakit, dili mag pacheckup kay mag salig sa ilahang "traditional practices", karon kay naa namay libre nga medical services, "magduol na jud sila sa health center, magpacheck up", or mag apil na jud sa feeding, immunization, etc".*

The assistance provided by non-government organizations (NGOs) in capacitating the province and the local chief executives through additional financial and technical assistance was also recognized as a contributory factor. The Integrated Provincial Health Office (IPHO) felt that their implementation of health and nutrition services was made better because of the assistance and support of the NGOs like Zuellig Family Foundation, Mahintana Foundation, Seaoil Foundation, ICM, Vitamin Angels, St. Francis of Assisi Foundation, etc; *"aside from provincial efforts, the presence ng NGOs lalo na ang ZFF in educating the mayors and other stakeholders in health and nutrition services, Vitamin Angels, Seaoil, Mahintana, etc were very helpful in the success of the implementation".* They perceived that the Municipal Local Governance Program (MLGP) was really a big help to LCEs because it enlightened the minds of all attendees and taught about prioritization and coordination with other sectors both inside and outside the local government.

Lastly, participants said, the concept of "to see, is to believe" also contributes to the achievement of nutritional outcomes. This is rooted in the mistrust that has been molded in peoples' minds towards government programs in the past. Participants said that the commitment of the current chief executives and officials towards implementing programs that they promised can influence the decision of their constituents. Since previously uncooperative mothers have seen the benefits of participating various health and nutrition services given by the government to their neighbors, this has encouraged them to participate and get involved too, hence, exhibiting a change of attitude; *" nakita nila ang kaayuhan sa kinabuhi sa mga silingan nga naga participate ug naga avail ug medical services, beneficiaries of feeding, seeds distribution, animal dispersal, etc, so muapil na jud sila".*

Nutrition-specific and nutrition-sensitive programs

Perceptions on the performance of nutrition-specific programs

The perceived quality of the performance of selected nutrition-specific programs that target different populations is presented in Table 2. When it came to interventions intended for pregnant women, **participants perceived that the province and their municipalities excelled in the implementation of prenatal services largely due to the availability of basic services that pregnant women can avail in any RHU within the municipalities.** As recalled by the BNSs, *"para sa prenatal services, kumpleto ang basic services tapos ginasubaybayan jud namo ang low BMI na buntis ginatagaan ug manna pack for 120 days, ug vitamins, ginaorient jud before start sa prenatal consultation kay naay mothers' classes para sa mga <3mos nga buntis".* This statement is in line with the effective implementation of the dietary supplementation to nutritionally at-risk pregnant women in the form of manna packs.

Table 2. Perceived performances of selected programs/interventions implemented in Sarangani Province, 2018-2022

Target Population Groups	Perceptions on selected Programs/Interventions Implemented	
	Did well	Did not do well
Pregnant Women	• Pre-natal care services • Dietary Supplementation - Supplementary feeding (NAR)- Manna Pack • IYCF program initiatives • National Promotion Program for Behavior Change • Micronutrient Supplementation - IFA, multivitamins	• Overweight and Obesity Management and Prevention Program

Target Population Groups	Perceptions on selected Programs/Interventions Implemented	
	Did well	Did not do well
Children (<5 years old)	• Operation timbang • IYCF program initiatives • National Dietary Supplementation • Micronutrient Supplementation	• PIMAM • Tutok Kainan
Adolescents (13-18 years old)	• Supplementation of Vitamin A • Deworming • HPV Vaccine	• National Promotion Program for Behavior Change

Aside from mothers' classes and nutrition counselling, the annual celebration of the Nutrition Month was consistently conducted and supported by the municipalities and barangays. Given the fact that some barangays had limited budgets for nutrition activities, health and nutrition workers had to be creative in finding solutions that entailed little to no cost. **A notable strategy adopted by these low resource barangays was to piggyback nutrition counselling and mothers' classes during prenatal visits.** All of these fell under the National Promotion Program for Behavior Change focusing on pregnant mothers.

When it comes to programs that target children aged 0- 59 months, the implementation of Operation Timbang has been exceptional. It has achieved 92% to 125% coverage over the past 4 years which exceeded the national standard of at least 80% coverage. Because of this, the province was awarded with *Excellence in Operation Timbang coverage* in 2021 and *Top Province with Highest EOPT Coverage* in 2022 by the National Nutrition Council Regional Office 12. Operation Timbang (OPT) Plus is the annual weighing and height measurement of children, 0-59 months in a community with at least 80% OPT coverage of the population to identify and locate the malnourished children. Data generated through OPT Plus are used for local nutrition action planning, particularly in quantifying the number of malnourished and identifying who will be given priority interventions in the community. Moreover, results of OPT Plus provide information on the nutritional status of the preschoolers and the community in general, thus, providing information on the effectiveness of the local nutrition program.

Three interventions focused on under-5 years old children, namely IYCF program initiatives, National Dietary Supplementation and Micronutrient Supplementation were perceived to have been conducted successfully from 2018 up to 2022. In particular, the implementation of the National Dietary Supplementation was enhanced through partnerships with NGOs who augmented and supported the Supplementary Feeding programs for undernourished children

aged 6 months up to 59 months in some municipalities. Unfortunately, the interventions perceived to have poor implementation were PIMAM and Tutok Kainan. This was largely due to the limited supply of commodities needed in the management of moderately acute malnourished children in both in-patient and outpatient therapeutic care. Similarly, Tutok Kainan met a lot of challenges in its implementation brought about by limited logistics and weak monitoring.

With the goal of reducing the number of children who are stunted, **the Infant and Young Child Feeding (IYCF) program initiatives were also implemented well.** Training and empowering the BNSs on IYCF and creation of support groups for IYCF in some barangays were already done and strengthened. Participants boasted that they have been serious in doing nutrition information education campaign about proper IYCF, telling *"ginaexplain jud namo ang breastfeeding, exclusive breastfeeding from 0-6mos; may Araw ng barangay nga naay lecture on nutrition particularly IYCF para makabal jud ang mga mama unsay maayong pagpakaon ug pag atiman sa ilang mga anak".*Though sometimes supplies run out of stock for supplements like iron-folic acid, iron and vitamin A capsules for pregnant women, still the Micronutrient Supplementation was also implemented soundly among pregnant mothers.

On the other hand, though sometimes hindered by limited supplies, **interventions for adolescents namely Supplementation of Vitamin A , Deworming and HPV Vaccine were implemented successfully through the effort of the Department of Education (DepEd) teachers in elementary and secondary levels.** The respective schools, through their principal, routinely report their accomplishments during Barangay Nutrition Committee (BNC) meetings in their respective barangays. Unfortunately, the National Promotion Program for Behavior Change intervention for this age group centered only in the celebration of nutrition month in their schools. This is a missed opportunity to engage adolescents to create positive attitude and behavior towards health and nutrition.

<u>Perceptions on coverage of nutrition-specific programs</u>

Participants perceived that coverage of nutrition-specific and nutrition-sensitive programs is wide and inclusive. From the year 2018- 2022, the perceived number of target beneficiaries of selected nutrition-specific programs are presented in Table 3. The perceived coverage of selected nutrition-specific programs was relatively high. Nutrition-specific programs that target children beneficiaries were perceived to have reached 9 out of 10 children. For programs targeting pregnant women, the perceived coverage was approximately 1 out of 4 pregnant women.

Table 3. Perceived number of target beneficiaries served/ covered in selected nutrition-specific programs of DOH

Nutrition-specific Programs	Average number of the target beneficiaries served/ covered (per 10 clients/ pax)
Ante-natal Care	8.28
Iron-Folic Acid (IFA) Supplementation	8.64
Vitamin A Supplementation	9.43
Immunization (fully immunized)	9.03
Operation Timbang	9.51

There were several factors that facilitated this level of implementation coverage. According to a respondent, **the IPHO prioritized all households with undernourished children and pregnant mothers in almost all food security and poverty alleviation programs in the province in its pursuit for the improvement of the health and nutrition outcomes of pregnant women and the reduction of the prevalence of stunting among 0-2 years old children.** Apart from the "*Tutok Buntis*" for pregnant mothers, "*Tutok Kainan*" which is a part of the National Dietary Supplementation Program of PPAN 201-2022 and other locally initiated supplementary feeding programs, these households are automatically prioritized as recipients or target beneficiaries for "*Tugon sa Gutom*" program of SEAOIL Corporation's, sustainable agriculture project, promoting backyard gardening utilizing organic farming methods. Household heads/fathers of undernourished children or spouses of pregnant mothers are also the target beneficiaries of animal dispersal, "*Cash For Work*", livelihood projects and other economic-related projects.

Furthermore, respondents attributed the province's excellent performance to the dedication and commitment of the MNAOs, BNSs, BHWs, midwives and nurses. It was also noted that most of the health and nutrition workers worked closely with each other for them to come up with more collaborative and comprehensive results. They shared that communication was a big help in the implementation of services. Another strategy they practiced ensuring sound implementation particularly when it came to supplementary feeding was that food/ commodities were delivered to the household-beneficiaries. Even though this was a burdensome and laborious task, they said that they usually practice *division of workload* with other BNSs to lighten up; "*nagahati mi sa akong kauban nga BNS sa ubang trabahoon aron mahuman ug dali";* however this can only happen when there is more than one BNS in a barangay, which is not the usual situation because it is dependent on the budget of the barangay and the number of its constituents to be served.

Interestingly, the power of social media and the Internet were powerful tools in connecting the BNSs with their clients. Participants shared that social media and text messaging, particularly Facebook and Messenger helped in their implementation of health and nutrition services. As such, most BNSs created group chats for mothers and caregivers so that all updates regarding health and nutrition services are posted in the chat box. This facilitated easy communication and information dissemination since almost all mothers were active in Facebook and Messenger and could easily see the information posted or chatted.

Initiated in 2020, the "*24/7 Sarangani Tele-Konsulta*" allowed the Municipal Health Officers in the MLGUs to conduct virtual consultations, evaluate and diagnose and treat patients, any time of the day. This initiative made these medical services more accessible to constituents who lack capacity to go to RHU for consultation due to either lack finances for transportation or physical distance to the RHU. The Tele-konsulta service allowed those who are too ill to call and consult regarding their symptoms without going to the RHUs or nearby province-run hospitals. "*Tele-konsulta*" is one of the required activities in the full rollout of the Universal Health Care Act, which focuses on the strengthening of the primary health care services in the grassroot levels.

Although health and nutrition services were perceived to cover a substantial portion of its target population, there were still several challenges that constrained the implementation of these programs. **Physical and financial access was still a problem for both beneficiaries and BNSs.** Farm-to-market roads and poor transportation still hampered full implementation of various health and nutrition services. There were few barangays and far-flung sitios that were not reached and covered because of distance from their residence to the nearest barangay health stations or health satellites. Since most of the households living in remote sitios lack financial capacity, they would often opt not to avail the health and nutrition services; *" dili muadto sa center/satellites kay walay kwarta, walay pamasahe kay dako kaayo (ranging from Php500-1,200 per trip back and forth, ipalit nalang nilag bugas ang ilang ipansahe"*. This was also a cause for concern for the BNS. They shared that they needed to shell out money from their own pockets to cover the transportation fare because, most of the time, the fare was not shouldered by the BLGU.

Another problem thought to hinder health and nutrition program implementation was the attitude and behavior of the mothers/ caregivers. There were few cases cited that some mothers, particularly the teenage mothers who are still frightened by the stigma of being pregnant at early age tend to hide their pregnancy and will only seek prenatal consultation and other health services when they are about to give birth; *"usahay dili tanang pregnant maka avail sa prenatal services kay dili sila muadto so usahay late na ang intervention kay 3rd trim na magpacheckup, labi na mga bata nga hiskol pa lang nabuntis".* Further,there are mothers, though living near the RHUs, still hesitate to subject children to immunization and feeding because they are too busy working so they have no time to go to the RHU. Similarly, there are mothers who also do not have time because they are busy gambling with other mothers in their vicinity. In the case of indigenous

people (Blaan and Teduray) and some Muslims, they are hesitant to seek health and nutrition services because they are shy and fear that they may pay for the services considering that most of them have low education and are stricken with poverty. Conversely, there were no "Halal-related" concerns concerning the acceptance of feeding commodities and supplements among Muslim mothers and children because the BNSs are efficiently explaining the contents of the commodities and supplements given.

Issues related to limited budget, limited implementation of services, and non-functional equipment also emerged. There were some municipalities that have a meager budget allocated for health and nutrition programs while some RHUs lack advanced services and equipment to cater the varied needs of the pregnant mothers especially during special cases, "*dili 100% ang implementation kay naa pay prenatal services like OB specialists na di kaya ng RHU so need jud mag private clinics at magbayad ang mga buntis".* Further, some anthropometric equipment used in measuring height and weight during OPT and monitoring are broken and not functional, not to mention the heavy weight of the heightboard that is constantly carried by the BNSs.

Perceptions on the performance of nutrition-sensitive programs

When it came to nutrition-sensitive programs, most of the responses of the respondents focused on three interlinked programs: (1) distribution for gardens, (2) setting up and maintenance of gardens in different settings and (3) the integration of nutrition education in the different FDS sessions under the DSWD. Unfortunately, the respondents were not able to describe programs related to animal/poultry dispersal as well as cooking lessons.

The seed distribution program, particularly among households with malnourished children, was widely implemented by the MLGUs. Largely led by the Municipal Agricultural Office, seeds provided by the Department of Agriculture were distributed to identified households.

Across all the municipalities, gardening was promoted and supported in 3 settings: households, barangay/ community, and schools. In most of the MLGUs, households with malnourished children were encouraged to do backyard gardening. Interestingly, there were respondents who shared that this initiative was promoted among families with children and 4Ps families. Over and above the seeds that were being provided, some respondents shared that recipient families were given planting kits and waterer. Interestingly, in one MLGU, the presence of a backyard garden was included in the requirements in the 4Ps certification needed for annual renewal.

Further, respondents from all the MLGUs and the PLGU reported that the *Gulayan sa Barangay* program was in place. Some MLGUs reported modifications to the program to increase its adoption. One MLGU passed a municipal ordinance mandating the establishment of a barangay

garden, although some respondents shared that there were still some barangays who were not compliant with this. The Gulayan sa Barangay program in a MLGU, called the *Kabalikat Ako sa Programang Inihahandog Tungo sa Angkop nga Nutrisyon* (KAPITAN garden), had a competition in place for the "Best Gulayan sa Barangay'' to encourage barangays to establish and sustain its community gardens. Through its partnership with SEAOIL, a MLGU was able to establish community gardens. Surprisingly, some BNS said that they were the one responsible in maintaining the community gardens, especially when it is located near the RHU because they felt that it will be helpful to the mothers who will visit RHU for consultation. In one barangay, there were sitios where it took 2-3 hours of travel to reach the RHU for consultation. Most mothers from these areas reach the RHU exhausted and starving, so the BNSs would usually offer a meal (usually lunch) composed of rice and a vegetable dish. Ingredients for the dish were harvested from the community garden near the RHU.

Similar to the Gulayan sa Barangay, respondents from all of the MLGUs and the PLGU shared that they were implementing the Gulayan sa Paaralan program in their areas. The schools were in-charge of maintaining their gardens.

The FDS sessions for nutrition and maternal care as well as the sessions for child and family nutrition were ready staging points for nutrition education. The midwife and/or the BNS were present during the FDS session to give lectures on health and nutrition. The program performance data for this program was reported to the province. Interestingly, the nutrition office is not included in the reporting loop. All the respondents were appreciative of the existence and continued conduct of the FDS sessions. These sessions were regularly conducted. An advantage cited by a respondent to integrating nutrition to the FDS sessions is that the 4Ps recipients did not want to miss these sessions for fear of losing part of their "ayuda".

There were other nutrition-specific programs that were being implemented in some but not all MLGUs. One such program is the development of local markets on top of existing local markets or "*talipapa*" in the barangays and Poblacion. In one MLGU, the LCE established a "*laray*" (talipapa) every Thursday. This was a venue for people in the community to come down and sell their produce. One respondent shared that there is nobody in the community on Thursdays because everybody would join the "*laray*". A similar model was also implemented in another MLGU. The local market was established in the municipal grounds. Free transportation was provided by the MLGU to link the farms to the market. Respondents indicated that these markets were helpful in ensuring that the farm produce is sold.

Nutrition monitoring in the day care centers presents an interesting contrast on the different MLGUs that are engaging with the program. There were some MLGUs who shared that they were not involved or had minimal involvement in the nutrition monitoring in the day care centers. The

respondents shared that either the nutrition monitoring was done only by the day care workers, or the engagement is limited to information sharing. In contrast, there were also MLGUs that reported that it was the BNSs who would conduct the weight monitoring for the students enrolled in the day care centers which shows a full engagement by the BNSs. It is worthwhile noting that in one MLGU, they were able to expand their oral health care program to the day care centers. This is an innovation brought about by the MLGUs investment in a municipal dentist. Interestingly, there were also inconsistencies in the responses in a MLGU. Although the technical officer shared that the BNS were doing the weight monitoring, the BNSs indicated that they did not participate in this activity.

Setting up vegetable and/or fruit gardens is one of the easier interventions that could be rolled out. Except for the barangays in the coastal parts of Sarangani, land is plentiful and seeds are available and can easily be distributed either by the Provincial Agriculture Office or the respective Municipal Agriculture Offices. Technical assistance is also available through the MLGUs. Household recipients just need to put in some "sweat equity." **However, there are still technical aspects that must be considered when setting up and maintaining gardens. These technicalities can constrain the adoption and sustainability of the gardens.** The most common challenge identified by the respondents was the quality of the seeds that were being distributed. Some respondents said that "*naay seeds na dili mutubo tapos pareho lang, walay variety ang gulay, if talong, talong lang tanan*." This is further compounded by the availability and unsuitability of land for gardening. They said that "*dili tanan nga balay naay lupa na matam-nan labi na ang mga barangay sa coastal areas kay dili jud mutubo ang tanum*." So, another strategy shared by one participant was the seeds were planted by the BNS because she has suitable soil in her area then shared the harvests to the household, which was the beneficiary of the seeds.

Sustainability of the interventions, specifically the gardens was also found to be problematic. There were some Gulayan sa Barangay projects that were not maintained by the barangay which eventually led to its deterioration. For school gardens, the gardens were left unattended when the school year ends. This was because there were no teachers or students to tend to the garden. They shared that *"mamatay ang tanum kay walang klase."* Useful as it is, there are barangays whose gardens were not sustainable, except for one MLGU who launched its own "KAPITAN Garden" and their own municipal garden which served as the producers of planting materials and/or sources of their seeds that are stored in the seed banks for future dispersal.

The behavioral aspect to these nutrition-sensitive programs is critical. According to some respondents, the adoption of backyard gardening proved to be challenging because there were mothers who were *"tamad mag tanum."* There were also households that would not plant the seeds that were given to them ("some beneficiaries dili nagatanom"). Contrary, one municipality had a positive response to seed distribution, because when they received the seeds from the Department of Agriculture

Further, although planting materials are widely available, **respondents found that the seed distribution as well as the gardening lacked sound monitoring and evaluation by its implementers**, suggesting that "*dapat unta balikan nila ang mga beneficiaries para icheck if nitubo ba ang mga seeds/planting materials, para mapugos jud ug tanom ang mga households nga gitagaan".* However, gardening that was facilitated by the SEAOIL Foundation through their "Tugon sa Gutom (TSG)" was seen to be sustainable compared to other gardening programs. TSG is considered as an intervention to food insecurity and hunger at the household level, aiming to help families to produce their own foods at home, ensure food access through establishment of family farms to achieve food and nutrition security (SEAOIL,n.d.). Around 182 out of 204 household beneficiaries graduated from SEAOIL's TSG in its pilot area; successful graduates were classified and evaluated using parameters, comparing the baseline and endline information on food security (HFIAS), income/savings of the households and nutritional status of the child member.

These challenges are indicative that these interventions are not "plug and play" interventions. Although a supportive environment is being provided through seed distribution activities and technical assistance, the science behind building and sustaining gardens should not be ignored. Likewise, not all people have green thumbs or have an affinity for gardening or even an interest in agriculture. Maybe fruit and/or vegetable gardens are not the appropriate intervention for certain areas. The appropriateness of interventions plays a big factor in ensuring that these interventions actually create an impact on nutritional status over the long run.

The uneven or non-implementation of the FAITH (Food In The Table) by some LGUs limits the possible impact of making vegetables or fruits accessible at no cost. Some respondents report that the guidelines for FAITH were not completely implemented in their LGUs. As a means of ensuring that households have some level of food self-sufficiency, the inconsistent implementation of FAITH hampers efforts to ensure the household members, especially the malnourished children, have direct access to food that would impact their dietary intake.

Another implementation hurdle is the financial and physical accessibility of the interventions. Most of the respondents shared that the attendance of the 4Ps during the FDS sessions proved to be challenging. This is especially true for recipients who lived in far-flung areas. When it came to harnessing the impact of these local markets (existing and newly developed) created, the capacity to buy of the local population especially those living in far-flung areas was a significant hindrance. According to a respondent, the income per capita of families with malnourished children is less than PhP5,000 per month. This was based on the profiling conducted by the province. Due to the low income of these households, they are unable to purchase what they need from these markets (*"walay ikapalit ang ubang households"*). This is further compounded by the fact that not all barangays have markets or "talipapas".

Integration between nutrition-specific programs

In Sarangani province, **the integration of nutrition-specific programs such as IYCF, PIMAM, National Dietary Supplementation Program, National Nutrition Promotion Program for Behavior Change, Food Fortification, Nutrition in Emergencies and Overweight and Obesity Management and Prevention Program is evident, though not adequately documented.** The program reported to be highly integrated in its implementation in most of the MLGUs is the OPT, which is done annually. BNSs conduct OPT through the help and in coordination with other health workers in the barangay such as BHWs, junior BHWs, BSI, Parent leaders, Kagawad of Health and other members of the Barangay Monitoring Team. Likewise, during the monthly and quarterly monitoring of height and weight, the BNSs are also assisted by the junior BHWs (in some MLGUs only), or the BHWs. Another example of an integrating mechanism are the active and functional MNCs and BNCs, of which several sectors such as health, agriculture, social welfare and development, education, development planning and budgeting are members of the committee. These nutrition councils are opportunities for the different stakeholders and implementers in the MLGUs and BLGUs to come together to discuss and address the issues and problems confronting the community as well as report their performances on programs that are health and nutrition related. The widely practiced intervention, the nutrition information and education campaign, commonly called by BNSs as "IEC" is integrated during prenatal consultations, midwife and BNS will really take time to talk to new/first time pregnant mothers about giving birth in a facility, benefits of prenatal consultation and proper IYCF practices.

Integration between nutrition-specific and nutrition-sensitive programs

Malnutrition is a multifaceted problem, hence calls for a multi-sectoral approach in the implementation of intervention programs. The integration of both nutrition-specific and nutrition-sensitive programs and services is vital to make headway in addressing malnutrition.

There appears to be some level of integration between nutrition-specific and nutrition-sensitive programs. The respondents from the PLGU and MLGUs shared the "new" and "re-designed" mechanisms and processes that were instituted in their LGUs to enhance the integration of health and nutrition services. Respondents shared different avenues by which this is practiced. Listed below are documented examples of integrated nutrition-specific and nutrition-sensitive programs/projects being implemented by various government agencies.

1. *Department of Social Welfare and Development*.

   In some LGUs, DSWD's nutrition sensitive programs complement in the implementation of nutrition specific programs. Its regularly conducted FDS among 4Ps beneficiaries tackle topics that are related to health and nutrition in addition to social welfare. They usually tap

their midwife and their BNSs to discuss topics on health and nutrition elaborately along with the benefits of having a positive health-seeking behavior.

Seemingly, it was reported that most of the community/barangay gardens are made by the 4Ps beneficiaries of its respective barangays. As part of their deliverables, they are also obliged to gather "tagbo" at least twice a month to either clean the vicinity of their community or have community gardens whose harvests are used as additional ingredients for supplementary feeding to underweight children in their barangay.

Aside from helping in the monitoring of height and weight for children aged 36-59 months, the respondents shared that the day care workers usually ask the BNSs for assistance during the preparation and cooking of the supplementary food that are fed to the children of the attendees.

Additionally, the SNP workers assigned in far-flung areas are also tapped in the monitoring of weight of children older than 24 months who are also their learners, they usually report this information to the assigned BNS in the purok/sitio. Likewise, the household heads of households with pregnant mothers and/or undernourished children are also prioritized in the Cash for Work and other livelihood projects of the DSWD.

2. *Department of Agriculture.*

   The food insecurity and hunger mitigation strategies of the Department of Agriculture through its seedling/planting material distribution and animal dispersion prioritizes households with pregnant and/or undernourished children.

3. *Department of Education.*

   Some BNSs collect height and weight data from teachers of children 59 months and below who are already enrolled in elementary education. Likewise, the parents of the learners who are 4Ps beneficiaries are the ones tapped to help in the establishment of "Gulayan sa Paaralan" whose produced vegetables are utilized as ingredients in the supplementary feeding.

   It was also reported that the schools celebrate Nutrition Month and display signages and posters about health and nutrition information in strategic places within the school. They also provide Iron Folic Acid supplements to learners and report their accomplishments that are health and nutrition related during BNC/MNC meetings.

Respondents at the province level shared that the nutrition status of children in households is used to target recipient households for nutrition-sensitive interventions such as seed distribution for backyard gardens, agricultural technical support, livelihood assistance, etc. The prioritization of households with malnourished children should be complemented by the targeted

delivery of nutrition-specific services to guarantee some form of success/ improvement in the nutritional status of household members, especially the children.

Alternative and uncommon pathways through which nutrition-specific and nutrition-sensitive programs were rolled out also developed. In one municipality, the schools became another staging point for case-finding, diagnosing, and monitoring of malnourished children and those within their families. A respondent shared that, if a student is malnourished, it is likely that they have malnourished siblings and parents. Through the schools, the LGU was able to reach out to these households, especially the mothers. The teachers were tapped as partners. Parents were organized and empowered wherein mothers were tapped to cook free lunches in the school. These free lunches were given to malnourished children. A respondent proudly shared that they were able to bring down school dropout rates because of this initiative.

In one MLGU, they created milk banks in the Poblacion. Milk produced in the local farms was sold to the milk bank. Other than selling the milk commercially, the milk bank also provided milk to the local schools. Other than the milk bank, they also instituted an unconventional approach to delivery of oral health services. Oral health services were channeled through the day care centers which was rather an unconventional approach since oral health services are usually confined within the RHU premises.

Positive nutrition and health behaviors were linked to established mechanisms that targeted the vulnerable is another example of an integrating mechanism. Compliance to the maintenance of backyard gardens, immunization and other positive practices were needed in order to be given the annual certification for 4Ps recipients. By linking this behavior to the 4Ps mechanisms, higher levels of compliance are induced.

Another integrating process is the inclusion of BNSs in regular Barangay Monitoring Teams (BMTs). The BMTs becomes a forum where other stakeholders such as Day Care Workers, Parent Leaders of IPs and 4Ps, heads of schools and religious associations can come together and discuss various issues confronting the community, including health and nutrition. Respondents saw these meetings as a venue for reporting and updates regarding concerns on nutrition and health, over and above other issues in the barangay. The ratings given by the respondents ranged from 2 to 5 with an average rating of 3.9.

The active engagement of BNSs in the delivery of both nutrition-specific and nutrition-sensitive programs adds another layer of integration. The integration happens when one group or person delivers a menu of services which could be a "physical integration". The delivery of some nutrition-specific and nutrition-sensitive programs and services appears to be consolidated at some point. BNSs assist or are involved in the various programs and services such

as PWUDs' activities, FDS, seed distribution and senior citizen programs. In some MLGUs, BNSs were taught to do case identification for oral health care ("*mag check ng ipin*"). Interestingly, there is an unexpected consistency between the responses of the frontliners and technical officers and LCEs when it came to how integration is exhibited at their levels. For technical officers and LCEs, their responses reflected the focus on linking different programs to enhance their delivery to the household levels. Ultimately, this is shown through the integration of service delivery to one person or group of persons – the BNS and BHW. Similarly, the frontliners (BNSs and BHWs) viewed integration through the lens of coordination and participation in meetings. Some respondents shared that the work, including reporting, was now shared among the BNSs. A respondent said "*tinabangay ug sharing sa reports and in doing the activities*."

While it can be more efficient, there are challenges. **The "physical integration" of functions creates a competing workload for the BNSs.** Over and above their existing functions and responsibilities, they also need to address the needs of these target/ priority households. When integration is achieved by integrating functions and responsibilities in one person (the BNS), the expanded workload becomes a burden for the BNS. These responsibilities now compete for her time and energy. This could create a situation where some functions and responsibilities are not accomplished due to time constraints.

Other challenges to integration centered on the budget and the implementation at the barangay level. Respondents emphasized the importance of financial support for the interventions to continue. Respondents in a MLGU shared that nutrition programs did not have a budget, only honorarium for the BNSs. Likewise, they shared that the implementation of the nutrition programs needs to be strengthened at the barangay level. The cooperation and support of the barangay captains was a particular point raised by the respondents.

Inclusivity of nutrition-specific and nutrition-sensitive programs

Sarangani Province is the home of tri-people - Bisaya, Muslim and IPs (mainly Blaan and Teduray). Ensuring social and cultural access adds an important dimension to the delivery of health and nutrition programs in the province. Respondents at the provincial and municipal levels all agreed that the programs are inclusive ("walay pili"). They identified some mechanisms and processes that were put in place to foster and strengthen inclusivity. These include:

- Conducting house to house visits
- Having constant personal conversations with the IP and Muslim clients in the community; establishing rapport
- Rolling out of the "Munisipyo to the Barangay" and "Lingap sa Barangay" programs
- Employing Liaison Officers who are IPs and Muslims in the municipal hall

- Hiring local translators if BNS and other health personnel cannot understand and speak their native dialect
- BNSs and BHWs acting as medium of services, in case IPs and muslims hesitate to approach the RHU

Despite these efforts, there are still implementation challenges. Limited budget and the lack of cooperation among barangay officials were also some of the implementation challenges they identified. A respondent shared that the geographic and physical conditions in their LGU remains to be a challenge. According to her, there are still barangays that are difficult to reach and the established Barangay Health Satellite (BHS) is still far from them.. If ever a health worker needs to go there, she will have to stay overnight which then becomes challenging for the RHU since they are one person less. A mechanism that they have put in place to address this is to recruit the BNS and/or BHW from within the community. The ratings given by the respondents ranged from 3 to 5 with an average rating of 4.6, with the hope that infrastructures like roads and additional BHSs will be constructed.

Health System Building Blocks

Health and Nutrition Leadership and Governance

The provincial government has adopted several approaches towards improving health and nutrition outcomes in Sarangani. The PLGU made significant investments in medical equipment, supplies, manpower support, augmentation of the honoraria of health and nutrition workers and other logistics needed by the municipalities. According to provincial respondents, there is a referral system for those diagnosed with malnutrition that enhances the service delivery component. It has also invested heavily in its HRH by augmenting the honoraria of the BNS and BHWs. According to provincial respondents, this has further motivated the HRH to further increase the OPT coverage which now stands at 95%. The augmentation of HRH has also helped in the monitoring of the nutritional status of the children during the first 1,000 days. The province has also initiated the creation of an ODK-based information system that is designed to monitor the nutrition status of children which could be viewed as a mechanism that shows in real time the impact of the integrated system. This information system is seen to be a critical ingredient in the watching over stunted children. **Thru these investments, the provincial government has significantly contributed to the systems strengthening at the municipality level. Although these investments are indirect in nature, the impact of these investments to the capacity of the municipality to delivery health and nutrition programs and services cannot be discounted.**

Through the convergence of various health and nutrition programs as well as non-health interventions, it has created a parallel pathway to address families/ household who are more vulnerable to malnutrition. This is evident in the programs that the IPHO has spearheaded. Started in 2013, the *Tutok Buntis* program of the province has become the province's flagship

program on maternal and child health. The program is built on a mechanism that targets high-risk pregnancies. This has been expanded to include nutrition interventions. Under the expanded program, the IPHO prioritized all households with undernourished children and pregnant mothers in almost all food security and poverty alleviation programs in the province in its pursuit for the improvement of the health and nutrition outcomes of pregnant women and the reduction of the prevalence of stunting among 0-2 years old children. These households are automatically prioritized as recipients or target beneficiaries for nutrition-specific interventions such as "*Tutok Kainan*", which is a part of the National Dietary Supplementation Program of PPAN 2017-2022, and other locally initiated supplementary feeding programs including SEAOIL Corporation's "*Tugon sa Gutom*" program. They were also target beneficiaries of nutrition-specific programs such as sustainable agriculture projects and backyard gardening utilizing organic farming methods. Household heads/fathers of undernourished children or spouses of pregnant mothers were also the target recipients of animal dispersal, "*Cash For Work*", livelihood projects and other economic-related projects.

ZFF's Nutrition Governance program served as a catalyst in pushing for critical changes in the implementation and support for health and nutrition programs. This is reflected in the level of articulation that the LCEs had when it came to their visions for health and nutrition in their locality. There was a profound understanding of the intricate systems that drove malnutrition. Taking off from this, their appreciation and ability to operationalize the Nutrition Roadmap was greatly enhanced. Building out of the Nutrition Roadmap provided a well-defined path towards achieving program objectives and, ultimately, nutrition-related goals. Together with their health officers, nutrition officers and BNSs, they were able to develop strategies in addressing malnutrition in their respective LGUs.

All the respondents shared that the local policy environment was supportive of nutrition. Most of them rated it "5" (very supportive). In 2021, the province's promulgation of the "Barangay Health and Nutrition Workers Welfare Ordinance" served as the impetus in improving the welfare of the BHWs and BNSs in the province, including the increase in their honoraria. This was subsequently adopted by the municipalities.

A supportive policy environment was also seen at the municipality level. In one MLGU, a directive to achieve "Zero Malnutrition Rate" was set. Likewise, a LCE has targeted "Zero Malnutrition" and "Zero school drop-out" in his municipality. Table 4 shows the different local policies that were promulgated between 2019 and 2023. Unfortunately, a more exhaustive list could not be gathered due to time constraints.

Table 4. Local nutrition policies promulgated at the municipal-level

YEAR	LGU	CODE	LONG TITLE
2019	Maasim	E.O. 01-2019-72	Reconstituting the Municipal Nutrition Committee and the Barangay Nutrition Committee in the Municipality of Maasim
	Malungon	Resolution #2019-096-14	Resolution concurring and adopting the Local Nutrition Action Plan for CY 2022-2022 of the municipality of Malungon
2021	Kiamba	Ordinance #37 Series of 2021	BHW and BNS Benefits and Incentives Code of 2021 of the Municipality of Kiamba
	Maasim	Resolution #2021-15-037	Authorizing the LCE to enter a MOA for the Implementation of the Tutok Kainan for pregnant women/ children in the Municipality of Maasim
	Maasim	Resolution #2021-15-055	Authorizing the LCE to enter a MOA for the Implementation of Mingo Meals Nutrition Program in the Municipality of Maasim
	Maasim	Resolution #2021-15-098	Resolution adopting the Municipal Nutrition Action Plan for CY 2020-2022 of the municipality of the Municipality of Maasim
	Malapatan	Ordinance #2021-09	Providing strategic focus on Nutrition for the First 1000 days of life through strengthened and integrated MNCHN
2022	Kiamba	Special Ordinance #23-S-01 Series of 2022	Creating the position of Nutrition Office II, Salary Grade 14, Office of the Municipal Health Officer, Kiamba
	Maasim	Ordinance #2022-16-002	Establishing a comprehensive nutrition program, creating the Maasim Municipal Nutrition Council
	Malapatan	E.O. 2022-47	Reorganizing the Municipal Nutrition Committee and the Municipal Nutrition Technical Working Group of the Municipality of Malapatan
2023	Kiamba	E.O. 021-22 Series of 2023	Reconstituting the composition of the Municipal Nutrition Committee of the Municipality of Kiamba

The organizational structure in place depicts the authority and responsibilities that are inherent in the different positions within the structure. It also shows the relationships between health and

nutrition officials. When it comes to matters related to nutrition, an inherent challenge is that most of these matters are related to health. But, on the other hand, these are also not wholly health. This is why nutrition issues are multifactorial in nature.

At the provincial level, the Provincial Health Officer (PHO) and Provincial Nutrition Action Officer (PNAO) are one and the same person. He provides the overall direction of health and nutrition in the province. There is also a District nutrition program coordinator who monitors the implementation of the province-led nutrition programs as well as the different nutrition programs and services at the municipality level. This is efficient especially when the programs that are lodged at the IPHO are integrated in nature (e.g., Tutok Buntis).

However, **at the municipality level, results of the study showed that there were 2 distinct organizational structures in place of nutrition programs** (Figure 9). Model A reflects the more traditional structure, given that most nutrition programs are health-related or require some medical intervention. On the other hand, Model B is the most ideal set-up since it closely mirrors the fact that nutrition is a multi-factorial condition that goes beyond health. A respondent shared her discomfort and confusion with this structure largely because she felt that Model A should be in place in the municipality.

A sub-analysis was done to determine the relationship of governance structure (Model A versus Model B) and main nutrition focal person (PHN/MNAO versus MNAO only) to selected program performance variables and nutritional and health outcome.

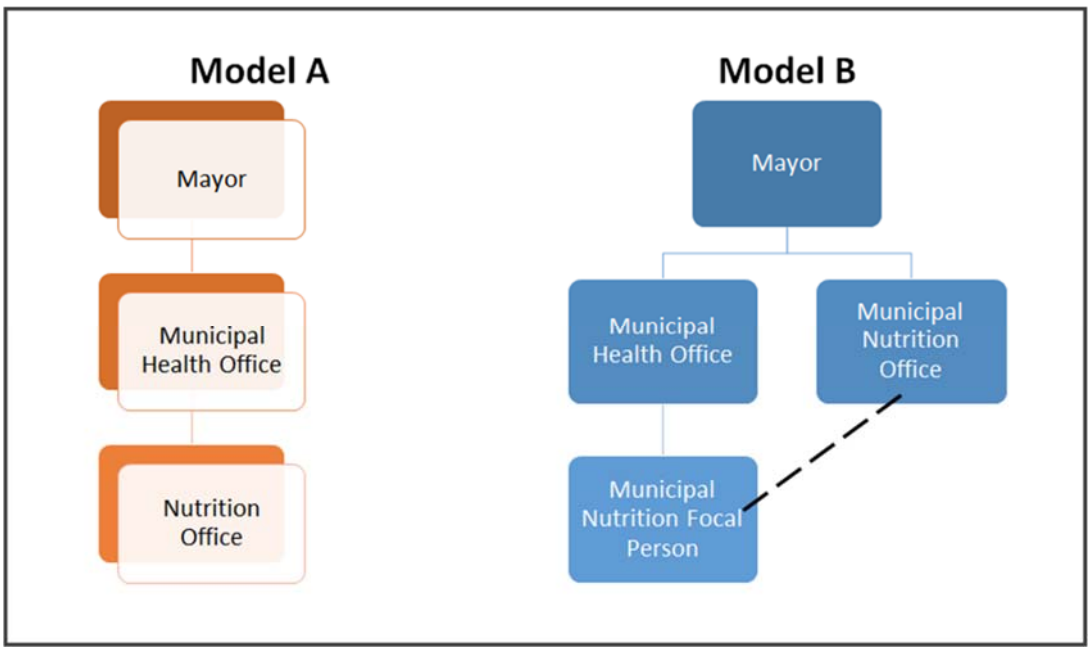

Figure 9. Governance structures for nutrition at the municipality level

The first analysis was based on governance structure in the Province of Sarangani (Figure 9). In this comparison, 1:2 case and control comparison using point biserial correlation. Results showed that a weak negative relationship was found between the more integrated Health and Nutrition office and the program performance. When health and nutrition is integrated under one office (Model A), the total number of children measured and OPT Coverage was found to be poorer compared to organizations that are not integrated (Model B).

When it came to selected nutrition outcomes, results showed that there is a weak to moderate positive relationship between non-integrated governance structure (Model B) and nutritional outcomes, specifically in the prevalence of stunting, wasting, obesity and overweight among children. This suggests that nutritional outcomes are better when the Nutrition and Health Offices are separate.

In contrast, results also showed that there is a weak to moderate negative relationship between an integrated governance structure (Model A) and selected health outcomes, specifically those related to maternal and child health. This is consistent with the prioritization of maternal and child health and nutrition under the F1KD program. Since the program focuses on pregnant women and their children within the first 1,000 days, the integrated structure is better at delivering the health and nutrition services to the target beneficiaries.

The second sub-analysis looked into the main nutrition focal person and selected health and nutrition outcomes. There were MLGUs that integrated health and nutrition into one focal person (PHN/MNAO) while other had a separate MNAO. The results of the second analysis were consistent with the patterns that emerged in the first sub-analysis.

There appears to be a trade-off between the 2 models. There are efficiencies that are generated when Model A is in place. Coordination between health and nutrition programs can be smoother and more seamless. However, there can be too much focus on the health-side of nutrition and nutrition-sensitive programs can then be overlooked. In contrast, Model B allows nutrition to stand by itself and work with both the health office and other offices that deliver nutrition-sensitive programs and services. Although this is a big plus, there is also a downside to this. Coordination between offices then becomes a very important ingredient in ensuring that both nutrition-specific and nutrition-sensitive programs and services are integrated and seamlessly provided. Under Model B, there is a more deliberate effort to be integrative compared to Model A.

Complimenting the formal organizational structure are the nutrition committees at the province, municipality, and barangay levels. **Almost all the respondents revealed that their municipal and**

barangay nutrition committees were active and functional. They reported that the nutrition committees held quarterly meetings. A respondent disclosed that the LGU's move to make their MNC and BNC active and functional was because they wanted to be a Seal of Good Local Governance (SGLG) awardee. They also saw the importance of having an active and functional nutrition committee. Some respondents said that *"pag naay meeting, mahisgutan ang mga problema ug mahibaluan ang kulang*" (when there are meetings, problems and what are needed can be discussed). In another MLGU, respondents revealed that, during BNC meetings, they can monitor and implement nutrition programs, especially if these were in-line with the BNAP. For the respondents who said that there were BNCs that were inactive or non-functional, they shared that the nutrition committee did not regularly meet (*"puro lang saad saad"*).

The Provincial Nutrition Action Plan (PNAP) and the Municipal Nutrition Action Plan (MNAP) can be considered the heart and soul of nutrition at the LGU level. It spells out the programs, projects and activities that the LGU will be undertaking as well as the budgetary requirement over a 3-year period. **The respondents shared that the PNAP and MNAP were in place and is being implemented.** Furthermore, these plans were developed with the assistance of the IPHO. According to the frontline respondents, activities stipulated in the Barangay Nutrition Action Plan (BNAP) were anchored in the MNAP. Additionally, there were some municipalities that rolled out unique/ custom nutrition services on top of what was included in the PNAP. It was also a positive step forward when the respondents reported that the programs, projects, and activities in the MNAP were already included in the Local Investment Plan for Health (LIPH), the Annual Investment Program (AIP) as well as the Provincial Development and Physical Development Plan. When asked whether they received some training to guide on how to integrate the PPAs into these development plans, almost all the respondents indicated that they received some training.

Over and above questions on leadership processes and mechanisms, the LCEs who participated in the study shared their vision and plans to address malnutrition in their MLGU. Their narratives were compelling and reflected the deeper understanding of the complexity of the underlying systems that drive malnutrition. One respondent shared that, in his MLGU, an agriculture-based economic enterprise will be created. Crops produced in the communities will be bought by the LGU. These would be given to the priority populations for nutrition, including students. This will create an opportunity for the frontliners (teachers and BNSs) to see the students everyday. In the far-flung areas, the LGU will help farmers get organized into cooperatives and the like. This will enable them to tap into existing financing mechanisms and grants from the governments. To complement this, the agricultural technicians of the LGU will be sent to these areas to help them grow their crops. His vision is to have an integrated system where investments will be made in agricultural production and creating economic opportunities.

Another respondent shared that investments have been in building farm-to-munisipyo links by providing free transportation to the weekly farmers market in the municipal grounds. In the

pipeline are the plans to create a *bagsakan* center where the agricultural produce will be sent. This will be handled by the municipality's food security unit, water system team, agriculture office and the marketing office. To stimulate agricultural production, agricultural technicians will be sent to these areas to provide technical support. There are also plans for the municipality to regulate the irrigation system within its jurisdiction. Once the bagsakan center is operational, the food security team will do business matching between the farmers and the buyers. Excess produce will be bought by the municipality which will be stored in the cold storage facility it also plans to build. In turn, these will be distributed to the schools and the nutrition program.

Likewise, a respondent shared that there are plans to invest in layer farms and egg distribution in another MLGU. Layer farms will be built as part of the municipality's economic enterprise. Eggs produced will be sold while some will be distributed to vulnerable families.

A common thread in their vision and plan is the focus on closing the supply chain loop (Figure 10). Looking at this through a supply and demand lens, the LGU is working towards ensuring that agricultural production (e.g. through the establishment of gardens in different settings) is supported and strengthened. At the same time, avenues where buyers and consumers could access these products are also created and supported. This creates livelihood for households and communities as well as increasing access to foods. By doing this, a positive externality is generated - improvements in nutritional outcomes at the household level that, theoretically, comes about through the increase in income and improvements in food security in the household.

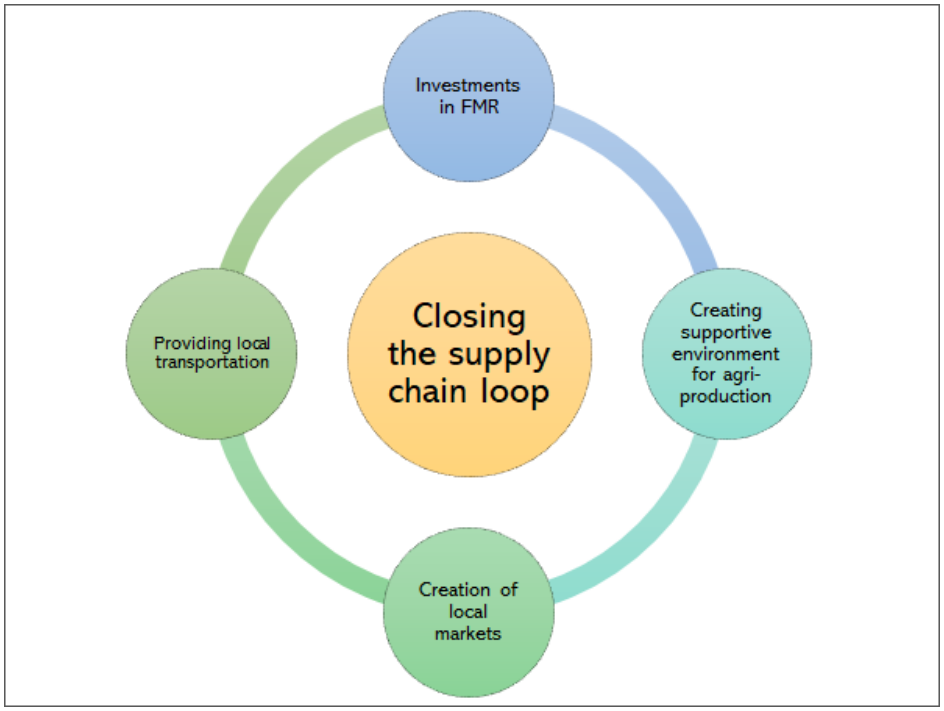

Figure 10. Food Supply Chain loop at the municipality level

However, how do these investments link back to nutritional outcomes? Increases in household income does not automatically ensure that the family is healthy, and the children are well-nourished. Having a backyard garden full of vegetables does not lead to healthier meals. The challenge moving forward is to push the gains from these investments enough to make positive headways in the health and nutritional status of each member of the household. Efforts to improve the nutritional status of household members falls short because of the absence of or the weak implementation of an intervention that guarantees that there is food (self-)sufficiency in the household, such as FAITH.

It is also worth noting that these interventions can be attributed to its inclusion in the nutrition roadmap which the province and each municipality is assessed on. It is a deliverable. The pathway towards the achievement of the program goals is clear and unambiguous. However, this can also be limiting because there is no incentive to think or deliver on what is not in the roadmap. Conversely, interventions, processes and mechanisms that are not included in the "roadmap" are not seen and monitored. Its impact, however small, remains invisible. The absence of social welfare interventions in the roadmap is an example of this. These have an indirect effect on nutritional status but LGUs also channel their efforts through these interventions.

Furthermore, the nutrition roadmap spells out the pathway on how LGUs can successfully reach its nutrition goals and outcomes. **Thus, there is a need to revisit the nutrition roadmap and its underlying logic theory and causal relationships.** The proximal and distal relationship of the different KPIs to nutritional status should be reviewed. The construction of road networks is an example. Although it is an integral part of the food supply chain, its impact on one of the A-B-C-D-E (Anthropometric- Biochemical- Clinical- Dietary- Environmental/ ecological) factors is distal.

An alternative perspective through which these relationships could be identified and classified would be through an ecological lens. The ecological framework distinguishes between (1) individual knowledge and behavior, (2) interpersonal relationships, (3) food environments in different settings and (4) enabling environment, including policy, infrastructure. This will make the "levelling" of the KPIs more nuanced and targeted.

<u>Health Human Resources</u>

A municipality in Sarangani Province instituted an innovative approach in its HRH. According to a respondent, the MLGU was performing poorly when it came to nutrition outcomes. To address this, they felt that they needed to strengthen their Nutrition Action Office. In 2022, the MLGU sought to tackle its nutrition challenge by passing a special local ordinance creating a Nutrition Officer 2 position in the municipality. **By adopting this strategy, the Nutrition Officer position is**

institutionalized thus making it difficult to drop or remove the plantilla item. A likely challenge to this down the road is when the position is not funded under the local budget.

The adequacy of human resources for health is a perineal challenge for LGUs. **Interestingly, there were contradictory points of view when it came to the adequacy of HRH at the provincial, municipality and barangay levels.** The technical officers at the municipality level found that the current number of HRH in their area to be sufficient. They gave different reasons for this. Some attributed this to the increase in their numbers over the past few years. Some of the respondents also referenced the importance of augmentation provided by the DOH as an intervention that helped them to ensure that there are enough HRH in their areas. In contrast, respondents from the province as well as the barangay frontliners agreed that the current HRH contingent were still insufficient. One reason they cited for this was that there were numerous nutrition services that needed to be covered. Another was the difficulty in recruiting BNSs due to the low pay.

Unfortunately, there were some respondents in the frontline who felt that their LCEs were not supportive of their work. They shared that their LCE has failed to acknowledge their efforts and contribution towards the achievement of good health and nutrition of the children and pregnant mothers in their LGU. They also felt unsupported because there is little to no nutrition budget, and they only received some honoraria. This has affected their morale and commitment. It is important to bring this to light because the respondents felt strongly enough to bring this up to the research team.

In the light of the implementation of the UHC Law and the Mandanas-Garcia ruling, a respondent raised the issue on its effect on the LGUs HRH contingent. According to the respondent, there is now a shift from the augmentation efforts of the DOH to encouraging LGUs to locally hire HRH. This was proving to be challenging largely due to the lack of guidelines.

The most common capacity building activities that the respondents mentioned were training on BNS Basic Course, Pabasa sa Nutrisyon, IYCF, PIMAM, F1KD and training by DOST-FNRI. Some respondents also mentioned training conducted by NGOs such as Save the Children and World Vision. When asked about whether the nutrition team is sufficiently competent, most of the respondents at the province, municipality and barangay levels agreed that they needed more training and capacity building activities. Respondents at the provincial level shared that the Provincial Nutrition Committees needs to be capacitated more. Unfortunately, most of the newly hired BNSs are not trained on: (1) the Basic BNC course, (2) encoding of OPT data using e-OPT Plus and (3) training on recent trends in health and nutrition.

Financing

The budget in Sarangani Province's Provincial Nutrition Action Plan for 2021-2022 was pegged at PhP 195,545,730.00. This translates to PhP 349.85 per capita investment in nutrition (based on 2020 Census). The province is planning to increase its investments in nutrition for 2023 to 2025 to PhP 1,036,990,737.46 (PhP 1,855.26 per capita). The expected increase in investments in nutrition by the province bodes well for the programs, projects and activities in the next 3 years.

Almost all the respondents from the province, municipality and barangay levels shared that the funding for nutrition has been "increasing but gamay ra." Most of the respondents found the budget wanting ("kulang kaayo kay daghan pa ug mga programs"). They shared that they needed to fit the budget to what needed to be done ("tama tamaon lang"). At the barangay level, there were still barangays who had a little to no budget for nutrition due to their small IRA. When prompted to share the barangay budget for nutrition, the responses ranged from a low of PhP0.00 (no budget) to a high of P300,000 with a mode of PhP15,000.

Despite this, the health and nutrition workers have been implementing strategies that entailed little to no cost on the part of the government. This includes enhancing IEC activities and piggybacking nutrition education on other existing programs that target mothers and their children. However, comparing the nutrition budgets across MLGUs should be done with a bit of caution. The programs, projects and activities that are funded under the MNAP may differ across MLGUs. This can be misleading especially if the programs, projects, and activities included in the MNAP are varied and diverse across the different LGUs.

When it came to major expenditure items, respondents at the provincial level reported that their budget was usually allocated for the honoraria of BNSs and other personnel. The same expenditure item (general services/ honorarium) was also identified at the municipality level. At the barangay level, the budget was usually spent for the feeding program, vitamins/ supplements, and the Nutrition Month celebration.

To augment the budget constraints, the respondents described how the different sources of funding come into play at their levels. **On top of the budget from the provincial government, there are funds that come from the DOH, DSWD, non-government organizations and civil society groups.** At the municipality level, respondents reported that they get support from the DOH. One MLGU reported that they get cash under the corporate social responsibility program of a private firm to support their supplementary feeding program. Another MLGU was able to get funding support from different lawmakers, specifically Senators Bong Go and Grace Poe, as well as a possible World Bank grant. Barangay respondents shared that their honorarium was funded by the LGU and the barangay. Other NGOs and faith-based organizations were supporting the feedback programs, medical missions and travel allowances of the BNSs.

When asked about the strengths in how their LGUs are financing nutrition, the respondents at the barangay level found that fact that there IS a budget a strength. This was echoed by the respondents from the provincial and municipal levels. Further, they link this to the LGUs ability to support the nutrition programs. So, despite the budgetary constraints, having some budget is better than not having any at all. Other strengths identified was the level of support provided by the LCE, MHO and MNAO. The support of these officials is critical to ensuring that the nutrition programs are included in the municipality's annual budget.

There were several challenges identified by the respondents. Respondents at the provincial level shared that the budget ceiling in place hampered their ability to implement the programs province-wide. One MLGU reported that they had a 14% decrease in their IRA. This was equivalent to PhP 45 million. This contraction in the budget has affected the budget for all programs, including nutrition. Even though the nutrition budget has already been integrated into the municipality's annual budget, a respondent in another MLGU shared that there are other priorities thus there is a need to balance this with the budgetary requirements of the other programs. This is a perennial challenge at the local level where there are competing yet equally important programs and services that need to be supported.

To create and sustain an enabling environment for health and nutrition, local legislation and budgets supportive nutrition-specific and nutrition-sensitive programs, projects and activities should be in place. To do this, **the level of financial investment that was made by the PLGU, the MLGUs and those from external partners to improve the nutritional outcomes must be determined and analyzed.** This critical piece of evidence, including analysis of where specific investments should be done to optimize its impact on program performance and, ultimately, improving nutritional outcomes, will greatly inform the policy development process. Given the gains that the province and municipalities have made, this analysis could also help inform the LGUs on which components should nutrition investments should be made and how much.

<u>Infrastructure and supplies</u>

All the respondents agreed that all the nutrition services were being offered. However, when it came to the availability and usability of the nutrition equipment, there was contradictory feedback. There were some respondents who shared that all the needed equipment were available while respondents in the frontlines reported that they lacked some equipment and that some of their equipment were either broken or missing. Some MLGUs had nutrition centers in every barangay while the other MLGUs reported that not all their barangays had nutrition centers. The respondents were asked to rate the availability of the commodities that are used in the different nutrition programs (Table 5).

Table 5. Average rating of the availability of nutrition commodities for the different nutrition programs by the respondents

Nutrition commodities	Average rating
Ingredients for complementary and supplementary feeding programs	4.27
Supplements for adolescents, pregnant women, and children	4.27
Supplements, medicines available for pregnants who are nutritionally at-risk	4.45

The different respondents were asked about the support and technical assistance that they received from different national agencies, the provincial government, and NGOs. According to the respondents, they received vaccines, medicines, supplements, deworming tabs, insurance as well as training from DOH. From NNC, respondents identified receiving IEC materials, Tutok Kainan allowance, uniform as well as technical assistance in the form of training, resource persons and experts. NGOs provided vitamins, manna packs, monggo blend, feeding supplies, medicines, IEC materials, supplements and deworming tabs. They also reportedly received honoraria and some equipment (e.g., height boards, gardening equipment, salter scale). MLGU respondents reported that they received feeding supplies, vitamins, deworming tabs, vaccines, supplements, and medicines from the provincial government. They also received honorarium and incentives as well.

This shows that there are available nutrition commodities however procurement is still a challenge according to some respondents. As identified in the previous paragraph, the province provides some nutrition commodities to the different municipalities. However, the procurement of these commodities (e.g., supplements) have been downloaded to the municipality. Thus, procurement is challenging in the face of 2 constraints: (1) they needed to work with the previous year's budget which did not include the commodities to be procured, and (2) not all the health and nutrition officers knew the government procurement process. The budget constraints at the municipality and barangay levels further exacerbated this problem. There were insufficient medicines due to the limited budget for nutrition, according to the respondents. However, a facilitating factor identified by one respondent was their existing relationships with the suppliers. This made the procurement process easier and faster for their MLGU.

Information system

Despite having 2 types of organizational structure at the municipality level, the information flow described by the respondents were not distinctively different between the 2 structures (Figures 11 and 12). The BNS would take care of encoding, calculating, and classifying his/her assessed 0-59 months children and other reports. The e-OPT report is submitted to the midwife for checking then to the barangay captain for approval and signature, it is then presented during

the BNC meetings. After approval by the Barangay Captain/BNC Chair, the e-OPT report is submitted to the MNAO then the MNAO, after checking, submits the report to the DNPC/PNAO. The PNAO then passes it to the Regional Nutrition Coordinator of NNA Regional Office 12. There were some respondents who said that they submit their reports directly to the MNAO/MPNC for checking and encoding, then the printed report is given back to them for checking by the midwife and approval by barangay captain. At the municipal level, the report, after checking and verification done by the MNAO, is presented during the MNC meetings before it goes to the DNPC/PNAO in the IPHO. Other reports such as the family profile and other information on nutrition are directly forwarded to the MNAO/MNPC. It is also noteworthy to be informed that only the nutritional status of children aged 0-59 months among all other age groups are routinely assessed and recorded by the BNS. Nutritional status of other vulnerable physiologic age groups: pregnant, lactating and elderly are not part nor assessed in the e-OPT tool. Interestingly, only one MLGU reported that the MHO is somehow part of the information flow albeit tangentially.

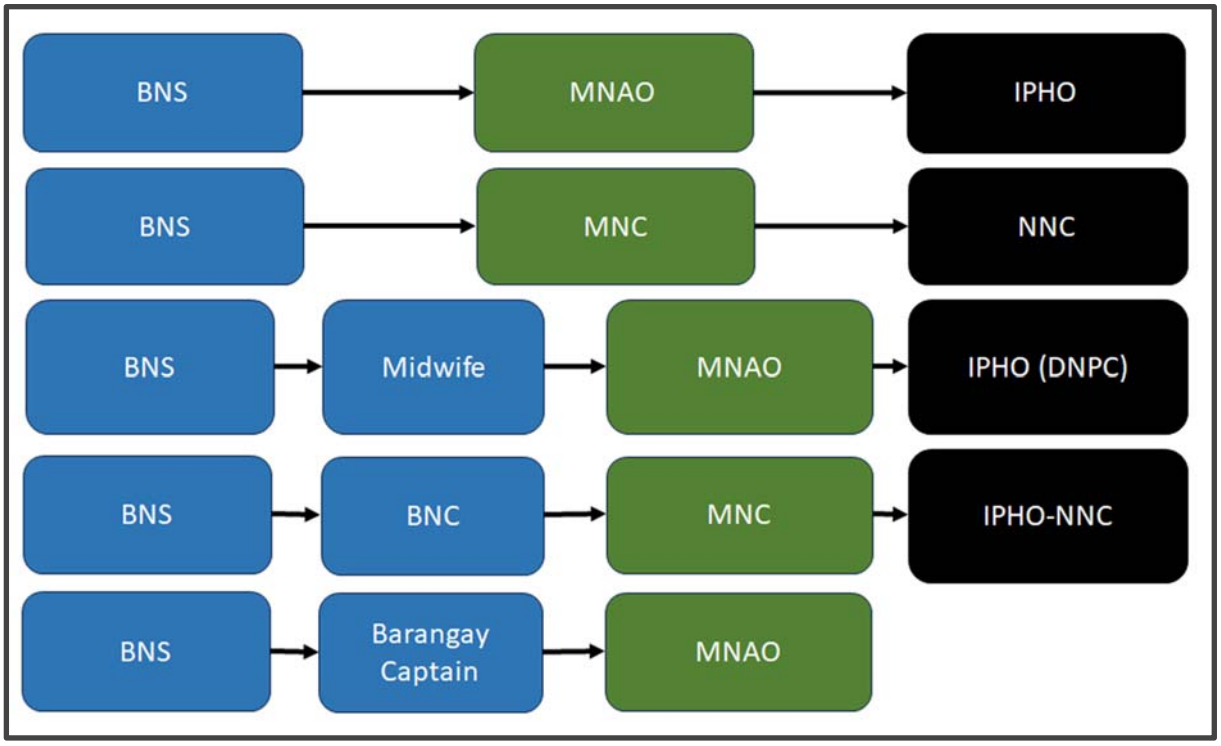

Figure 11. Flow of information as described by respondents from MLGUs with an integrated health and nutrition office

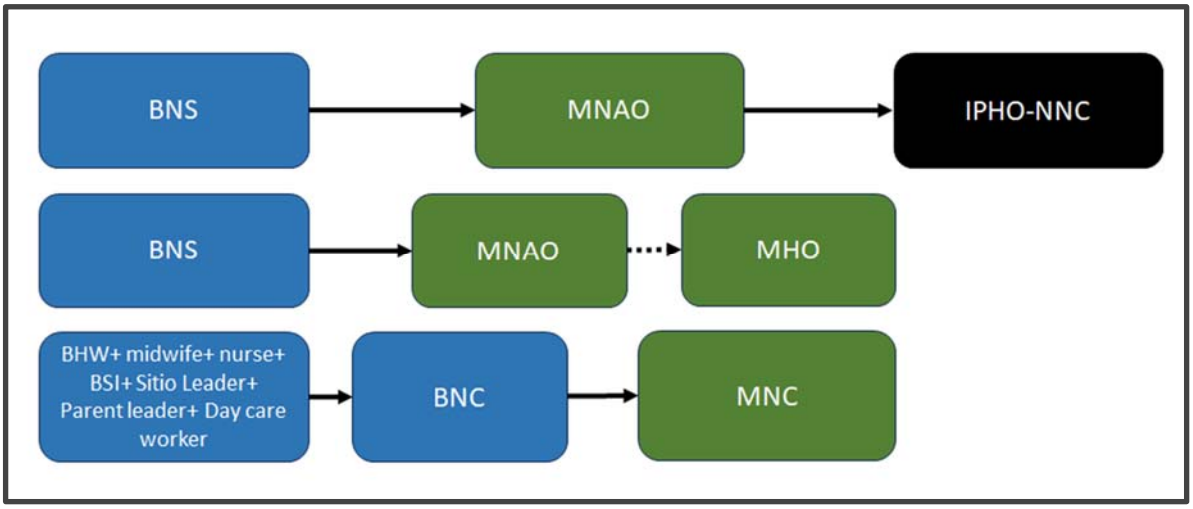

Figure 12. Flow of information as described by respondents from MLGUs with separate health nutrition offices

The LCE is also notably absent in the information flow described by the respondents. This is interesting because the LCE-respondents said that the MNAO or the MHO would regularly report to them either during the Management Committee meetings of the LCE or bi-monthly meetings. Unless the LCE regularly sits in the MNC meetings, this can be concerning because apparently the respondents do not "feel his presence" in the information loop.

When asked about the utilization of the information collected, the respondents were able to identify different ways by which their nutrition data is being used. **Most of them said that the information collected, and reports generated are presented during the Nutrition Committees at the barangay, municipality and province levels.** At the BNC level, the respondents shared that it is presented as feedback on the activities conducted, for planning interventions and budgetary purposes. It is also used to check the number of malnourished children and pregnant mothers in their area. At the municipality and provincial levels, the reports generated are used as bases for interventions and decision-making.

The province is currently rolling out an ODK-based information system to monitor the health and nutrition situation in the different MLGUs. According to the respondents at the provincial level, this information system is expected to track records down to the household level. **Unfortunately, there are logistical challenges confronting this initiative.** The gadgets needed still need to be sourced. There are still some BNSs who are "technologically challenged" especially when it comes to encoding. Since ODK needs Internet connection when uploading data, Internet connectivity is still a problem in some areas.

The same challenge confronts the implementation of Operation Timbang Plus. Most of the respondents in the frontline shared that they need to be taught about the OPT Plus tool for encoding. Other than being technologically challenged, they shared that most of them do not have laptops in their BNC office. This makes encoding difficult and sometimes expensive because they have to pay somebody else to encode the data.

Conclusion

Sarangani Province and its 7 municipalities showed a substantial decline in the prevalence rates of undernutrition, specifically low birthweight infants, stunting, wasting among 0-59 months old children and nutritionally at-risk pregnant mothers. These were attributed to the changes in the behavior of the target populations. Facilitating factors were strong support and political will of the Local Chief Executives, the committed human resources at the provincial, municipality and barangay levels, the presence and visibility of health and nutrition personnel and other workers in the barangay. ZFF's Nutrition Governance program served as a catalyst in pushing for critical changes in the implementing and supporting health and nutrition programs. Building from their deeper appreciation of nutrition and its underlying systems, they were able to support and implement nutrition-specific and nutrition-sensitive programs at the municipality level. The Nutrition Roadmap provided a well-defined pathway for the LCEs and their health and nutrition officers.

These factors brought about an enabling environment with increased financial and logistical support for health and nutrition. Implementation constraints centered on budgetary limitations, inadequate HRH and the lack of supplies and commodities. Changing conditions on the ground brought about the full implementation of the UHC Law and the Mandanas-Garcia ruling affects the operations of the LGU which, ultimately, impacts service delivery.

The structure that governs command and control of health and nutrition programs influences service delivery and, ultimately, health and nutrition outcomes. The 2 types of organizational structures present in the municipalities were found to have significant influence on the prevalence of stunting and wasting as well as in the achievement of some health outcomes.

Findings of the study revealed that there is some level of integration between the different nutrition-specific programs as well as between nutrition-specific and nutrition-sensitive programs. There were existing mechanisms and processes that enhanced integration (e.g., active and function MNCs and BNCs). Likewise new mechanisms were also created such as the involvement of Barangay Captains in enhancing adoption and compliance among the target households. The delivery of the different nutrition-specific and nutrition-sensitive services and interventions were "physically integrated" into one group or person - the BNS. This can be efficient. However, this creates an added burden to the BNS who already have existing functions and responsibilities.

Limitations of the study

The results are not generalizable to other areas. The study and its findings are specific to the context of the province of Sarangani and its 7 municipalities.

Due to the rapid nature of the study design, there was limited access to municipal-level records due to the preparations being made for the Colloquium. There were also some prospective respondents who were not able to participate in the study. Their experiences and perspectives were not captured in the study.

Ways forward

1. Integration is key.

   The integration of nutrition-specific and nutrition-sensitive programs is critical to ensure that the province and the municipalities sustain its gains. It is critical that current efforts and pipeline programs lead to nutritional gains at the household level. Integrating service delivery to one group/ person will not suffice. Full integration entails re-engineering in how programs and services are organized and delivered. Processes and mechanisms must be streamlined and simplified.

2. There is a need to re-visit the current organizational structure governing health and nutrition.

   It is important to study the efficiencies each model brings to the table. Also, there are political, financial and legislative trade-offs between the 2 governance models. However, the impact on health and nutrition outcomes also needs to be considered.

3. The level of financial investments needed to improve nutritional outcomes must be determined at the provincial and municipality levels.

   This is a critical piece of evidence that would help in the creation of an enabling environment through the promulgation of supportive local legislation and budgets for health and nutrition, specifically nutrition-specific and nutrition-sensitive programs, projects and activities. This would include analysis of where specific investments should be done to optimize its impact on program performance and, ultimately, improving nutritional outcomes.

4. There must be a pro-active search for opportunities wherein nutrition programs, projects and activities could be added and/or integrated.

Resources, whether financial or logistics, will always be insufficient. By actively looking into opportunities to integrate/ piggyback nutrition activities into existing health and non-health programs and services, the nutrition programs, projects and activities are able to reach its target beneficiaries through other means.

Looking into existing but un-common staging grounds could also sharpen the integrated delivery of health and nutrition programs and services. This includes markets (*palengke*), schools, day care centers, houses of worship, senior citizen events, even activities for PWUDs. These are existing structures that can readily be tapped.

5. No population group must be left behind. "No data. No problem. No action"

   There are population groups that are not currently "seen" by the system. Steps must be taken to ensure that the nutritional status of these population groups are monitored. Nutrition has a vital role in the challenges that confront LGUs such as the increasing rates of teenage pregnancies and increasing prevalence of CVD. Data on population groups that are not currently seen by the health and nutrition system should be included in the existing M&E system being operationalized.

6. The nutrition roadmap must be revisited.

   As a critical document that provides direction to the LCEs and the health and nutrition workers, it is important that the nutrition roadmap is routinely revisited and critically assessed. It should reflect the current state of the science that drives the nutritional status of individuals in households.

Reference

1. *Operation Timbang result*. (n.d.). National Nutrition Council. https://nnc.gov.ph/related-statistics/operation-timbang-result/category/262-2022
2. National Nutrition Council. Implementing Guidelines on Operation Timbang Plus (OPT+). Inter-agency Technical Working Group on Child Growth Standards. Approved for nationwide implementation by the NNC Governing Board pursuant to NNC Governing Board Resolution No. 2, Series 2012. 12 January 2012.
3. Van Olmen, J., Criel, B., Bhojani, U., Marchal, B., Van Belle, S., Chenge, M., Hoerée, T., Pirard, M., Van Damme, W., & Kegels, G. (2012). The Health System Dynamics Framework: The introduction of an analytical model for health system analysis and its application to two case-studies. *Health, Culture and Society*, *2*(1), 1–21. https://doi.org/10.5195/hcs.2012.71
4. Carlson, N. S., Leslie, S. L., & Dunn, A. (2018). Antepartum Care of Women Who Are Obese During Pregnancy: Systematic Review of the Current Evidence. *Journal of midwifery & women's health*, *63*(3), 259–272. https://doi.org/10.1111/jmwh.12758

5. UNICEF-WHO Joint Database on Low birth weight. (http://data.unicef.org/nutrition/low-birthweight; https://www.who.int/nutgrowthdb/lbw-estimates).
6. Oken, E., Rifas-Shiman, S.L., Field, A.E., Frazier, A.L., & Gillman, M.W. (2008). Maternal Gestational Weight Gain and Offspring Weight in Adolescence. *Obstetrics & Gynecology, 112*, 999-1006.
7. SEAOIL. (n.d.). *Tugon sa Gutom Program. Pagkain sa Mesa Para sa Masa*. https://www.seaoil.com.ph/corporate/our-programs

Annex

Annex 1: Summary Methods Matrix

OBJECTIVES	VARIABLES	DATA COLLECTION	DATA ANALYSIS
1. Describe the changes in nutritional outcomes in Sarangani Province and its 7 municipalities from 2018 to 2022	Reportable nutrition indicators for women, children, adolescents and general population	Review of Records	Descriptive statistics
2. Determine the strategies, processes and mechanisms that contributed to the improvement of the province's nutrition outcomes, specifically those related to the different health system building blocks.	Program performance data of the various nutrition-specific and nutrition-sensitive programs directed towards women, children and adolescents BNSs involvement in various nutrition-specific and nutrition-sensitive interventions Created and implemented strategies, processes and mechanisms related to the different health system resources and service delivery	Review of Records Survey KII, FGD	Descriptive statistics Descriptive statistics Thematic analysis

OBJECTIVES	VARIABLES	DATA COLLECTION	DATA ANALYSIS
3. Analyze the influence of the leadership and governance interventions provided to the provincial and municipal leaders to the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and services.	Program performance data of the various nutrition-specific and nutrition-sensitive programs directed towards women, children and adolescents Governance intervention data, including but are not limited to: ● data on capacity building courses ● data on one-on-one sessions with health and nutrition officers, including the LCE Insights on how the interventions has helped them re-frame the problems and eventually co-create and co-design the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and services.	Review of Records KII, FGD	Descriptive statistics Thematic analysis
4. Examine the practices and lessons learned when it comes to the planning, implementation and monitoring of	Insights on practices and lessons learned when it comes to the planning, implementation and monitoring of	KII, FGD	Thematic analysis

OBJECTIVES	VARIABLES	DATA COLLECTION	DATA ANALYSIS
nutrition-specific and nutrition-sensitive programs and services	nutrition-specific and nutrition-sensitive programs and services.		

Annex 2: Nutritional Status of Mothers and Children in Sarangani

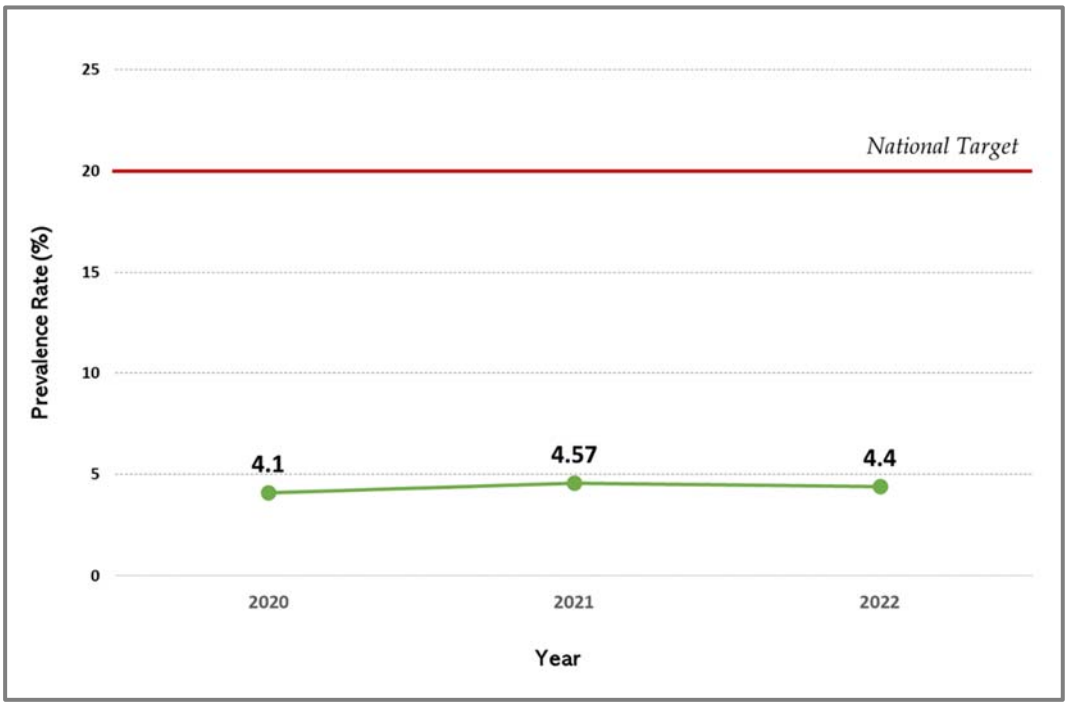

Figure A.1 Prevalence of low BMI among pregnant women in Sarangani Province, 2020-2022

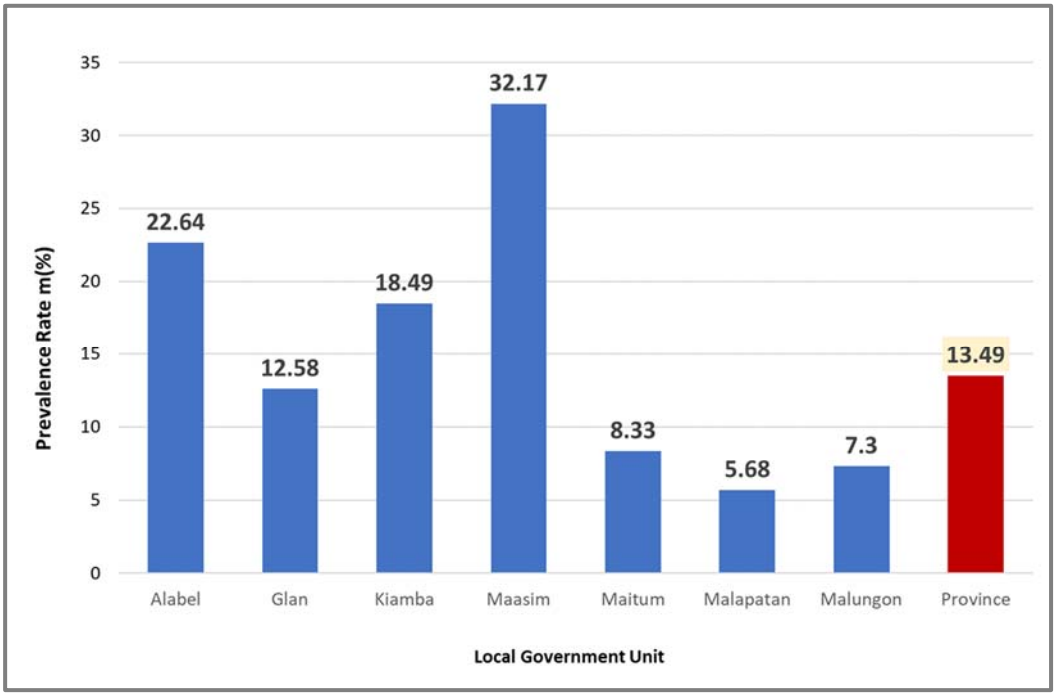

Figure A.2 Prevalence of high BMI among pregnant women, by municipality, 2022

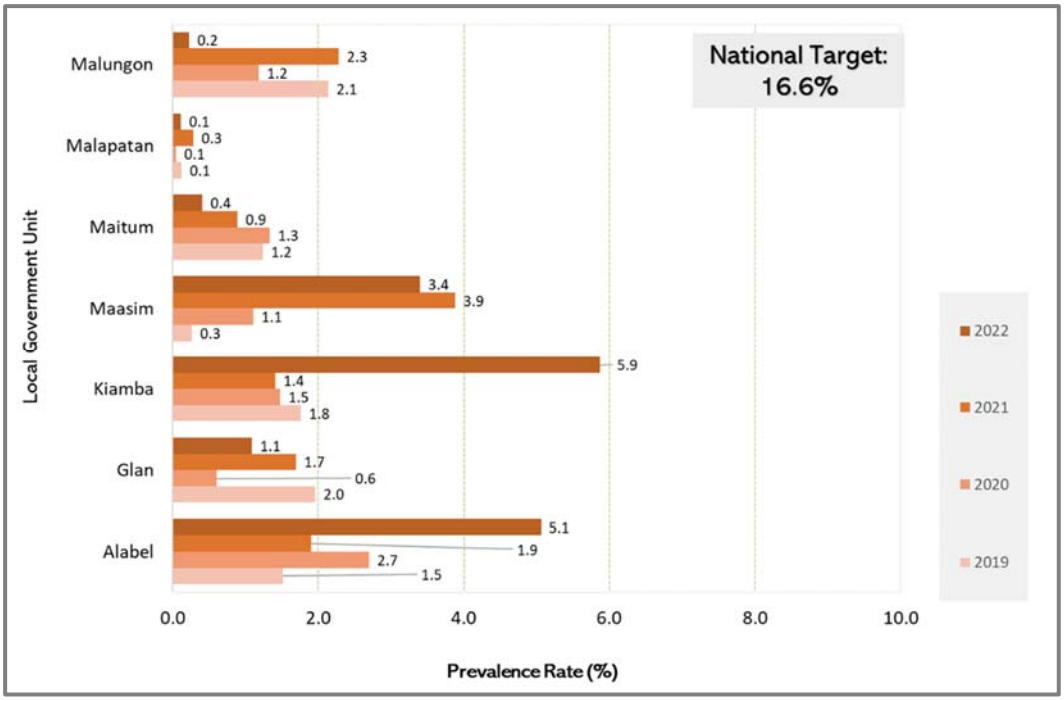

Figure B.1 Prevalence of low birth weight (LBW) infants, by municipality, 2019-2022

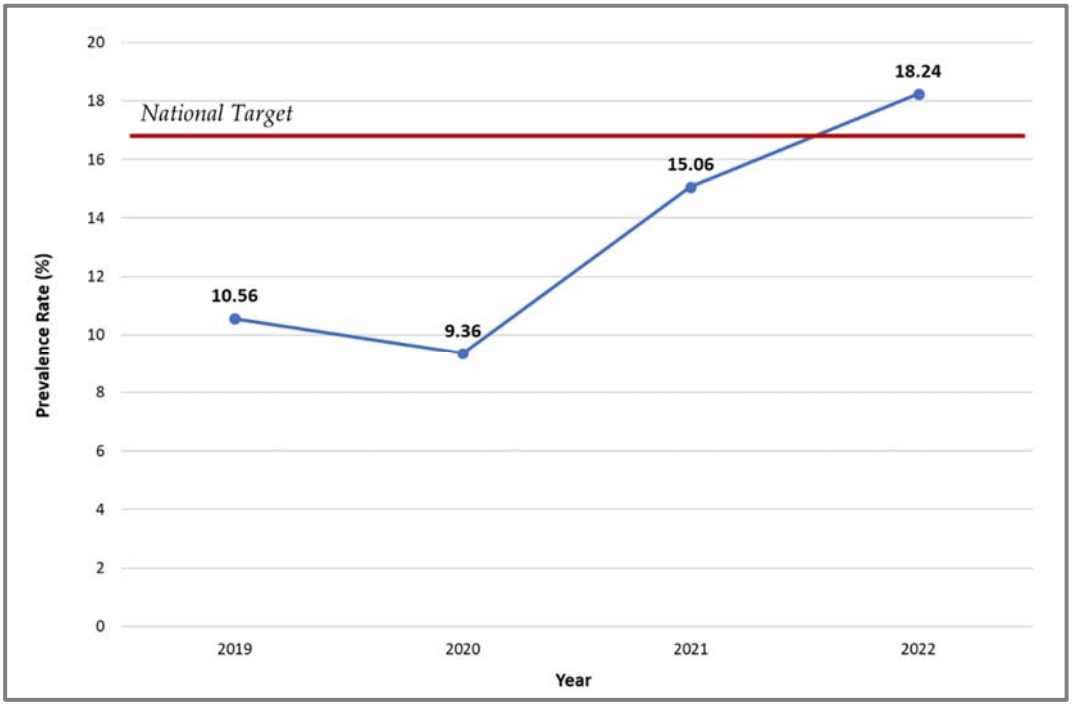

Figure B.2 Prevalence of low birth weight (LBW) infants in Sarangani Province, 2019-2022

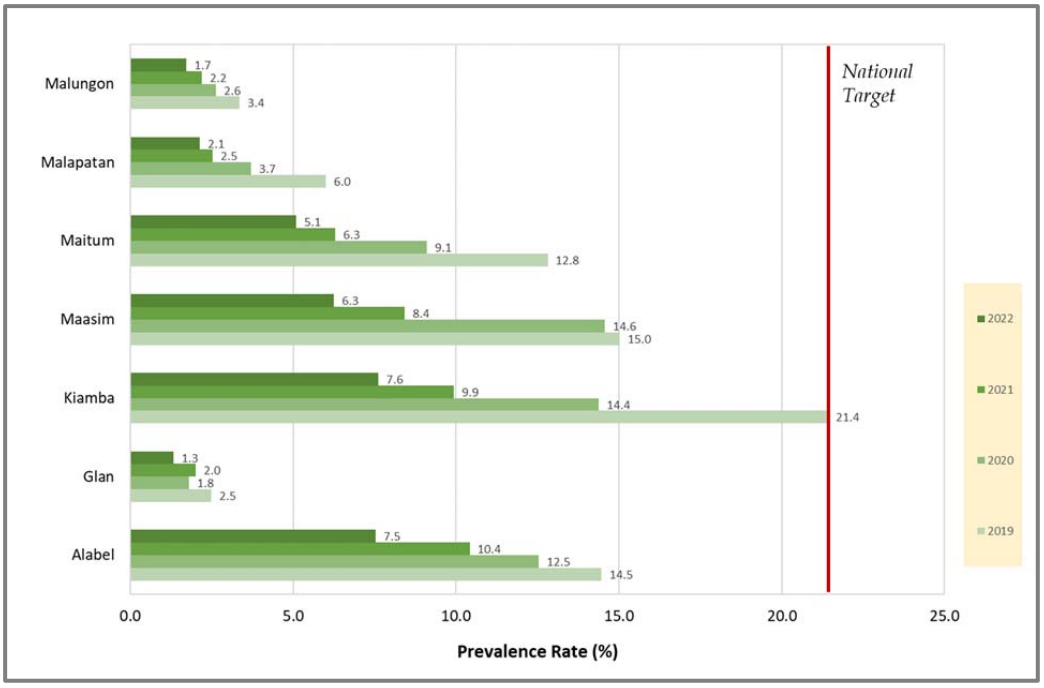

Figure C. 1 Prevalence of stunting, children 0-59 months by municipality, 2018-2022

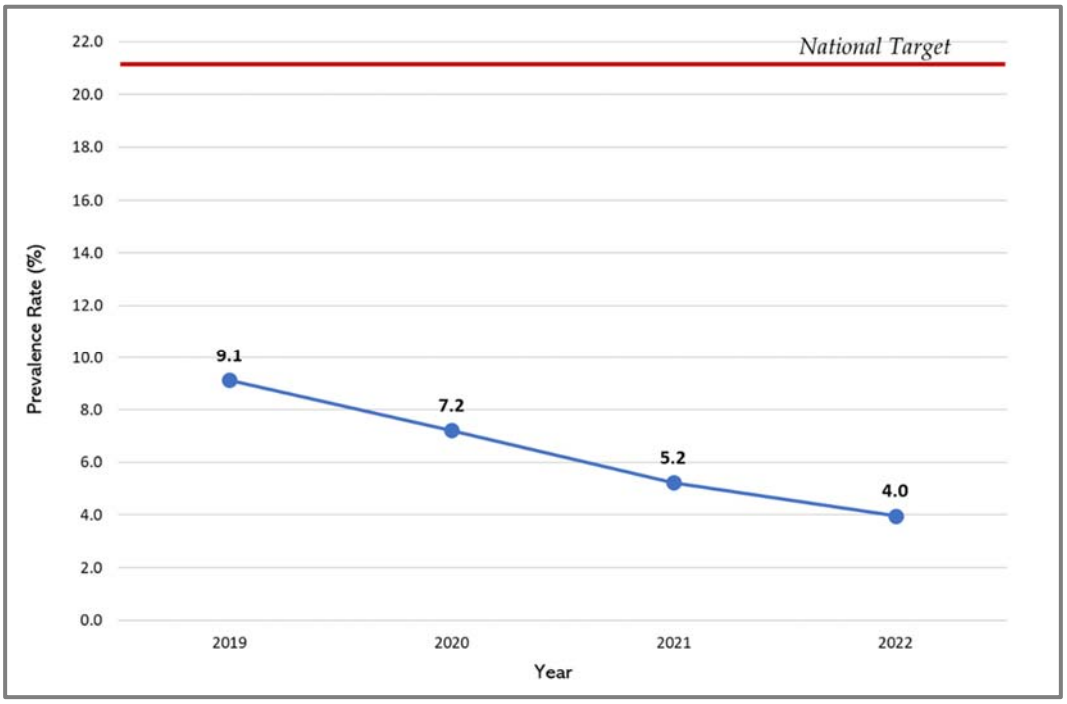

Figure C.2 Prevalence of stunting among children 0-59 months in Sarangani province, 2019-2022

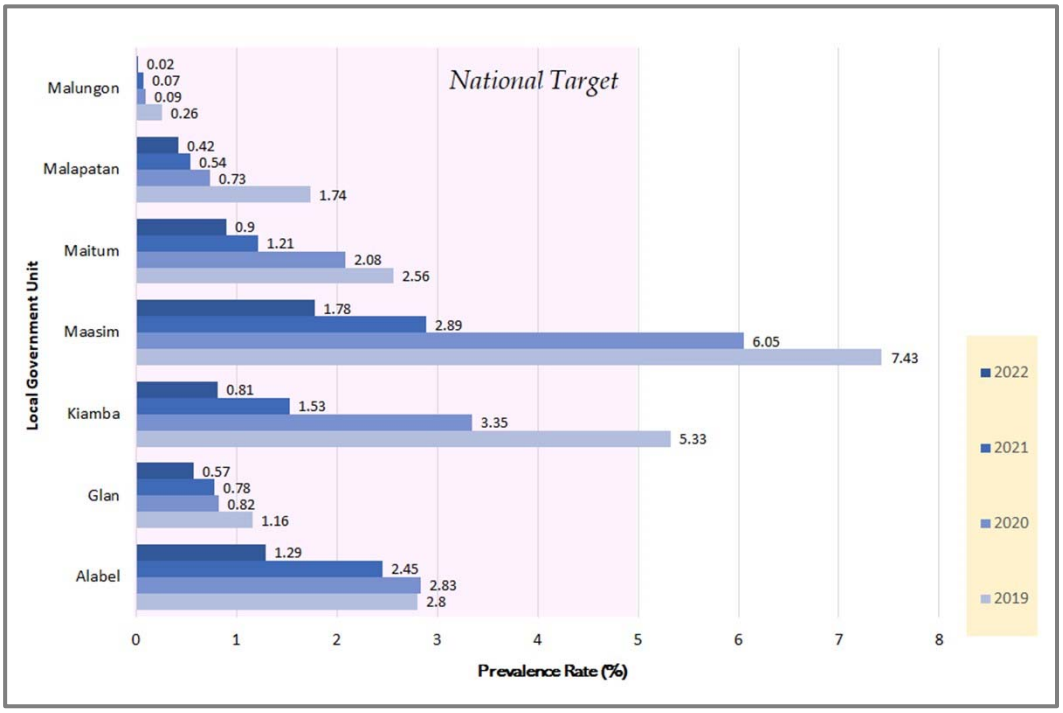

Figure D.1 Prevalence of wasting, children 0-59 months, by municipality, 2019-2022

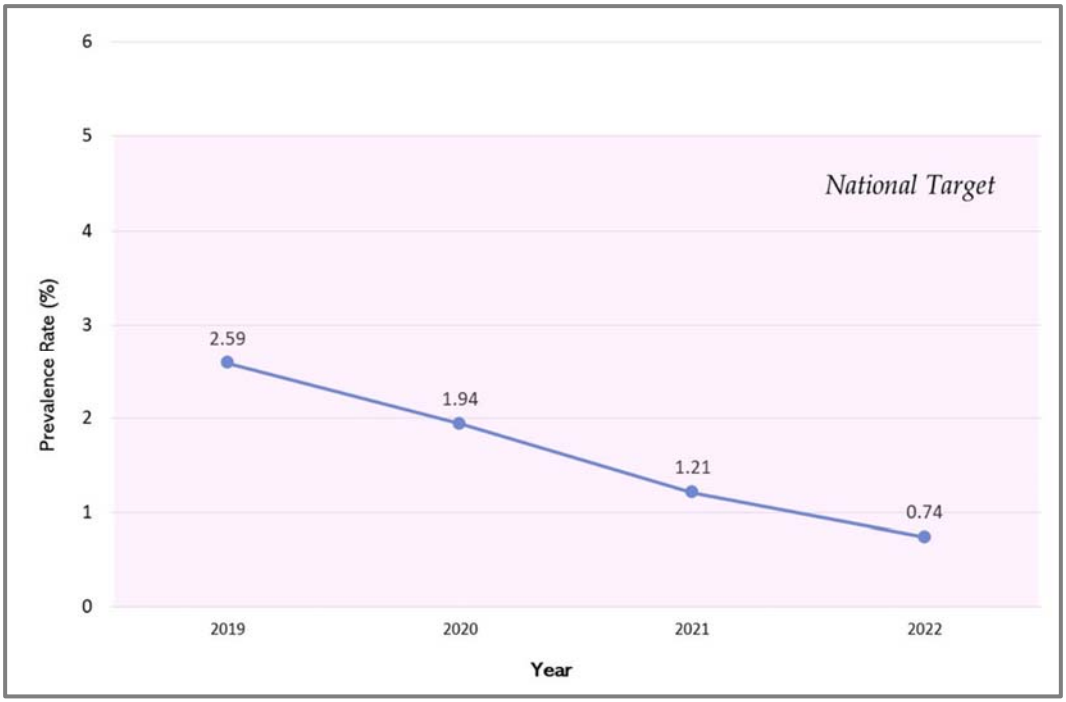

Figure D.2 Prevalence of wasting among children 0-59 months in Sarangani province,0-59 months. 2019-2022

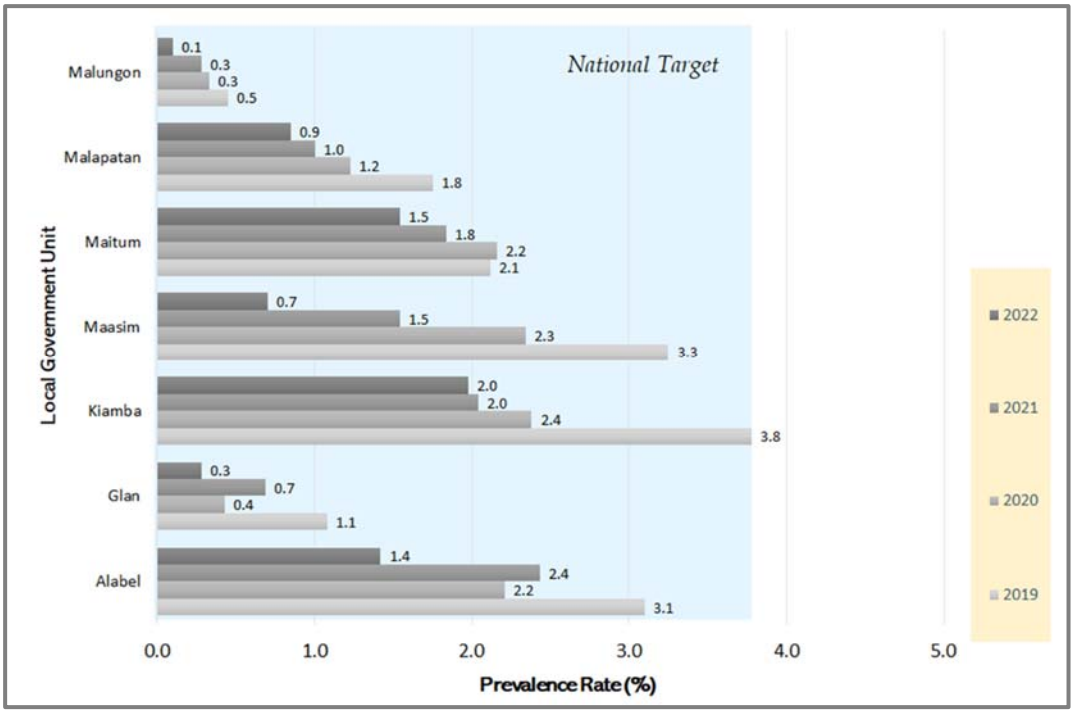

Figure E.1 Prevalence of overweight and obesity among children 0-59 months, by municipality. 2019-2022

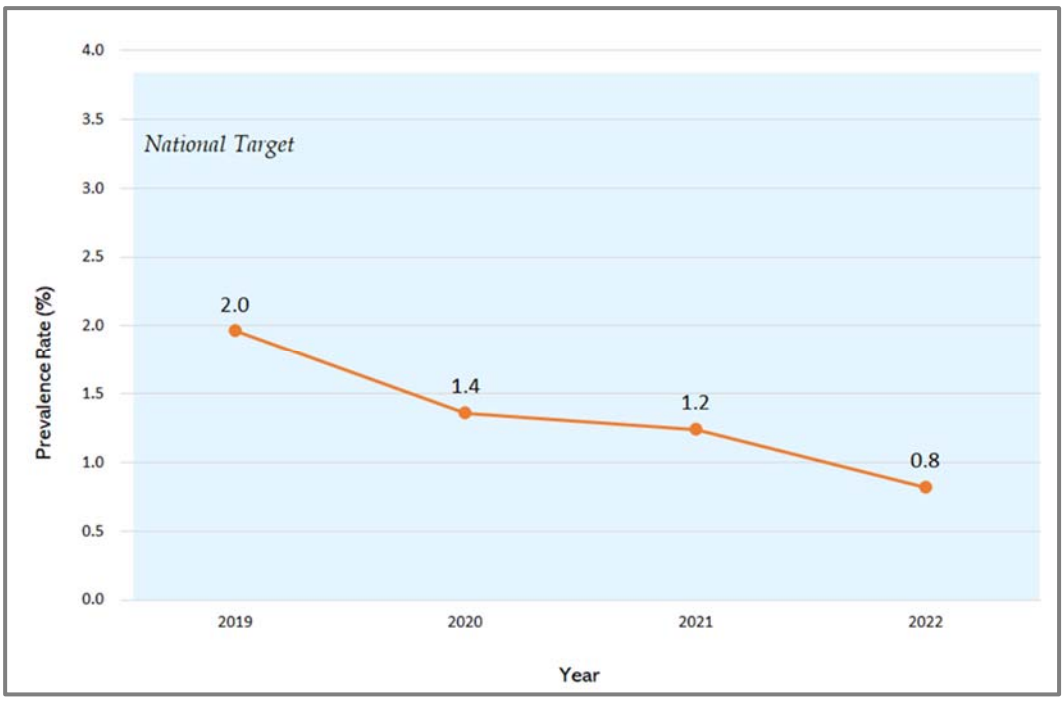

Figure E.2 Prevalence of overweight and obesity among children 0-59 months in Sarangani province. 2019-2022

Annex 3: Measurement tools

FORM 1. Document Extraction Tool

Information being asked for	Possible Documents
Policy documents at the barangay, city and regional levels	Administrative Order, Executive Order, Ordinances, Manual of Operations, Guidelines
Organizational Structure	Organogram for the Municipal Nutrition Committee and the Provincial Nutrition Committee, special order designating certain persons
Plans (at the barangay, city, regional levels)	Municipal Nutrition Action Plan, Provincial Nutrition Action Plan, Municipal Development Plan, Provincial Development Plan, Municipal Health Investment Plan, Provincial Health Investment Plan and other MLGU, PLGU plans that are related to nutrition, hunger and food security covering years 2018-2022
Annual budget and Expenditures for health and nutrition programs and services, including nutrition-specific and nutrition-sensitive programs	AOP or Annual work and financial plan, or annual statement of obligation or audited financial statement of the LGU
Program Performance	Monitoring and evaluation reports for nutrition-specific and nutrition-sensitive programs and services Annual reports
Program Performance	ZFF documentation and reports on the Sarangani project (those that can be made available to the team), including but are not limited to: ● Monitoring reports ● Progress reports (Word and/or slide deck) ● Worksheets with disaggregated data on nutrition status, performance of capacity building activities, etc.
Nutrition situation	FHSIS report of the municipality and province (only nutrition status data)2018-2022
Nutrition situation	Local nutrition database (all collected data related to health and nutrition programs and services)2018-2022

FORM 2.A. In-depth Interview guide (LGU technical officers, LCEs)

Instructions:

Before the IDI starts, the facilitator shall properly introduce herself, following the guide below:

1. Introduce the team properly.
2. Explain the objectives and relevance of the case study.
3. Clearly state why they are chosen to be part of the case study.
4. Follow the process of asking for the informed consent. Refer to the consent form. Explain its content.
5. Tell the interviewee about the allotted time for the interview.
6. Describe the flow of the KII and FGD

Name of respondent: _____

Municipality: [] Alabel [] Malapatan [] Glan [] Malungon
[] Maasim [] Kiamba [] Maitum [] Malungon
[] Sarangani Province

Position: [] MNAO [] MHO [] LCE

A. Nutrition goals and outcomes

1. Together with ZFF, the goal that was set for the nutrition program and services was to see improvements in the health and nutrition outcomes among pregnant women and stunting reduction among children 0-2 years old (F1KD population).

    a. How do you think did your municipality/ province do when it comes to the nutritionally at-risk pregnant women and newborns?

        - If you were to rate your municipality/ province's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

    b. How do you think did your municipality/ province do when it comes to the childhood illnesses and wasting?

- If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

c. How do you think did your municipality/ province do when it comes to the nutrition status among diagnosed and treated F1KD?

- If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

d. How do you think did your municipality/ province do when it comes to the stunting rate?

- If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

2. Based on what you have witnessed in the past 5 years, how has the behavior of the families of pregnant women and children been towards food, health and nutrition been?
    a. Were there changes?
    b. What are the changes that you have witnessed? Give examples on the changes that happened.
    c. What do you think influenced these changes? What actions/ activities did the municipality do?
    d. If you were to rate your municipality/ province's efforts in creating positive behavior towards food, health and nutrition from 1 (lowest) to 5 (highest), what would your rating be? Why?

1	2	3	4	5

B. Program coverage

1. Out of 10 children/ adolescents/ pregnant mothers in your municipality/ province, how many were you able to reach or cover in the following services from 2018 to 2022? (Coverage of the following services in your municipality from 2018-2022).

Services	2018	2019	2020	2021	2022
Ante-natal care					
Iron and Folic Acid (IFA) supplementation					
Vit. A supplementation					
Fully-immunized child					
Operation Timbang					

2. I'd like to get your perspective and feedback on the following nutrition-specific programs and services.
    a. Can you describe some of the activities that you undertook for each program?
    b. Which aspects of the program do you think your municipality/ province did well? Why do you think so? What factors do you think helped in the implementation?
    c. Which aspects of the program do you think your municipality/ province found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?
    d. If you were to rate your municipality/ province's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

<u>Women of reproductive age, including pregnant, lactating mothers</u>

Infant and Young Child Feeding (IYCF) Program - support for breastfeeding among mothers (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program - Supplementary Feeding of Pregnant Women and Lactating Mothers (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation - women and pregnant, lactating mothers (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

<u>Infants and children</u>

Operation Timbang Program (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Infant and Young Child Feeding (IYCF) Program (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Philippine Integrated Management of Acute Malnutrition (PIMAM) Program (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change - nutrition promotion in schools, CDC, and SNPs (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Overweight and Obesity Management and Prevention Program (OOMPP) (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

<u>Adolescents</u>

Micronutrient Supplementation - adolescent girls (Description:)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

<u>Other nutrition programs implemented (non-routine)</u>

Description: _____

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

3. I'd like to get your perspective and feedback on the following nutrition-sensitive programs and services.

a. Can you describe the activities that you undertook for each program?

b. Which aspects of the program do you think your municipality/ province did well? Why do you think so? What factors do you think helped in the implementation?

c. Which aspects of the program do you think your municipality/ province found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?

d. If you were to rate your municipality/ province's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

Gardening (household)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Gardening (barangay)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Gulayan sa Paaralan

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions on nutrition and maternal care

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions for child and family nutrition project

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Local market development for food

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Distribution of seeds

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Cooking lessons

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Nutrition monitoring in the day care

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

C. Health and Nutrition System building blocks (resources)

1. Human resources

a. Prior to 2018, what was the HRH situation in your municipality/ province when it came to the nutrition programs? Probe into the P/MNAO and BNS situation (presence/ absence of P/MNAO, security of tenure, number/ adequacy of the BNS, capacity to delivery services)

b. At present, what was the HRH situation in your municipality/ province when it comes to the nutrition programs? Probe into the P/MNAO and BNS situation (presence/ absence of P/MNAO, security of tenure, number/ adequacy of the BNS)

- Do you think there is an adequate number of people involved the nutrition programs? Why?

- Are there plans to improve this? Describe.

c. What capacity building activities (short courses, trainings, etc) did you and the nutrition team receive? Probe into the focus of these activities, frequency, conduct of refresher courses, assistance provider (NNC, DOH, etc).
   - At present, do you think you and your team are (sufficiently) competent to improve and sustain the nutrition situation in your municipality? Why? If not sufficiently competent, what are the gaps?

d. What was the assistance provided to you and your municipality/ province by the ZFF?
   - Probe on the assistance related to:
     - Information systems
     - Development of the MNAP
     - Delivery of routine nutrition programs
   - Can you give us your feedback on the assistance provided to you?

2. Financing
   a. Prior to 2018, how much was the budget allocation for nutrition programs?
      - What was your budget utilization rate? Try to get this for the 2018 to 2022.
        - If poor, why? What are the challenges to the utilization of the Malaria budget?
        - If good, what were the factors that facilitated this pattern?
      - Has this been increasing or shrinking in the years prior? Why? What were the challenges along the way?
   b. At present, are the activities outlined in your P/MNAP included in the municipality/ province's programs?
      - If yes, how much budget is allocated for the nutrition-specific programs? Try to get this for the 2018 to 2022.
        - What is your budget utilization rate? Try to get this for the 2018 to 2022.
          - If poor, why? What are the challenges to the utilization of the budget?
          - If good, what were the factors that facilitated this pattern?

- If yes, how much budget is allocated for the nutrition-sensitive programs? Try to get this for the 2018 to 2022.
    - What is your budget utilization rate? Try to get this for the 2018 to 2022.
        - If poor, why? What are the challenges to the utilization of the budget?
        - If good, what were the factors that facilitated this pattern?
- If no, why?

c. How about in the AOP? Why or why not?

d. What are the major expenditure items in the budget for nutrition? Why?

e. Do you receive financial support (e.g. additional funding, grants) from the province, DOH, NNC and other partners?
    - If yes, what were these? Probe on projects and funders.

f. What are the current strengths to the financing of nutrition programs in your municipality/ province?

g. What are the challenges to the financing of nutrition programs in your municipality/ province?

3. Infrastructure and supplies

a. What are the current physical facilities in place in your municipality/ province where nutrition programs and services are offered? Probe into:
    - Services offered
    - Location
    - Manning of the facilities
    - Equipment present in the facilities
        - Weighing scale
        - Infantometer
        - Height board
        - MUAC tape

b. What are the operational challenges to these facilities? Probe into the links with adequacy of HRH, financing and availability of supplies

c. How would you assess the availability of the ingredients needed for complimentary and supplementary feeding programs? Who provides these? Rate from 1 to 5.

1	2	3	4	5

d. How would you assess the availability of supplements for adolescents, pregnant women and children that the programs provide? Who provides these? Rate from 1 to 5.

- Vitamin A
- Iron and Folic Acid
- Others

1	2	3	4	5

e. How would you assess the availability of supplements, medicines available for those who are nutritionally at-risk? Who provides these? How are these made available to patients? Rate from 1 to 5.

- RUSF (Ready to use supplementary food)
- RUTF (Ready to use therapeutic food)
- MNP (Micronutrient pack)
- Others

1	2	3	4	5

f. What are the tests and medicines available for those who are nutritionally at-risk? How are these made available to patients? Who provides these?

g. What support and technical assistance do you receive from:

- DOH
- NNC
- Provincial government
- NGOs

h. What are the challenges when it comes to medical products and technologies?

4. Information system

    a. What is the reporting process for nutrition data from the municipality/ province? Draw the reporting process starting from the barangay until the province.

Mandated (from DOH/ NNC)	Internal (Provincial database)

- Probe into:
    - Information collected
    - Who collects the information
    - How is it recorded
    - Where is it aggregated
    - Who is it reported to

    b. Once the aggregated reports are generated, how is the information used at your level? Probe into utility in the decision-making processes, feedback to health officials and LCE. Differentiate between the mandated process versus the provincial data base.

    c. How are this information used in program planning at your level? Monitoring and evaluation at your level? Ask for examples/ instances. Differentiate between the mandated process versus the provincial data base.

    d. What are the strengths and weaknesses to the mandated process versus the provincial data base.

	Mandated (from DOH/ NNC)	Internal (Provincial database)
Strengths		
Challenges		

    e. Did you receive support/ technical assistance from the national government agencies? (e.g. training, computers, etc)

    f. Do you receive support/ technical assistance from the NGOs? (e.g. training, computers, etc)

B. Health and Nutrition Leadership and Governance

1. Local policies on nutrition

    a. Do you think the current policy environment is supportive of nutrition (or improving the nutritional status of your constituents? If you were to rate from 1 (least supportive) to 5 (very supportive), what would be your rating? Why?

    b. What are the current policies in place in the municipality/ province that is related to nutrition? Ask about details about each policy. Probe into:

        - Target/ Policy outcomes
        - Strategies outlined in the policy
        - Status of its implementation
        - Do you think it is effective? Why?
        - What are its strengths and challenges?
        - Can you share with us how you were able to put these into place? Probe into the BL competencies if possible

2. Municipal/ Barangay Nutrition Committee

    a. What is the status of your MNC/ BNC?

        - Is it functional? If no, why?
        - Is it active? If no, why?
        - Who are currently sits in the nutrition committee?
        - What are the strengths? What are its challenges?

3. P/MNAP

    a. How did your municipality go about updating the P/MNAP over the past 5 years? Probe into:

        - Evidence generation and utilization
        - Participation of other stakeholders

    b. Were you able to integrate the programs, projects and activities in the P/MNAP into Local Development and Annual Investment Program? Why/ why not?

        - Did you receive any training on this from the NNC? If yes, when and how was the training conducted? Was it helpful in helping you navigate the inclusion of nutrition in the LIPH?

c. Were you able to integrate the programs, projects and activities in the MNAP into Provincial Development and Physical Development Plan? Why/ why not?

- Did you receive any training on this from the NNC? If yes, when and how was the training conducted? Was it helpful in helping you navigate the inclusion of nutrition in the LIPH?

4. Processes and mechanisms that enhanced integration within nutrition-specific programs (inter-program linkages)

    a. Based on what you have seen and experienced, how integrated are the different nutrition-specific programs? Give examples.

        - Are there referral systems in place for nutritionally at-risk mothers? Describe. Probe into how and who are involved.
        - Are there referral systems in place for nutritionally at-risk children? Describe. Probe into how and who are involved.

    b. What are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]

    c. If you could rate the over-all level of integration of nutrition-specific programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

    d. What are the remaining gaps to fully integrate?

5. Processes and mechanisms that enhanced integration between nutrition-specific and nutrition-sensitive programs

    a. Based on what you have seen and experienced, how integrated are the nutrition-specific and nutrition-sensitive programs? Give examples.

        - If yes, what are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]
        - If no, why? What are the challenges/ road blocks?

b. If you could rate the over-all level of integration of nutrition-specific and nutrition-sensitive programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

c. What are the remaining gaps to fully integrate?

6. Processes and mechanisms that enhanced inclusivity of nutrition-specific and nutrition-sensitive programs. Sarangani Province has a relatively big proportion of indigenous peoples.

    a. Based on what you have seen and experienced, how inclusive are the different nutrition-specific programs in your municipality? Give examples.

        - If yes, what are the "new" or "re-designed" processes and mechanisms that helped the increase the inclusivity of these programs (greater coverage of Ips, etc)? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]
        - If no, why? What are the challenges/ road blocks?

    b. If you could rate the over-all level of inclusivity of nutrition-specific and nutrition-sensitive programs from 0 (not inclusive at all) to 5 (very integrated), how would you rate this for your municipality? Why?

    c. What are the remaining gaps to fully integrate?

FORM 2.B. FGD guide (BNSs)

Instructions:

Before the FGD starts, the facilitator shall properly introduce herself, following the guide below:

1. Introduce the team properly.
2. Explain the objectives and relevance of the case study.
3. Clearly state why they are chosen to be part of the case study.
4. Follow the process of asking for the informed consent. Refer to the consent form. Explain its content.
5. Tell the interviewee about the allotted time for the interview.
6. Describe the flow of the FGD

Municipality: [] Alabel [] Malapatan [] Glan [] Malungon
[] Maasim [] Kiamba [] Maitum [] Malungon
[] Sarangani Province

D. Nutrition goals and outcomes

1. Together with ZFF, the goal that was set for the nutrition program and services was to see improvements in the health and nutrition outcomes among pregnant women and stunting reduction among children 0-2 years old (F1KD population).

    a. How do you think did your municipality do when it comes to the nutritionally at-risk pregnant women and newborns?

        - If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

    b. How do you think did your municipality do when it comes to the childhood illnesses and wasting?

        - If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

c. How do you think did your municipality do when it comes to the nutrition status among diagnosed and treated F1KD?

- If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

d. How do you think did your municipality do when it comes to the stunting rate?

- If you were to rate your municipality's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

2. Based on what you have witnessed in the past 5 years, how has the behavior of the families of pregnant women and children been towards food, health and nutrition been?

   a. Were there changes?

   b. What are the changes that you have witnessed? Give examples on the changes that happened.

   c. What do you think influenced these changes? What actions/ activities did the municipality do?

   d. If you were to rate your municipality's efforts in creating positive behavior towards food, health and nutrition from 1 (lowest) to 5 (highest), what would your rating be? Why?

1	2	3	4	5

E. Program coverage

4. Out of 10 children/ adolescents/ pregnants in your municipality, how many were you able to reach or cover in the following services from 2018 to 2022? (Coverage of the following services in your municipality from 2018-2022).

Services	2018	2019	2020	2021	2022
Ante-natal care					
Iron and Folic Acid (IFA) supplementation					
Vit. A supplementation					
Fully-immunized child					
Operation Timbang					

5. I'd like to get your perspective and feedback on the following nutrition-specific programs and services.
    a. Which aspects of the program do you think your barangay did well? Why do you think so? What factors do you think helped in the implementation?
    b. Which aspects of the program do you think your barangay found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?
    c. If you were to rate your barangay's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

<u>Women of reproductive age, including pregnant, lactating mothers</u>

Infant and Young Child Feeding (IYCF) Program - support for breastfeeding among mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program - Supplementary Feeding of Pregnant Women and Lactating Mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation - women and pregnant, lactating mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Infants and children

Operation Timbang Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Infant and Young Child Feeding (IYCF) Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Philippine Integrated Management of Acute Malnutrition (PIMAM) Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change - nutrition promotion in schools, CDC, and SNPs (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Overweight and Obesity Management and Prevention Program (OOMPP) (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Adolescents

Micronutrient Supplementation - adolescent girls (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Other nutrition programs implemented (non-routine)

Description: _____

Did well (why, factors)	Challenging (why, factors)	Rating

6. I'd like to get your perspective and feedback on the following nutrition-sensitive programs and services.
    a. Were these programs implemented in your barangay?
    b. Which aspects of the program do you think your barangay did well? Why do you think so? What factors do you think helped in the implementation?
    c. Which aspects of the program do you think your barangay found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?
    d. If you were to rate your barangay's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

Gardening (household)

Did well (why, factors)	Challenging (why, factors)	Rating

Gardening (barangay)

Did well (why, factors)	Challenging (why, factors)	Rating

Gulayan sa Paaralan

Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions on nutrition and maternal care

Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions for child and family nutrition project

Did well (why, factors)	Challenging (why, factors)	Rating

Local market development for food

Did well (why, factors)	Challenging (why, factors)	Rating

Distribution of seeds

Did well (why, factors)	Challenging (why, factors)	Rating

Cooking lessons

Did well (why, factors)	Challenging (why, factors)	Rating

Nutrition monitoring in the day care

Did well (why, factors)	Challenging (why, factors)	Rating

F. Health and Nutrition System building blocks (resources)

1. Human resources

a. Prior to 2018, what was the HRH situation in your barangay when it came to the nutrition programs? Probe into the BNS situation (presence/

absence of MNAO, security of tenure, number/ adequacy of the BNS, capacity to delivery services)

b. At present, what was the HRH situation in your barangay when it comes to the nutrition programs? Probe into the MNAO and BNS situation (presence/ absence of MNAO, security of tenure, number/ adequacy of the BNS)
    - Do you think there is an adequate number of people involved the nutrition programs? Why?
    - Are there plans to improve this? Describe.

c. What capacity building activities (short courses, trainings, etc) did you and the nutrition team receive? Probe into the focus of these activities, frequency, conduct of refresher courses, assistance provider (NNC, DOH, etc).
    - At present, do you think you and your team are (sufficiently) competent to improve and sustain the nutrition situation in your municipality? Why? If not sufficiently competent, what are the gaps?

d. What was the assistance provided to you and your municipality by the ZFF?
    - Probe on the assistance related to:
        - Information systems
        - Development of the MNAP
        - Delivery of routine nutrition programs
    - Can you give us your feedback on the assistance provided to you?

2. Financing
    a. Prior to 2018, How much was the budget allocation for nutrition programs in your respective barangays?
        - What was your budget utilization rate? Try to get this for the 2018 to 2022.
            - If poor, why? What are the challenges to the utilization of the Malaria budget?
            - If good, what were the factors that facilitated this pattern?
        - Has this been increasing or shrinking in the years prior? Why? What were the challenges along the way?

b. At present, are the activities outlined in your BNAP included in the barangay and municipality's programs?
    - If yes, how much budget is allocated for the nutrition-specific programs? Try to get this for the 2018 to 2022.
        - What is your budget utilization rate? Try to get this for the 2018 to 2022.
            - If poor, why? What are the challenges to the utilization of the budget?
            - If good, what were the factors that facilitated this pattern?
    - If yes, how much budget is allocated for the nutrition-sensitive programs? Try to get this for the 2018 to 2022.
        - What is your budget utilization rate? Try to get this for the 2018 to 2022.
            - If poor, why? What are the challenges to the utilization of the budget?
            - If good, what were the factors that facilitated this pattern?
    - If no, why?

c. How about in the AOP? Why or why not?

d. What are the major expenditure items in the budget for nutrition? Why?

e. Do you receive financial support (e.g. additional funding, grants) from the province, DOH, NNC and other partners?
    - If yes, what were these? Probe on projects and funders.

f. What are the current strengths to the financing of nutrition programs in your barangay?

g. What are the challenges to the financing of nutrition programs in your barangay?

3. Infrastructure and supplies

    a. What are the current physical facilities in place in your barangay where nutrition programs and services are offered? Probe into:
        - Services offered
        - Location
        - Manning of the facilities

- Equipment present in the facilities
    - Weighing scale
    - Infantometer
    - Height board
    - MUAC tape

b. What are the operational challenges to these facilities? Probe into the links with adequacy of HRH, financing and availability of supplies

c. How would you assess the availability of the ingredients needed for complimentary and supplementary feeding programs? Who provides these? Rate from 1 to 5.

1	2	3	4	5

d. How would you assess the availability of supplements for adolescents, pregnant women and children that the programs provide? Who provides these? Rate from 1 to 5.

- Vitamin A
- Iron and Folic Acid
- Others

e. How would you assess the availability of supplements, medicines available for those who are nutritionally at-risk? Who provides these? How are these made available to patients? Rate from 1 to 5.

- RUSF (Ready to use supplementary food)
- RUTF (Ready to use therapeutic food)
- MNP (Micronutrient pack)
- Others

f. What are the tests and medicines available for those who are nutritionally at-risk? How are these made available to patients? Who provides these?

g. What support and technical assistance do you receive from:

- DOH
- NNC
- Provincial government
- NGOs

h. What are the challenges when it comes to medical products and technologies?

4. Information system

    a. What is the reporting process for nutrition data from your barangay? Draw the reporting process starting from the barangay until the province.

Mandated (from DOH/ NNC)	Internal (Provincial database)

- Probe into:
    - Information collected
    - Who collects the information
    - How is it recorded
    - Where is it aggregated
    - Who is it reported to

    b. Once the aggregated reports are generated, how is the information used? Probe into utility in the decision-making processes, feedback to health officials and LCE. Differentiate between the mandated process versus the provincial data base.

    c. How are this information used in program planning? Monitoring and evaluation? Ask for examples/ instances. Differentiate between the mandated process versus the provincial data base.

    d. Are you aware about the provincial data base on nutrition? What are the strengths and weaknesses to the mandated process versus the provincial data base.

	Mandated (from DOH/ NNC)	Internal (Provincial database)
Strengths		
Challenges		

    e. Did you receive support/ technical assistance from the national government agencies? (e.g. training, computers, etc)

    f. Do you receive support/ technical assistance from the NGOs? (e.g. training, computers, etc)

C. Health and Nutrition Leadership and Governance

1. Local policies on nutrition
    a. Do you think the current policy environment is supportive of nutrition (or improving the nutritional status of your constituents? If you were to rate from 1 (least supportive) to 5 (very supportive), what would be your rating? Why?
    b. What are the current policies in place in the municipality that is related to nutrition? Ask about details about each policy. Probe into:
        - Target/ Policy outcomes
        - Strategies outlined in the policy
        - Status of its implementation
        - Do you think it is effective? Why?
        - What are its strengths and challenges?
        - Can you share with us how you were able to put these into place? Probe into the BL competencies if possible
2. Barangay Nutrition Committee
    a. What is the status of your BNC?
        - Is it functional? If no, why?
        - Is it active? If no, why?
        - Who are currently sits in the nutrition committee?
        - What are the strengths? What are its challenges?

3. BNAP
    a. Prior to 2018, did your barangay have a BNAP? What were the challenges did you encounter in coming up with a BNAP?
    b. How did your barangay go about updating the BNAP over the past 5 years? Probe into:
        - Evidence generation and utilization
        - Participation of other stakeholders
        - How did your barangay participate in the creation of the MANP?

4. Processes and mechanisms that enhanced integration <u>within</u> nutrition-specific programs (inter-program linkages)
    a. Based on what you have seen and experienced, how integrated are the different nutrition-specific programs? Give examples.

- Are there referral systems in place for nutritionally at-risk mothers? Describe. Probe into how and who are involved.
- Are there referral systems in place for nutritionally at-risk children? Describe. Probe into how and who are involved.

b. What are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]

c. If you could rate the over-all level of integration of nutrition-specific programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

d. What are the remaining gaps to fully integrate?

5. Processes and mechanisms that enhanced integration <u>between</u> nutrition-specific and nutrition-sensitive programs

a. Based on what you have seen and experienced, how integrated are the nutrition-specific and nutrition-sensitive programs? Give examples.

- If yes, what are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]
- If no, why? What are the challenges/ road blocks?

b. If you could rate the over-all level of integration of nutrition-specific and nutrition-sensitive programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

c. What are the remaining gaps to fully integrate?

6. Processes and mechanisms that enhanced inclusivity of nutrition-specific and nutrition-sensitive programs. Sarangani Province has a relatively big proportion of indigenous peoples.

a. Based on what you have seen and experienced, how inclusive are the different nutrition-specific programs in your municipality? Give examples.

- If yes, what are the "new" or "re-designed" processes and mechanisms that helped the increase the inclusivity of these

programs (greater coverage of Ips, etc)? How did you implement these processes and mechanisms? Probe into who co-designed with them, how did they harness their bridging leadership skills. [If not BL trained, probe into how they were able to co-create these, how they were able to get cooperation, etc]

- If no, why? What are the challenges/ road blocks?

b. If you could rate the over-all level of inclusivity of nutrition-specific and nutrition-sensitive programs from 0 (not inclusive at all) to 5 (very integrated), how would you rate this for your municipality? Why?

c. What are the remaining gaps to fully integrate?

FORM 3. In-depth Interview guide (ZFF staff)

Instructions:

Before the IDI starts, the facilitator shall properly introduce herself, following the guide below:

1. Introduce the team properly.
2. Explain the objectives and relevance of the case study.
3. Clearly state why they are chosen to be part of the case study.
4. Follow the process of asking for the informed consent. Refer to the consent form. Explain its content.
5. Tell the interviewee about the allotted time for the interview.
6. Describe the flow of the KII and FGD

Name of respondent: _____

Position: _____

A. Introduction

    1. As the _____, what was your responsibility in the conduct of the Nutrition Governance project in Sarangani?

B. Nutrition goals and outcomes

    1. Together with Sarangani, the goal that was set for the nutrition program and services was to see improvements in the health and nutrition outcomes among pregnant women and stunting reduction among children 0-2 years old (F1KD population).

        a. How do you think did Sarangani do when it comes to the nutritionally at-risk pregnant women and newborns?

            - If you were to rate Sarangani's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

b. How do you think did Sarangani do when it comes to the childhood illnesses and wasting?

- If you were to rate Sarangani's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

c. How do you think did Sarangani do when it comes to the nutrition status among diagnosed and treated F1KD?

- If you were to rate Sarangani's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

d. How do you think did Sarangani do when it comes to the stunting rate?

- If you were to rate Sarangani's over-all performance from 1 (lowest) to 5 (highest, what would your rating be? Why?

1	2	3	4	5

2. Based on what you have witnessed in the past 5 years, how has the behavior of the families of pregnant women and children been towards food, health and nutrition been?

   a. Were there changes?

   b. What are the changes that you have witnessed? Give examples on the changes that happened.

   c. What do you think influenced these changes? What actions/ activities did the municipality do?

   d. If you were to rate Sarangani's efforts in creating positive behavior towards food, health and nutrition from 1 (lowest) to 5 (highest), what would your rating be? Why?

1	2	3	4	5

C. Program coverage

1. Out of 10 children/ adolescents/ pregnants in Sarangani, how many do you think was the province as a whole able to reach or cover in the following services from 2018 to 2022? (Coverage of the following services from 2018-2022).

Services	2018	2019	2020	2021	2022
Ante-natal care					
Iron and Folic Acid (IFA) supplementation					
Vit. A supplementation					
Fully-immunized child					
Operation Timbang					

2. I'd like to get your perspective and feedback on the following nutrition-specific programs and services.
    e. Which aspects of the program do you think Sarangani did well? Why do you think so? What factors do you think helped in the implementation?
    f. Which aspects of the program do you think Sarangani found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?
    g. If you were to rate Sarangani's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

<u>Women of reproductive age, including pregnant, lactating mothers</u>

Infant and Young Child Feeding (IYCF) Program - support for breastfeeding among mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program - Supplementary Feeding of Pregnant Women and Lactating Mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation - women and pregnant, lactating mothers (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Infants and children

Operation Timbang Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Infant and Young Child Feeding (IYCF) Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Philippine Integrated Management of Acute Malnutrition (PIMAM) Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Dietary Supplementation Program (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

National Nutrition Promotion Program for Behavior Change - nutrition promotion in schools, CDC, and SNPs (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Micronutrient Supplementation (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Overweight and Obesity Management and Prevention Program (OOMPP) (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Adolescents

Micronutrient Supplementation - adolescent girls (Description:)

Did well (why, factors)	Challenging (why, factors)	Rating

Other nutrition programs implemented (non-routine)

Description: _____

Did well (why, factors)	Challenging (why, factors)	Rating

3. I'd like to get your perspective and feedback on the following nutrition-sensitive programs and services.

    h. Which aspects of the program do you think your municipality did well? Why do you think so? What factors do you think helped in the implementation?

    i. Which aspects of the program do you think your municipality found challenging? Why do you think so? What factors do you think hindered/ constrained the implementation?

    j. If you were to rate your municipality's efforts in the implementation of the program from 1 (lowest) to 5 (highest), what would your rating be? Why?

Gardening (household)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Gardening (barangay)

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Gulayan sa Paaralan

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions on nutrition and maternal care

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

FDS sessions for child and family nutrition project

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Local market development for food

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Distribution of seeds

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Cooking lessons

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

Nutrition monitoring in the day care

Activities	Did well (why, factors)	Challenging (why, factors)	Rating

D. Health and Nutrition System building blocks (resources)

1. Human resources

    a. Prior to 2018, what was the HRH situation in Sarangani when it came to the nutrition programs? Probe into the MNAO and BNS situation (presence/ absence of MNAO, security of tenure, number/ adequacy of the BNS, capacity to delivery services)

    b. At present, what was the HRH situation in Sarangani when it comes to the nutrition programs? Probe into the MNAO and BNS situation (presence/ absence of MNAO, security of tenure, number/ adequacy of the BNS)

        - Do you think there is an adequate number of people involved the nutrition programs? Why?
        - Are there plans to improve this? Describe.

    c. What capacity building activities (short courses, trainings, etc) was provided to the province and municipalities? Probe into the link of activities to needs assessment, focus of these activities, frequency, conduct of refresher courses, assistance provider (NNC, DOH, etc).

        - Probe on the assistance related to:
            - Information systems
            - Development of the MNAP
            - Delivery of routine nutrition programs
            - Others
        - What were the strengths and challenges to the roll out of these capacity building activities?

    d. At present, do you think Sarangani nutrition teams are (sufficiently) competent to improve and sustain the nutrition situation in their localities? Why? If not sufficiently competent, what are the gaps?

2. Financing

    a. Prior to 2018, How much was the budget allocation for nutrition programs?

- What was your budget utilization rate? Try to get this for the 2018 to 2022.
    - If poor, why? What are the challenges to the utilization of the Malaria budget?
    - If good, what were the factors that facilitated this pattern?
- Has this been increasing or shrinking in the years prior? Why? What were the challenges along the way?

b. At present, are the activities outlined in the MNAPs and PNAPs included in the province's and municipality's programs?
    - If yes, how much budget is allocated for the nutrition-specific programs? (the range of budget allocations would suffice)
        - What is the average budget utilization rate? Try to get this for the 2018 to 2022.
            - If poor, why? What are the challenges to the utilization of the budget?
            - If good, what were the factors that facilitated this pattern?
    - If yes, how much budget is allocated for the nutrition-sensitive programs? (the range of budget allocations would suffice)
        - What is the average budget utilization rate? Try to get this for the 2018 to 2022.
            - If poor, why? What are the challenges to the utilization of the budget?
            - If good, what were the factors that facilitated this pattern?
    - If no, why?

c. How about in the AOP? Why or why not?

d. What are the major expenditure items in the budget for nutrition? Why?

e. Do the province and its municipalities receive financial support (e.g. additional funding, grants) from the province, DOH, NNC and other partners?
    - If yes, what were these? Probe on projects and funders.

f. What are the current strengths to the financing of nutrition programs in your municipality?

g. What are the challenges to the financing of nutrition programs in your municipality?

3. Infrastructure and supplies

    a. Do you think that the equipment in the current physical facilities were nutrition programs and services are staged complete?

        - Weighing scale
        - Infantometer
        - Height board
        - MUAC tape

    b. What are the strengths to the infrastructure and equipment that are in place in Sarangani and its municipalities?

    c. What are the challenges to these facilities? Probe into the operational challenges linked to adequacy of HRH, financing and availability of supplies

    d. How would you assess the availability of the ingredients needed for complimentary and supplementary feeding programs? Who provides these? Rate from 1 to 5.

1	2	3	4	5

    e. How would you assess the availability of supplements for adolescents, pregnant women and children that the programs provide? Who provides these? Rate from 1 to 5.

        - Vitamin A
        - Iron and Folic Acid
        - Others

1	2	3	4	5

    f. How would you assess the availability of supplements, medicines available for those who are nutritionally at-risk? Who provides these? How are these made available to patients? Rate from 1 to 5.

        - RUSF (Ready to use supplementary food)
        - RUTF (Ready to use therapeutic food)
        - MNP (Micronutrient pack)
        - Others

1	2	3	4	5

g. What are the tests and medicines available for those who are nutritionally at-risk? How are these made available to patients? Who provides these?

h. What support and technical assistance does the province and municipalities receive from:

- DOH
- NNC
- Provincial government
- NGOs

i. What are the challenges when it comes to medical products and technologies?

4. Information system

a. What is the reporting process for nutrition data from the barangay to the province and beyond the province? Draw the reporting process starting from the barangay until the province.

Mandated (from DOH/ NNC)	Internal (Provincial database)

- Probe into:
  - Information collected
  - Who collects the information
  - How is it recorded
  - Where is it aggregated
  - Who is it reported to

b. Once the aggregated reports are generated, how is the information used? Probe into utility in the decision-making processes, feedback to health officials and LCE. Differentiate between the mandated process versus the provincial data base.

c. How are this information used in program planning? Monitoring and evaluation? Ask for examples/ instances. Differentiate between the mandated process versus the provincial data base.

d. What are the strengths and weaknesses to the mandated process versus the provincial data base.

	Mandated (from DOH/ NNC)	Internal (Provincial database)
Strengths		
Challenges		

e. What interventions has ZFF provided in this process?

D. Health and Nutrition Leadership and Governance

1. Local policies on nutrition

a. Do you think the current policy environment is supportive of nutrition (or improving the nutritional status of people in Sarangani? If you were to rate from 1 (least supportive) to 5 (very supportive), what would be your rating? Why?

b. What are the current policies in place in the municipality andprovince that is related to nutrition? Ask about details about each policy. Probe into:

- Target/ Policy outcomes
- Strategies outlined in the policy
- Status of its implementation
- Do you think it is effective? Why?
- What are its strengths and challenges?
- Can you share with us how you were able to put these into place? Probe into the BL competencies if possible

2. Municipal/ Barangay Nutrition Committee

a. What is the status of your BNCs, MNCs and PNCs?

- How many are functional?
    - For those who are functional, what are the facilitating factors?
    - For those who non-functional, what are the hindering factors?
    -
- How many are active?
    - For those who are active, what are the facilitating factors?
    - For those who not active, what are the hindering factors?
- Who are currently sits in the nutrition committee? [barangay, municipality and province]

- As a whole, what are the strengths to the Nutrition Committees in Sarangani? What are its challenges to the Nutrition Committees in Sarangani?

3. MNAP
    a. How did the province and municipalities go about updating the MNAP over the past 5 years? Probe into:
        - Evidence generation and utilization
        - Participation of other stakeholders
    b. Were you able to integrate the programs, projects and activities in the PNAP into Local Development and Annual Investment Program? Why/ why not?
        - Did you receive any training on this from the NNC? If yes, when and how was the training conducted? Was it helpful in helping you navigate the inclusion of nutrition in the LIPH?
    c. Were you able to integrate the programs, projects and activities in the PNAP into Provincial Development and Physical Development Plan? Why/ why not?
        - Did you receive any training on this from the NNC? If yes, when and how was the training conducted? Was it helpful in helping you navigate the inclusion of nutrition in the LIPH?

4. Processes and mechanisms that enhanced integration <u>within</u> nutrition-specific programs (inter-program linkages)
    a. Based on what you have seen and experienced, how integrated are the different nutrition-specific programs? Give examples.
        - Are there referral systems in place for nutritionally at-risk mothers? Describe. Probe into how and who are involved.
        - Are there referral systems in place for nutritionally at-risk children? Describe. Probe into how and who are involved.
    b. What are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How were these implemented? Probe into the co-designing and co-creation process that the LCEs, MHOs, PHOs and BNSs did, how were their bridging leadership skills harnessed.
    c. If you could rate the over-all level of integration of nutrition-specific programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

d. What are the remaining gaps to fully integrate?

5. Processes and mechanisms that enhanced integration between nutrition-specific and nutrition-sensitive programs

    a. Based on what you have seen and experienced, how integrated are the nutrition-specific and nutrition-sensitive programs? Give examples.

        - If yes, what are the "new" or "re-designed" processes and mechanisms that helped the integration of these programs? How were these implemented? Probe into the co-designing and co-creation process that the LCEs, MHOs, PHOs and BNSs did, how were their bridging leadership skills harnessed.
        - If no, why? What are the challenges/ road blocks?

    b. If you could rate the over-all level of integration of nutrition-specific and nutrition-sensitive programs from 0 (not integrated at all) to 5 (very integrated), how would you rate this for your municipality? Why?

    c. What are the remaining gaps to fully integrate?

6. Processes and mechanisms that enhanced inclusivity of nutrition-specific and nutrition-sensitive programs. Sarangani Province has a relatively big proportion of indigenous peoples.

    a. Based on what you have seen and experienced, how inclusive are the different nutrition-specific programs in your municipality? Give examples.

        - If yes, what are the "new" or "re-designed" processes and mechanisms that helped the inclusivity of these programs? How were these implemented? Probe into the co-designing and co-creation process that the LCEs, MHOs, PHOs and BNSs did, how were their bridging leadership skills harnessed.
        - If no, why? What are the challenges/ road blocks?

    b. If you could rate the over-all level of inclusivity of nutrition-specific and nutrition-sensitive programs from 0 (not inclusive at all) to 5 (very integrated), how would you rate this for your municipality? Why?

    c. What are the remaining gaps to fully integrate?

Form 4. BNS Survey on nutrition-specific and nutrition sensitive programs

As the BNS in your area, please check (✓) the intervention that you are part of.

LIFE CYCLE	Nutrition Interventions	Nutrition-sensitive Interventions
I. All population	☐ Nutrition education campaign thru mothers' classes, peer counselling	☐
II. Pre-pregnancy	☐ Folic Acid/ Iron supplementation ☐ Maintaining normal nutrition and healthy lifestyle ☐ Diet counselling ☐ Adolescent Health and Development information	☐ Water, Sanitation and Health (WASH)
III. Pre-natal	☐ Provision of 8 essential antenatal care services ☐ Monitoring of weight, height, ☐ Monitoring of BP ☐ Screening and blood testing (CBC, blood typing, urinalysis, HbsAg, blood sugar screening, pregnancy test, cervical cancer test and pap smear) ☐ Promotion of exclusive breastfeeding, newborn screening, BCG and hepa B birth dose immunization ☐ Micronutrient supplementation ☐ Iron/Folic and other supplements (I, Ca) ☐ Deworming at 2nd trimester of pregnancy ☐ Supplementary feeding ☐ One-on-one nutrition counselling ☐ Other activities: Buntis Congress, etc.	☐ Confirmation of pregnancy

LIFE CYCLE	Nutrition Interventions	Nutrition-sensitive Interventions
IV. Post-partum care	◻ Nutrition/Breastfeeding counselling and support ◻ Post-partum Vit A supplementation (to mother) ◻ Folic Acid and Ferrous Sulfate ◻ Follow-up check-up after delivery	◻
V. Newborn	◻ Exclusive Breast Feeding ◻ Breastfeeding support ◻ Newborn screening	◻ Immunization
VI. 1-6 months	◻ Exclusive Breast Feeding ◻ Well-baby check-up ◻ Growth monitoring	◻ Immunization
VII. 6 months – 2nd year	◻ Growth monitoring ◻ Complementary feeding counselling & support starting at 6 months ◻ Community-based Management for Acute Malnutrition (CMAM), as needed ◻ Vitamin A supplementation ◻ Iron supplementation, as needed ◻ Zinc and Oral Rehydration Solution (ORS) for diarrhea ◻ Oral health	◻ Immunization
VIII. 2 -5 years old	◻ Complementary feeding ◻ Supplementary feeding, local (undernourished) ◻ OPT Plus ◻ Deworming ◻ Vitamin A supplementation ◻ Iron Supplementation ◻ Zinc and Oral Rehydration Solution (ORS)	◻ Oral health ◻ WASH in pre-school
IX. School Children	◻ Vitamin A supplementation ◻ Deworming ◻ Feeding program in school	◻ Oral health ◻ WASH in schools

LIFE CYCLE	Nutrition Interventions	Nutrition-sensitive Interventions
X. Adolescents	☐ Weekly Iron-Folic Acid Supplementation (WIFA)	

Other non-health intervention

- ☐ Gardening (household)
- ☐ Gardening (barangay)
- ☐ Gulayan sa Paaralan
- ☐ FDS sessions on nutrition and maternal care
- ☐ FDS sessions for child and family nutrition project
- ☐ Local market development for food
- ☐ Distribution of seeds
- ☐ Cooking lessons
- ☐ Nutrition monitoring in the day care

Are there other nutrition-specific and nutrition-sensitive programs that your municipality is implementing at the moment?

Nutrition-specific	Nutrition-sensitive

Annex 4: Informed consent form

Informed consent form (English)

Magandang araw po. I am_____(name of researcher)_____.

Zuellig Family Foundation (ZFF) is currently conducting a case study on the nutrition governance in Sarangani Province. This study seeks to analyze the factors that contributed to the improvement of Sarangani Province's nutritional outcomes from 2018 to 2022. Specifically, it is designed to:

1. Describe the changes in nutritional outcomes in Sarangani Province and its 7 municipalities from 2018 to 2022.
2. Determine the strategies, processes and mechanisms that contributed to the improvement of the province's nutrition outcomes, specifically those related to the different health system building blocks.
3. Analyze the influence of the leadership and governance interventions provided to the provincial and municipal leaders to the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and services.
4. Examine the practices and lessons learned when it comes to the planning, implementation and monitoring of nutrition-specific and nutrition-sensitive programs and

I would like to invite you to participate in this research. We are very interested to hear your valuable opinion / feedback on the nutrition-specific and nutrition-sensitive programs in your municipality/ province. Your responses will help your municipality, province as well as government agencies like the DOH.

Your participation is voluntary. It will only take about 1.5 – 2 hours of your time. Should you wish to withdraw from the interview at any given time, you are free to do so and we will fully understand.

The information that you will give us is completely confidential. We will not associate your name with anything you say in the interview or during the FGD. Your name and other personal-identifiable details will be private and confidential. It will remain with us and will not be shared with anyone or with any organization.

I also would like to ask for your permission for us take notes of the interview so that we can make sure that we capture the thoughts, opinions and ideas that you share with us.

If you have any questions, comments or additional inputs, now or after we have completed the interview or FGD, please feel free to ask me or you can contact me via my mobile number (0921-201-8235) or email (mcsilva@up.edu.ph).

Kindly sign below in the space provided for as an indication that you agree to participate in this evaluation. Thank you for agreeing to participate.

[ ] Yes. I am willing to participate [ ] No. I don't want to participate

_____

Lagda ng interviewee

Contact No: _____

Informed consent form (Bisaya)

Maayong buntag/ hapon. Ako si _____.

Ang Zuellig Family Foundation (ZFF) nagpahigayon karon og case study sa nutrition governance sa Sarangani Province. Kini nga pagtuon nagtinguha sa pag-analisar sa mga hinungdan nga nakatampo sa pag-uswag sa mga resulta sa nutrisyon sa Sarangani Province gikan sa 2018 ngadto sa 2022. Sa partikular, kini gidisenyo aron:

1. Ihulagway ang mga kausaban sa resulta sa nutrisyon sa Sarangani Province ug sa 7 ka lungsod niini gikan sa 2018 ngadto sa 2022.
2. Tinoa ang mga estratehiya, proseso ug mekanismo nga nakatampo sa pag-uswag sa mga resulta sa nutrisyon sa probinsiya, ilabina kadtong may kalabutan sa lain-laing mga bloke sa pagtukod sa sistema sa panglawas.
3. Analisaha ang impluwensya sa mga interbensyon sa pagpangulo ug pagdumala nga gihatag sa mga lider sa probinsiya ug munisipyo sa pagplano, pagpatuman ug pagmonitor sa mga programa ug serbisyo nga espesipiko sa nutrisyon ug sensitibo sa nutrisyon.
4. Susiha ang mga gawi ug mga leksyon nga nakat-unan kon bahin sa pagplano, pagpatuman ug pagmonitor sa mga programa nga espesipiko sa nutrisyon ug sensitibo sa nutrisyon ug

Gusto ko nga imbitahon ka sa pag-apil sa kini nga panukiduki. Interesado kaayo kami nga makadungog sa imong bililhong opinyon/feedback sa nutrition-specific ug nutrition-sensitive nga mga programa sa imong munisipyo/probinsya. Ang inyong mga tubag makatabang sa inyong munisipyo, probinsiya ug ingon man sa mga ahensya sa gobyerno sama sa DOH.

Ang imong partisipasyon boluntaryo. Magkinahanglan lang kini og mga 1.5 - 2 ka oras sa imong oras. Kung gusto nimo nga mo-withdraw gikan sa interbyu sa bisan unsang oras, gawasnon ka nga buhaton kini ug masabtan namon ang tanan.

Ang kasayuran nga imong ihatag kanamo hingpit nga kompidensyal. Dili namo i-associate ang imong ngalan sa bisan unsa nga imong isulti sa interbyu o atol sa FGD. Ang imong ngalan ug uban pang personal nga mailhan nga mga detalye mahimong pribado ug kompidensyal. Magpabilin kini kanamo ug dili ipaambit sa bisan kinsa o sa bisan unsang organisasyon.

Gusto ko usab nga mangayo alang sa imong pagtugot alang kanamo nga magkuha mga nota sa interbyu aron among masiguro nga makuha namon ang mga hunahuna, opinyon ug ideya nga imong gipaambit kanamo.

Kung naa kay pangutana, komento o dugang nga input, karon o pagkahuman namong makompleto ang interbyu o FGD, palihug ayaw pagduhaduha sa pagpangutana kanako o mahimo nimo akong kontakon pinaagi sa akong mobile number (0921-201-8235) o email (mcsilva@up .edu.ph).

Palihog pagpirma sa ubos sa luna nga gitagana isip timailhan nga miuyon ka nga moapil niini nga ebalwasyon. Salamat sa pag-uyon sa pag-apil.

[ ] Oo. Mu-apil ko. [ ] Dili ko mu-apil.

_____

Pirma sa interviewee

Contact No: _____