

# **BENAZIR NASHONUMA PROGRAMME**

## **MIDLINE EVALUATION RESULTS**

Operating under the Government of Pakistan's Benazir Income Support Programme (BISP) – the country's largest social protection programme – the Benazir Nashonuma Conditional Cash Transfer Programme has become the national cornerstone in the fight against malnutrition in Pakistan. Nashonuma was scaled up nationwide in 2023 and has reached more than 3.7 million women and children by now. Its midline evaluation shows some of the strongest results ever documented globally for such a large-scale nutrition programme, with a very high impact on stunting reduction, child survival and reduced zero-dose immunisations.

## I. Malnutrition in Pakistan

In Pakistan, stunting affects 40 percent of children under 5 years of age (~12 million children), indicating a public health emergency.<sup>i</sup> Stunting (or chronic malnutrition) is measured as low height-for-age. It manifests itself over a period of time due to persistent undernutrition, which affects not only growth in length, but also short- and long-term health and developmental outcomes. Stunting cannot be treated, so it must be prevented.

The cost of inaction is far greater than the cost of action. Global evidence shows that early in life investments in nutrition are the best, with a 1:23 cost:benefit ratio, due to improved health and productivity during a person's lifetime.<sup>ii</sup> In addition to the loss of lives, malnutrition restricts Pakistan's human capital development, hampering the country's efforts to advance the 2030 Agenda and to meet its targets under the Sustainable Development Goals (SDGs). Malnutrition causes an annual economic loss of US\$ 17 billion, equivalent to 6.4 percent of the country's Gross National Income (GNI).<sup>iii</sup>

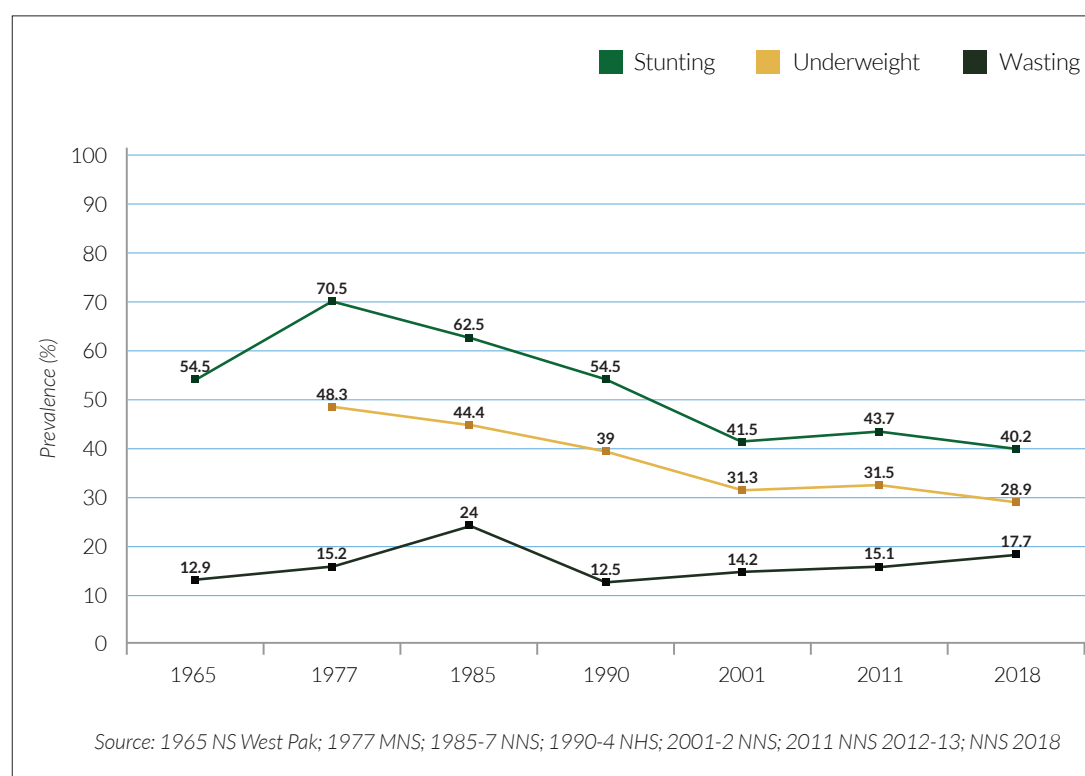


Figure 1: Prevalence of stunting, wasting and underweight has remained stagnant for the last two decades.



## II. The Benazir Nashonuma Programme for Stunting Prevention

### **Nashonuma Programme: A systems approach**

Launched in 2020 and scaled up nationwide in 2023, the Nashonuma Programme provides a comprehensive set of services to pregnant and breastfeeding women (PBW) and children under 2 years of age, focusing on the pivotal first 1,000 days, that start at conception. Eligible women come from the poorest households in the country who are enrolled in the BISP un-conditional cash transfer programme (Kafalaat).

The Nashonuma programme is delivered through more than 540 facilitation centers (FC) located in government health facilities in 157 districts across the country and has reached 3.7 million women and children since its inception.

Women from eligible households are advised to enrol early in their pregnancies to receive the below set of comprehensive nutrition specific and sensitive services through the child's second birthday on a quarterly basis.

1. Uptake of antenatal and postnatal care services and immunization provided by health centres, is a conditionality of the Nashonuma programme.
2. Provision of specialized nutritious food (SNF) for mothers and children (75 and 50 grams per day, respectively). These are locally produced and consist of nutrient-packed paste to complement the daily diet by filling essential nutrient gaps, especially of vitamins, minerals and essential amino acids and fatty acids. Since Q4 2025, women with overweight/obesity (MUAC  $\geq$  25 cm, ~15 percent of all women) receive a multiple micronutrient supplement (MMS) instead of SNF.
3. Conditional cash transfers are provided directly by BISP to PBW/mothers who meet the conditions of health services utilization and who return 90 percent of the empty sachets of SNF they received in the previous appointment (note: a woman visits the FC every 90 days until her child reaches 2 years of age). The cash transfer is higher for a girl child as compared to that for a pregnant woman and a boy child (4,000 vs 3,500 PKR/quarter, respectively).

### **PAKISTAN'S HIGH UNAFFORDABILITY OF A HEALTHY DIET IS A MAJOR DRIVER OF STUNTING**

Stunting originates early in life, starting in pregnancy. Therefore, families' access to healthy, diverse diets is critical so that pregnant and breastfeeding women and young children have access to diets that prevent stunting and related nutritional deficiencies.

However, two-thirds of families in Pakistan cannot afford a nutritious diet.<sup>vi</sup> The affordability gap is largest among the poorest two wealth quintiles: their food expenditure covers less than 60 percent of the cost of a healthy, diverse diet,<sup>vii</sup> restricting their choices to basic foods, such as bread, lentils and some vegetables, a diet that does not provide adequate nutrition, neither in terms of micro- nor macronutrients, a major driver of malnutrition.

In order to access a diverse healthy diet, with just half of energy provided by bread and rice, more than 400 g of vegetables and fruits, some lentils or nuts, and some animal source foods everyday, people need more than knowledge and desire, they also need to be able to find them on the market and to be able to afford these foods.

4. Awareness sessions on maternal, infant and young child nutrition and hygiene practices, and on storage and utilization of the SNF, are provided at each quarterly visit to the FC. This is further complemented by community awareness raising activities to foster positive nutrition and health practices, address gender issues, and to stimulate enrollment in the programme as well.
5. At each visit, women and children also undergo regular screening for malnutrition and are referred for treatment of both moderate and severe malnutrition when required.



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## **BENEFICIARY TESTIMONY**

*“When my son was first weighed, I feared for his life. Through the Programme, he grew stronger, and I learned how to keep my children healthy. Now I know that one mother’s knowledge can change generations.”*

From fear to hope, Safia’s journey reflects how knowledge and care can transform lives. Through the Benazir Nashonuma Programme, her son Meesum’s health improved, and she discovered her own strength.

## **SPECIALIZED NUTRITIOUS FOODS (SNFS): A PROVEN, COST-EFFECTIVE INVESTMENT IN HUMAN CAPITAL DEVELOPMENT**

The inadequate intake of essential nutrients from diets that are not diverse enough is partly filled, in a very cost-efficient manner, by the SNF that is provided to the women during pregnancy and breastfeeding and to the child during the complementary feeding period. The cost of the SNF and its provision, including the full running cost of the FCs, is less than US \$66 per person per year, or US \$0.18 / PKR 50 per person per day.

WHO guidelines for prevention and management of wasting<sup>viii</sup> and for prevention of poor birth outcomes<sup>ix</sup> recommend the use of SNFs, and in particular lipid-based nutrient supplements, such as Maamta and Wawamum, where family foods alone cannot meet nutritional requirements of those affected or at-risk. The SNFs provided by Nashonuma consist of a nutrient-packed paste made from chickpeas, vegetable oil, milk powder and sugar, and are comprehensively fortified with a vitamin and mineral premix. Maamta is provided to pregnant & breastfeeding women (75 g/d) and Wawamum to children 6-23 months (50 g/d) to complement their daily diet with essential nutrients, required for the prevention of stunting, wasting and micronutrient deficiencies and their consequences such as higher risk of morbidity and mortality, anaemia, reduced cognitive development and productivity.

## Midline Evaluation Results

The results of the independent mid-term impact evaluation of the Nashonuma Programme by the Aga Khan University Institute for Global Health & Development (AKU) funded by the Gates Foundation and presented in September 2025 found that Nashonuma is delivering some of the strongest results ever documented globally for a large-scale nutrition programme.

The repeated cross-sectional survey component of the study found a **6.4 percentage points lower prevalence of stunting among children aged 6-23 months** who participated in Nashonuma as compared to those who did not. This is equivalent to a 15 percent lower prevalence of stunting. Similarly, in intervention districts, the prevalence of low birth weight in programme participants was 5.6 percentage points less than in non-intervention districts. Minimum dietary diversity among women was nearly 45 percent at midline, an increase of 16.9 percentage points among Nashonuma participants compared to non-participants, while among children aged 6-23 months, it was 14.5 percent, an increase of 5.8 percentage points compared to non-participants, but still very low.

Findings from the longitudinal cohort follow-up are even more remarkable:

- Among children from the Nashonuma cohort, whose mothers had joined the programme in the 1st or 2nd trimester of pregnancy, **the prevalence of stunting at 6 months of age was 20 percent lower** compared to the non-Nashonuma cohort.
- Mothers of the Nashonuma cohort were less likely to deliver a baby born too small or too early, they had **7 percent less small vulnerable newborn births**, an unprecedented early gain, also very important for child survival.
- Furthermore, a dose-response relationship was found - the longer the duration of participation of the mother during pregnancy and the higher total number of SNF sachets consumed, the lower the incidence of low birth weight, preterm births and small vulnerable newborn births.<sup>1</sup>

The evaluation also demonstrated that Nashonuma has led to improvements in number of antenatal care visits, early initiation

<sup>1</sup> Low birth weight is defined as <2500 g. Preterm births are those that occur before 37 weeks of gestation. Small vulnerable newborns have a birth weight that is too low for their gestational age or are born preterm.

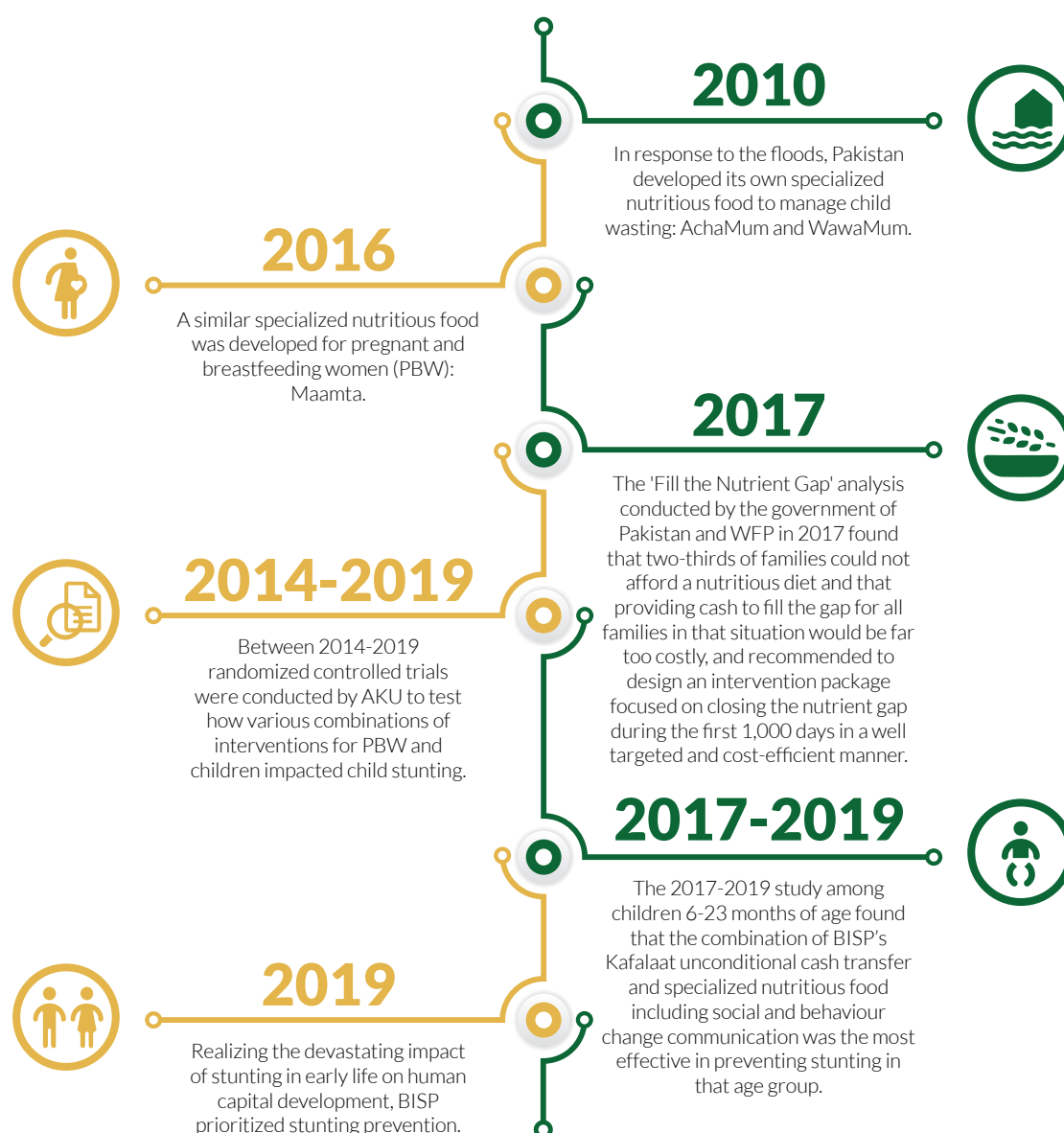


of breastfeeding, and immunization coverage, including a 10 percent reduction of ‘zero dose immunisations’ – percentage of children aged 12-23 months who had not received any immunisations.

### ***The Nashonuma package: The evidence-base for its design***

Nashonuma was built using the findings of a set of rigorous cluster randomized controlled trials (2014–2019) with Aga Khan University and Government of Sindh<sup>iv</sup>. Based on strong results, the Nashonuma programme was

designed by BISP with inputs from development partners and piloted in 2020, increased in scale in 2022, and scaled up to nationwide coverage from 2023 (157 districts, excluding some in Punjab). Meanwhile, the scope of the services provided at the FCs is also expanding, but this is not covered in this brief.



## **What underlies the strong cohort's pregnancy and birth outcomes results of Nashonuma?**

The evidence-base for the design of Nashonuma was strong and its combination of different components that are well-delivered provide for the impact at scale, including:

1. The provision of **locally produced, specialized nutritious food supplement** (SNF) that fills dietary gaps, at a time in life when inadequate nutrition needs to be prevented because of its far reaching, lifelong consequences. Dietary gaps are very much related to poverty, with people not being able to afford much more than bread with some pulses and vegetables, while meat, eggs, dairy and fish are only consumed occasionally. This results in diets with inadequate content of essential nutrients such as vitamins, minerals, essential amino acids (protein components) and essential fatty acids. Young children's complementary foods need to be particularly diverse to meet their nutritional needs, but many of them consume foods from no more than two of eight food groups per day.
2. **Conditional cash transfer** provided to the women and children on a quarterly basis when they visit the FC to enable and incentivize them to uptake health and nutrition services during pregnancy and early infant life.
3. **Access to essential health and nutrition services** such as antenatal care, postnatal care and immunization, that are a condition for receiving the Nashonuma services.
4. **Sustained high enrolment and participation in the program.** Through social mobilization and word of mouth, eligible women and their families hear

about the program and come forward to register, including families who were not yet enrolled in BISP Kafalaat. According to beneficiary testimonies, the combination of cash, access to quality health services and nutritious supplemental foods make the programme attractive to eligible women and their children.

5. **Change of health and nutrition practices** that are encouraged by the program, to the extent that families can adopt these (such as greater dietary diversity and optimal breastfeeding practices), the proportion of participants that participated in the impact evaluation who achieved these changes during the evaluation period remained low in both the study and control groups.

## **Nashonuma programme: Partnerships for implementation**

The Nashonuma Programme is funded and managed by the Government of Pakistan under the Benazir Income Support Programme (BISP) and implemented together with the provincial Health Departments.

The World Food Programme (WFP), in close partnerships with Health Departments, supports the management of the FCs and the procurement and supply chain management of the specialised nutritious foods which are sourced in Pakistan and transported across the country. The FCs are mostly located at secondary care health units (Tehsil Head Quarters), so that all services can be available to Nashonuma beneficiaries under one roof. Furthermore, they are located near to BISP centres so that any administrative requirements can be processed nearby. Meanwhile, the health services (ANC, PNC and immunization) can be obtained in any health facility, documentation of which should then be brought when visiting the FC.



Staff at the FCs also screen for, and manage, acutely malnourished children and women. Severe cases with medical complications, and infants under 6 months, are referred to one of the 169 nutrition stabilization centres (NSCs) supported by the World Health Organization (WHO). The NSCs have been established in close coordination with the respective health departments across the country and provide life-saving treatment to infants and children admitted for inpatient care. WHO ensures that the NSCs are well equipped through provision of therapeutic milk, essential equipment and placement and training of human resource. The United Nations Children's Fund (UNICEF) provides locally produced Ready-to-Use Therapeutic Food (RUTF) for the treatment of uncomplicated severe acute malnutrition following the simplified protocols for the management of wasting.

UNICEF also manages Social and Behaviour Change (SBC) activities at the FCs as well as in the community. The Nashonuma activities at the community level include mobilization, to raise awareness about Nashonuma and

stimulate enrolment, and awareness sessions and counselling on Maternal, Infant, Young Child, and Adolescent Nutrition (MIYCAN), Key Family Care practices and nurturing care. Awareness raising is further supported with cooking demonstrations, establishment of mother, father and peer support groups, mass media, district and community campaigns, and engagement of religious leaders and influencers. And last but not least, the Nashonuma programme integrates adolescent nutrition and youth empowerment by positioning young people as agents of change within their communities.





## COST-BENEFIT OF NASHONUMA PROGRAMME

Globally, there have not been many nutrition programmes delivered at large scale that have shown the level of impact reported by this mid-term evaluation. The cost of the programme is approximately US \$125 per person per year: US \$55 for the conditional cash (PKR 3,500 or 4,000 per quarter) and US \$70 for programme implementation at the FCs, including SNF purchase, transport, storage and delivery, maintaining and running the FCs as well as the beneficiary information system, Social and Behaviour Change communication, and screening and management of acute malnutrition.

For a mother-child pair, from mid-pregnancy to 24 months of age, total Nashonuma cost is ~US \$314 (29/12 months \* 130). Including the Kafalat unconditional transfer (PKR 13,500 per quarter, ~US \$195/y), the cost for the family during the full 1,000 days period (29 months, assuming enrolment in 2nd trimester of pregnancy) is US \$785. These costs and the impact on stunting are comparable to those reported for two 1,000 days nutrition programmes in Guatemala and Burundi that also included family food assistance, a specialized nutritious food for mother and child, and upgraded health services,\* as shown in the below table.

The estimates for Pakistan will be further refined when the endline results have become available which will report the impact on stunting for children who will have had longer exposure to the program. From the perspective of preventing undernutrition and its different consequences, covering the full period until 24 months of age, is best. Furthermore, the cohort study found a very remarkable 7 percent reduction of small vulnerable newborn births which is very important for child survival as well as for health and development in the shorter and longer term.

Table 1. Cost of 1,000 days programs to prevent stunting, per person until 24 months of age and per percentage point stunting reduction achieved in Guatemala, Burundi and, based on preliminary results, for Pakistan.

	Pakistan	Guatemala	Burundi
Cost for 1,000 days, from pregnancy to 24 months of age (US\$/person)	785	1080	765
Cost per percentage point reduction of stunting achieved (US\$/person/percentage point)	38-97 <sup>1</sup>	97	103

<sup>1</sup>The 20% reduction of stunting prevalence at 6 months of age among the cohort is equivalent to 7.8 percentage points, based on 39% stunting among infants aged 6 months in the lowest two wealth quintiles across Pakistan (National Nutrition Survey 2018 results, shared by AKU). This reduction was achieved after approximately 11 months of enrolment, starting in ~4th month of gestation. This is equivalent to an investment of  $11/29 \text{ months} \times 785 \text{ US\$} / 7.8 = 38 \text{ US\$} / \text{person/percentage point}$ . The cross-sectional study observed 6.4 percentage points less stunting among enrolled children aged 6-23 month. Duration of program enrolment of these children, including the participation of their mother, differed and they had not yet reached 24 months of age. Assuming enrolment from 4th month of gestation and until, on average, 18 months of age, would be a total of 23 months of programme exposure. This is equivalent to an investment of  $23/29 \text{ months} \times 785 \text{ US\$} / 6.4 = 97 \text{ US\$} / \text{person/percentage point}$ .

It is important to note that delivering a good quality and comprehensive package comes at a cost, and that alternative lower cost packages and delivery options can be explored, but that these will need to show comparable results when implemented at scale. Furthermore, achieving impact also requires good compliance by participants, in the case of Nashonuma by visiting the FCs, meeting the conditionalities and consuming the SNF per instructions. Implementing a program at scale that does not deliver results would not only be a waste of resources but also deprive people in need of important benefits.

## **METHODOLOGY OF AKU EVALUATION**

The AKU evaluation is funded by the Gates Foundation. Initiated in 2021, It has two components, a repeated cross-sectional survey of pregnant and breastfeeding women and children under five and a cohort follow-up from enrolment during the first two trimesters of pregnancy until the children have reached 12 months of age. All participants are BISP beneficiaries with one group enrolled in Nashonuma and one group not enrolled. The cross-sectional surveys sample from a total of 18 districts, 9 exposed, 9 non-exposed, that are paired per two, for nutrition and socio-economic characteristics, 4 each from Balochistan, Khyber Pakhtunkhwa and Sindh provinces and 2 each from Punjab, Gilgit-Baltistan and Pakistan Administered Kashmir. The cohort follow-up is conducted in the districts of Rajanpur in Punjab and Dadu in Sindh.

The figure below shows that data collection for the first cross-sectional surveys started in December 2021 and that the third one, the endline, will be conducted in January-March 2026. Cohort enrolment started in March 2023 and most children will have reached 12 months of age by the end of 2025, when their last data will be collected,

Thus far, midline data have been collected for both components. For the cross-sectional surveys, data are compared between intervention and non-intervention districts as well as within the intervention districts between Nashonuma and non-Nashonuma enrolled households. For the Nashonuma enrolled households, the history of Nashonuma participation, and baseline characteristics of participants in both groups and different geographies also vary. While the analysis can control for confounding characteristics to some extent, the cohort follow-up is comparatively better controlled.

The cohorts' participating pregnant women were sampled while in their first or second trimester. The Nashonuma cohort enrolled 2,263 pregnant women, while the non-Nashonuma cohort enrolled 4,452, because it was expected that many women might join the Nashonuma program during the period of follow-up. Data at 6 months of age are available for 1,839 children in the Nashonuma cohort and 1,905 in the non-Nashonuma cohort.

Primary outcomes for both studies are child stunting and low birth weight, while secondary objectives include dietary diversity of mothers and children, program enrolment, consumption of SNF, ANC attendance, immunization coverage, child wasting or acute malnutrition, maternal BMI, MUAC and weight gain.

## NASHONUMA IMPACT ASSESSMENT TIMELINE OVERALL

### Repeated cross-sectional surveys

**(Dec 2021-Mar 2022)**

Baseline Survey Phase-1  
12 districts



**(Sept 2022-Jan 2023)**

Baseline Survey Phase-2  
6 districts



**(Jan 2024-March 2024)**

Midline Survey Phase-1  
8 districts (complete)  
4 districts (ongoing)



**(May 2024-July 2024)**

Midline Survey Phase-2  
6 districts



**(Jan 2026-March 2026)**

Endline survey



### Nashonuma cohort and control cohort follow-up

**(June 2022)**

Phase-1  
Dissemination workshop



Floods



**(March 2023)**

Cohort enrollment  
initiation of pregnant  
women in 2 districts



**(February 2024)**

Cohort enrollment  
complete



**(April 2024)**

Birthweight achieved for  
50% of the cohort



Cohort outcomes achieved  
**(Oct 2024-Nov 2024)**

Birthweight of the total  
cohort

**(Nov2025 -Dec 2025)**

Stunting at 12 months





## References

- i. Government of Pakistan and UNICEF. National Nutrition Survey 2018 - Key Findings Report. UNICEF. [Online] 2019. <https://www.unicef.org/pakistan/reports/national-nutrition-survey-2018-key-findings-report>.
- ii. World Bank. Investment framework for nutrition. 2024. Investment Framework for Nutrition 2024.
- iii. Nutrition International. The cost of inaction. [Online] 2024. [https://www.nutritionintl.org/wp-content/uploads/2024/07/Cost-of-Inaction-Pakistan-Brief-EN-FINAL.pdf?utm\\_source=chatgpt.com](https://www.nutritionintl.org/wp-content/uploads/2024/07/Cost-of-Inaction-Pakistan-Brief-EN-FINAL.pdf?utm_source=chatgpt.com)
- iv. Soofi SB, Khan GN, Ariff S et al. Effectiveness of nutritional supplementation during the first 1000 days of life to reduce child undernutrition: A cluster randomized trial in Pakistan. The Lancet Regional Health – Southeast Asia 2022;00:100035.
- v. Soofi SB, Khan GN, Ariff S et al. Effectiveness of unconditional cash transfers combined with lipid-based nutrient supplement and/or behavior change communication to prevent stunting among children in Pakistan: A cluster randomized trial. Am J Clin Nutr 2022;115:492-502.
- vi. WFP. Mind the Gap. Country case study Pakistan. 2024. [docs.wfp.org/api/documents/WFP-0000161880/download/?\\_ga=2.6954864.35155795.1761109772-234287740.1743506801](https://docs.wfp.org/api/documents/WFP-0000161880/download/?_ga=2.6954864.35155795.1761109772-234287740.1743506801)
- vii. Benjamin-chung et al, Nature 2023.
- viii. World Health Organization. WHO guideline on the prevention and management of wasting and nutritional oedema (acute malnutrition) in infants and children under 5 years. 2023. WHO guideline on the prevention and management of wasting and nutritional oedema (acute malnutrition) in infants and children under 5 years.
- ix. World Health Organization. WHO recommendations on antenatal care for a positive pregnancy experience. 2016. WHO recommendations on antenatal care for a positive pregnancy experience.
- x. Heckert J, Leroy JF, Olney DK, Richter S, Iruhiriye E, Ruel MT. The cost of improving nutritional outcomes through food assisted maternal and child health and nutrition programmes in Burundi and Guatemala. Matern Child Nutr. 2020;16:e12863. <https://doi.org/10.1111/mcn.12863>







