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MITRA YOUTH FINAL FINAL REPORT

Final Report

MITRA Youth : Weekly Iron Folic Acid Supplementation for Prevention and Reduction of Anaemia among School-going Adolescent Girls in Selected Districts of Two Provinces – East Java & East Nusa Tenggara, Indonesia

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ACRONYMS

Abbreviation	Meaning
BCI	Behavior Change
	Intervention
BOK	Bantuan Operasional Kesehatan/Health
	Assistance Fund
DEO	District Education
	Office
DFAT	Department of Foreign
	Affairs and Trade, Australia
DHO	District Health Office
EJ	East Java
ENT	East Nusa Tenggara
GAC	Global Affairs Canada
Gol	Government of
111.415	Indonesia
HMIS	Health Management Information System
IFA	Iron and Folic Acid
мнм	Menstrual Hygiene
	Management
ΜοΕ	Ministry of Education
МоН	Ministry of Health
MoRA	Ministry of Religious Affairs
МоНа	Ministry of Home Affairs
NI	Nutrition International
OJT	On the Job Training
PEO	Provincial Education Office
РНО	Provincial Health Office
PRAO	Provincial Religious
_	Affairs Office
Pramuka	Praja Muda Karana/ National Scouts
RAD-PG	Rencana Aksi Daerah
	Pangan dan Gizi/ Regional Action Plan
	for Food and Nutrition
RPJMN	Rencana Pembangunan
	Jangka Menengah Nasional/Medium
	Term Development
	Plan
R/R SEAFAST	Recording/Reporting South East Asia Food
SEAFAST	and Agricultural
	Science and
111/2	Technology
UKS	Usaha Kesehatan Sekolah/School
	Health Program
ТоТ	Training of Trainers
WASH	Water Sanitation and Hygiene
WHO	World Health Organisation
WIFA	Weekly Iron Folic Acid
WIFAS	Weekly Iron Folic Acid
	Supplements

Supplements

Executive Summary

cross the world, malnutrition and anaemia is a leading public health concern for adolescent girls, due to changes in their biological processes and social-determinants that impact them more than boys of their age. Anaemia is usually a result of micronutrient deficiencies and affects a significant proportion of children, adolescents and women of reproductive age. Although adolescent-specific data is lacking globally, it is estimated that approximately 48 percent of adolescent girls are anaemic in Indonesia⁽ⁱ⁾, an increase from the previous prevalence of 30%⁽ⁱⁱ⁾. Weekly Iron and Folic Acid Supplementation (WIFAS) is a key preventative intervention for improving health and nutrition of adolescent girls.

Since 2006, Nutrition International (formerly known as the Micronutrient Initiative) has been working to improve the nutritional status of the high-need population of Indonesia, especially women, children, and adolescents. Nutrition International conducted a series of consultations with the Micronutrient Subdivision of the Directorate of Nutrition, Directorate General of Public Health (MoH), Ministry of Education (MoE) and School Health Program (UKS) on the progress of iron folic acid (IFA) supplementation among school-going adolescent girls to discuss ways to improve the coverage and adherence of these programs, thereby making them more effective. Following NI's experience through another Department of Foreign Affairs and Trade (DFAT) funded program 'Micronutrient Supplementation for Reducing Mortality and Morbidity' (MITRA)(iii) from 2015 to 2020 for improved nutrition of pregnant women and children, and with previously established expertise^(iv) in WIFAS implementation, NI proposed to implement 'MITRA Youth' with support from DFAT, Government of Australia, and Global Affairs Canada (GAC), Government of Canada.

Goal

MITRA Youth aimed to improve nutrition for adolescent girls through increased access and consumption of WIFA supplements as well as reinstate the government's focus on the program for adolescent girls for improved health and education outcomes through evidence-based advocacy among the district, province

⁽ⁱⁱ⁾ WHO.2011. Prevention of Iron deficiency Anaemia in Adolescents: Role of Weekly Iron Folic Acid Supplementation. World Health Organisation – Regional Office for South West Asia, New Delhi, India, RISKESDAS, 2013

^(iv) Based on the successful WIFAS demonstration project in West Java and Banten, documented as global case study by PMNCH in BMJ. (Roche, M.L., Bury, L., Yusadiredja, I.N., Asri, E.K., Purwanti, T.S., Kusumiati, S., Bhardwaj, A. and Izwardy, D. (2018) Adolescent girls' nutrition and prevention of anemia: a school-based multisectoral collaboration in Indonesia. BMJ 2018; 363 doi: https://doi.org/10.1136/bmj.k4541)

⁽i) RISKESDAS 2018

⁽iii) MITRA means 'Partnership' in Bahasa



and national governments. The program activities under MITRA Youth were mainly school-based, reaching 70-80% of the total girls aged 15-18 years enrolled in schools (based on senior high school attendance).

Program strategy

To achieve the goal of the program, a threepronged program strategy was adopted focused on (i) creating an enabling environment; (ii) improving provision; and (iii) increasing consumption.

Geographical scope

MITRA Youth was selected to work in 10 districts each in East Java (EJ) and East Nusa Tenggara (ENT) to leverage resources and relations with government built under MITRA, with an additional focus on the school-going adolescent girls in these two provinces.

Program duration

MITRA Youth program's grant agreement was signed in May 2017 and was to be completed on 30 September 2020. However, due to the ongoing COVID-19 pandemic in 2020, it was proposed to extend the program to complete the activities and ensure continued support to the government of Indonesia to implement the WIFA program for adolescents during the pandemic. To ensure the integration of lessons learned from MITRA Youth, to ensure enhanced focus on micronutrient programming at the district and provincial level, and to complete ongoing activities and few additional activities as discussed with DFAT, the program was given a No Cost Time Extension (NCTE) until May 2021.

Relevance

MITRA Youth has been a well-timed and topical intervention aligned with the GoI's national long-term and medium-term development plans - RPJMN, 2015-2019 and RPJMN, 2020-2024, which focus on the development of youth by improving human resources, and with the 'National Strategy for Stunting Reduction' launched by the President and Vice President, that focuses on IFA supplementation for pregnant women. MITRA Youth also connects to DFAT's focus on addressing child undernutrition as highlighted in the ODE Brief, 2015 which states, "DFAT should ensure that the proportion of Official Development Assistance (ODA) invested in partner countries to address child undernutrition is appropriate to the country context".

Operating context

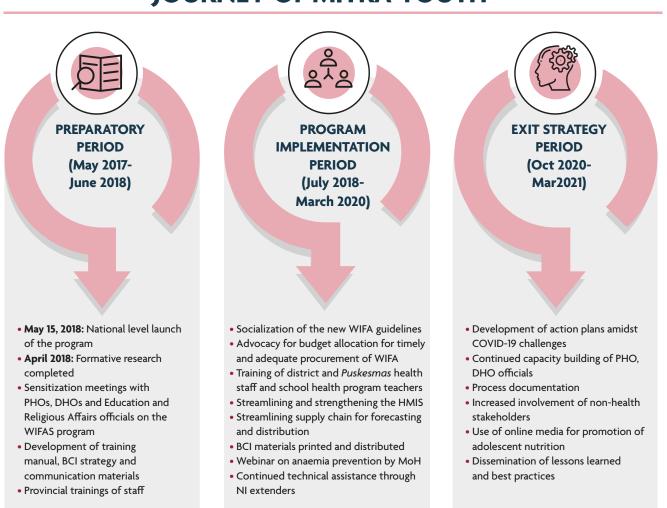
Nutrition International worked with local governments (provincial and district health offices, health facility head and staff, provincial and district education office, school teachers) and the national government (Ministry of Health, Ministry of Education, Ministry of Religious Affairs, Ministry of Home Affairs and Coaching Team of School Health Unit^(v)) to implement various programs aimed at addressing malnutrition in the country. MITRA Youth (2017-2021) program was implemented in the same locations as that of the MITRA (2015-2020) program, keeping in view the increased efficiency as the government counterparts overlapped for both the programs, and to capitalize on the relationships established as part of the MITRA program.

MITRA Youth effectively targeted schools as the delivery platform, and to create the desired impact it successfully advocated for the inclusion of health and nutrition education in the formal curriculum. The integrated approach additionally triggered inter-program and inter-sectoral collaborations between the health, education, social and religious affairs departments from district to the national level.

Nutrition International continues to build on the work done as part of the MITRA and MITRA Youth programs through its BISA (Better Investment of Stunting Alleviation) program which aims to reduce stunting among children through improved service delivery of nutrition services for children, pregnant women and adolescent girls in the West Java and East Nusa Tenggara provinces. Beyond the on-ground implementation, in March 2020 when the COVID-19 pandemic hit the country and caused temporary closures of schools, Nutrition International tailored the program's approach and adapted to the digital platforms such as Zoom and www.HIPWEE.com, to impart nutrition education and create awareness on anaemia prevention and adolescent health.

Activity implementation

The program implementation period can be broadly divided into the preparatory period (May 2017-June 2018), program implementation



JOURNEY OF MITRA YOUTH

period (July 2018-September 2020) and exit strategy period (Oct 2020-Mar 2021). Details of the activities undertaken during the program implementation period have been provided in the six semi-annual reports submitted previously to DFAT during 2017 to 2020. The Annex A presents a summary of the activities completed during the program period.

Achievements towards outcomes

The MITRA Youth program reached adolescent girls in schools with IFA supplements, provided nutrition education for health promotion and awareness to both boys and girls, built capacity of health service providers and school teachers on planning, management, implementation and monitoring the program, improved knowledge and skills on counselling, streamlined supply chain for WIFA and engaged with key officials from MoH, PHO and DHO to strengthen their commitment for the implementation of adolescent WIFA supplementation program. Increase in budget allocation in 19 out of 20 districts can be seen from declaration events, socializations meetings, replicated BCI materials and trainings conducted by districts using own budget.

Enabling environment

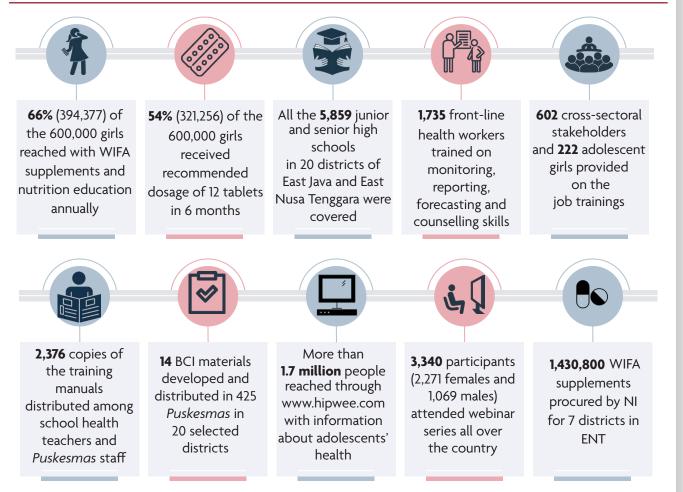
MITRA Youth, through regular advocacy and engagement at national, provincial, district and Puskesmas levels, was successful in encouraging the policy makers to prioritize adolescent health and nutrition and showcased their commitment through:

Increase in budget allocation for organizing declaration events, socialization meetings, procurement of WIFA supplies, printing and distribution of BCI material

Integration of WIFAS program in the overall adolescent health program and prioritizing it with the stunting reduction program

Revision and modification of 2016 national guidelines for anaemia prevention and control for

KEY ACHIEVEMENTS OF MITRA YOUTH



adolescent girls and women of reproductive age which included recommendation to provide IFA supplement with 60mg iron and 400mcg folic acid weekly throughout the year

Strengthened coordination and integration among representatives from multisectoral departments

Successfully influence the Ministry of Religious Affairs to increase budget allocation for WIFAS program orientation for head of madrasah^(v)

Provision

Puskesmas staff and schools' health teachers reported improved knowledge and skills to plan, monitor and implement the WIFA program*.

Availability of adequate supplies was ensured through regular advocacy for adequate budget allocation and timely procurement of WIFA supplements.

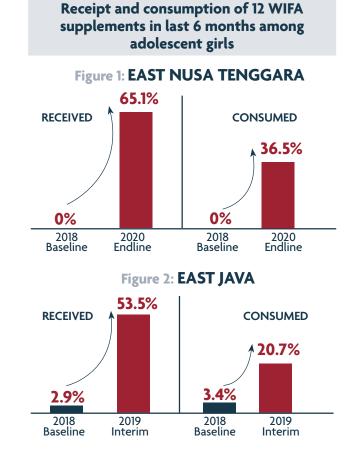
Technical assistance provided by NI's extenders to PHOs and DHOs on real-time supply forecasting and procurement planning resulted in improved capacity for management of supplies of WIFA supplements and their timely distribution*.

Consumption

■ Nutrition International developed the BCI strategy and materials for increased engagement and ownership of adolescents towards the WIFAS program. The strategy utilized existing channels for promotion of nutrition education in schools, and also included adolescent boys as secondary target audience, as they are also vulnerable to anaemia and require nutrition education.

Continuous engagement with the adolescents resulted in many positive behaviour changes, which was reflected in increased access and consumption of WIFA supplements by adolescent girls in schools in program districts across both provinces as reflected in Figure 1 and 2. However, the achievements were lower than the planned targets due to lack of baseline data at the time of proposal development.

Nutrition International developed BCI materials (posters, compliance card and video) incorporating COVID-19 health protocols, which will be used once the schools re-open and are aimed at improving school attendance and better equipping students to maintain COVID-19 health protocols in schools.



 Nutrition International also supported teachers and students in 'learning from home' during COVID-19, by developing online materials including nutrition education videos.

MITRA Youth has considered adolescents to be powerful agents of change, whose contributions are to be nurtured and augmented through meaningful engagement and participation. NI developed effective BCI materials for demand generation and involved various stakeholders, including the adolescents, in successful implementation of the project. Through targeted activities based on gender sensitive BCI strategy, awareness on nutrition, anaemia and benefits of WIFAS was generated among the school, education, and health staff, parents and adolescents. Peer counseling using BCI materials was used to motivate adolescent champions in engaging with fellow students and parents to promote healthy diet, give reminders for adherence of WIFAS and increase awareness on the benefits of WIFAS. During the pandemic, adolescents created blogs, short videos and WhatsApp messages to promote balanced diet and WIFAS, and to monitor receipt and consumption of IFA supplements among their peers. During the exit phase, to further strengthen the initiatives and ensure the sustainability of the anaemia prevention program, girl scouts in EJ were

^(v)Madrasah is an Islamic school supervised under the Ministry of Religious Affairs

^{*} This is reflected in low stock outs and redistribution of supplies, especially during the pandemic, and reporting by the adolescent girls about increased counselling by teachers on consumption.

trained on WIFAS and nutrition education. Girl scouts who completed their training were awarded the WIFA Badge and took charge of promoting WIFA compliance in their community and schools.

Challenges, constraints and mitigation strategies

■ High staff turnover and recruitment at different levels addressed through regular coordination meetings by NI to sensitize the new staff on the program.

Lack of coordination between PHO and DHO addressed by developing a good rapport with staff of PHO and DHO.

• Lack of awareness among the stakeholders and frontline workers from non-health sectors about their role in WIFA supplementation program addressed through focused advocacy and capacity building to get all stakeholders on board.

• Lack of adequate supply of IFA supplements from central to district level addressed through budget provisioning and advocacy for increased budget allocation for IFA procurement.

■ Gaps in supply chain management of IFA supplements bridged through technical assistance to first utilize supplements which are near expiration and re-distribute supplements for efficient utilization of stocks.

Irregular collection and reporting of HMIS data addressed by generating awareness and understanding among school teachers and Puskesmas staff about the revised recording and reporting formats, and by providing regular support for compilation and submission of reports.

■ Lack of high-level adolescent nutrition policy addressed by co-developing a policy brief to bring more attention to adolescent nutrition and through regular advocacy for the inclusion of adolescent nutrition in the next Mid Term National Planning 2019-2024.

Delays and interruption in program implementation due to COVID-19 addressed through various innovative strategies to deliver WIFA supplements at home and to continue nutrition education through digital platforms.

■ Limited knowledge of local religious leaders (who lead education in Madrasah) addressed through nutrition education and advocacy with MoRA for increasing budget allocation to conduct WIFAS orientation.

Monitoring

Nutrition International advocated for streamlining and strengthening of the HMIS for the WIFA

program both at the national and sub national level. Based on advocacy by NI, MoH revised the existing recording and reporting format to track the receipt and adherence of WIFA supplements among adolescent girls and included it in the WIFA guideline, which was printed and distributed to all the districts. MoH further updated the HMIS form based on recent technical implementation guideline on nutrition surveillance in 2020. So, NI supported capacity development of 939 PHO and DHO staff (796 females, 143 males) in all districts of EJ and ENT to improve recording and reporting system for the distribution of WIFA supplements to girls from schools to district level.

Evaluation

A baseline and an interim survey were conducted in 2018 and 2019 respectively in the two implementation provinces (EJ and ENT) and in one comparison (non-intervention) province of South Sulawesi. An endline survey was conducted in March 2020. However, while the data collection for ENT was completed, it could not be completed for EJ (program area) and South Sulawesi (comparison area) due to outbreak of the COVID-19 pandemic. Details of the survey findings are provided in Annex B.

Gender equality

MITRA Youth promoted gender equality by strengthening government commitment towards programs for women and adolescent girls' health, strengthening supply chain and forecasting of IFA supplement requirements for women and adolescent girls, skills development and creation of potential opportunities for economic empowerment for healthcare staff and frontline workers.

Behaviour Change Intervention (BCI) materials for MITRA Youth were developed to increase awareness about the WIFAS program and nutrition education for both - adolescent girls and boys.

■ The program mainstreamed gender concepts into trainings at all levels. At the end of the program, more than 83% of the 7,739 participants from meetings funded by NI were female and 554,156 were adolescent girls.

MITRA Youth engaged community-based networks, some of which were male-dominant, in dialogues about adolescent girls' health and nutrition, demonstrating the important role men and boys could play in the successful implementation of the program.

Key successes of MITRA Youth



1. Increased budget allocation for prioritization of adolescent health and nutrition programs 2. Improved knowledge and skills of health staff at DHO and *Puskesmas*, and school teachers on WIFAS program

3. Adequate availability of WIFA supplies ensured from province to school **4.** Establishment of integrated programming with inter departmental coordination at the district level 5. Engagement with adolescents boys and girls as change-agents for demand generation and awareness

Lessons learned

• Ensuring sustained commitment towards budget allocation for the WIFAS program requires intensive advocacy and constant communication with province and district level officials, which needs to be adequately incorporated in the project implementation at the planning stage.

• Ownership by provincial and district level stakeholders can be ensured through regular engagement and consultation during the development of program materials.

Direct supervision by teachers played an important role in increasing consumption of the nutrition supplements.

• Experience sharing and cross learning between districts motivated policy makers to replicate the best practices and improved coordination.

Development of locally adapted and contextualized BCI strategies and materials increased their ownership by healthcare staff and teachers and improved counselling.

■ Encouraging adolescents' participation in designing BCI content enriched the quality of the materials and ensured that messages on factors that needed attention according to adolescents are emphasized (Refer to Annex E for details).

• Engagement of men and adolescent boys plays an important role in the successful implementation and buy-in of the program.

■ Use of social media to generate awareness among adolescents and their caregivers and influencers proved to be effective, especially during the COVID-19 pandemic.

Sustainability

The MITRA Youth program can be sustained and scaled-up across the country through various strategies.

Replication of program activities in NIsupported districts as well as other districts using government's own budget

Adequate supply of WIFA supplements being

made available from MoH for nutrition priority districts

■ Increased allocation from local budget for procurement of WIFA supplements and management of supply chain and distribution

■ Increase motivation and engagement of adolescents toward WIFAS program All these factors will enable continuation of the WIFAS program and creation of a platform/ network for girls to keep in touch, and support in prevention of drop-outs and completion of high school education, paving the way for increased productivity and empowerment in the future.

Recommendations

A holistic approach to adolescent nutrition programming that includes deworming, menstrual hygiene management (MHM), and WASH integrated with WIFAS and nutrition education should be adopted.

Best practices and learnings from MITRA Youth can be replicated and adopted nationwide.

Establish platforms or channels of communication with adolescents, teachers and parents to seek their feedback in designing and implementing a robust anaemia reduction program for adolescents.

 Utilize digital platforms to disseminate nutrition education and generate awareness on WIFAS program.

Donors and governments can explore opportunities to expand the WIFAS program for out-of-school adolescent girls.

• Explore use of eco-friendly methods to dispose/ recycle waste generated from WIFA supplements' packaging.

Financial summary

The total project value was AUD 2,204,464. A detailed financial report will be submitted to DFAT separately by 31 August 2021, as per agreement.



Introduction

alnutrition and anaemia is a leading public health concern for adolescent girls the world over, due to changes in their biological processes and social-determinants that impact them more than boys of their age. After infancy, adolescence is the next most rapid period of growth with highest nutritional needs, providing a second window of opportunity to catch up for the early childhood growth failure. Until recently, the health and nutrition of adolescents has been a neglected area in global and national investment, policy and programming, however, from 2015 onwards, there has been an increasing global consensus that investing in adolescents girls would be instrumental in attainment of the Sustainable Development Goals (SDGs) due to multiple positive outcomes associated with their improved nutritional status. Indonesia's economy has grown significantly in recent years, however, the problem of double burden of malnutrition remains a cause

for concern. Anaemia is usually a result of micronutrient deficiencies and affects a significant proportion of children, adolescents and women of reproductive age. Global evidence suggests that anaemia during adolescence exacerbates to maternal anaemia which increases the risk of maternal mortality and leads to adverse birth outcomes, such as delivering premature or low birthweight babies. Anaemic mothers are also more likely to have an anaemic child, and hence the intergenerational cycle of malnutrition continues. Although adolescent specific data are lacking globally, it is estimated that approximately 48 percent of adolescent girls are anaemic in Indonesia (RISKESDAS 2018) which is an increase from the previous prevalence of 30% (WHO 2011¹, RISKESDAS 2013). Anaemia affected 48.9 percent of pregnant mothers in 2018 and has been on the rise in Indonesia². In addition, there is inadequate knowledge of the causes and serious implications of iron deficieny and anaemia among adolescents in the country. The reduction of anaemia among adolescent girls has been designated as a high priority by the Ministry of Health (MoH) and the National Guidelines (2016) has been suitably revised to incorporate the World Health Organisation guidelines (2011). Weekly Iron and Folic Acid Supplementation (WIFAS) is a key preventative intervention for improving health and nutrition of adolescent

² United Nations Children's Fund (2020). The State of Children in Indonesia – Trends, Opportunities and Challenges for Realizing Children's Rights. Jakarta: UNICEF Indonesia.

¹WHO.2011. Prevention of Iron deficiency Anaemia in Adolescents: role of Weekly Iron Folic Acid Supplementation. World Health Organisation – Regional Office for South Wast Asia, New delhi, India.

girls. Nutrition interventions delivered through the school system have a higher chance of acceptance and ensuring consumption of nutrients as compared to community-based interventions. However, despite the global thrust towards improving adolescent health and nutrition, the program has had implementation challenges due to various supply and demand issues. Since 2006, Nutrition International (formerly known as the Micronutrient Initiative) has been working to improve the nutritional status of the high-need population of Indonesia, especially women, children and adolescents. Nutrition International conducted a series of consultations with the Micronutrient Subdivision of the Directorate of Nutrition, Directorate General



The program activities under MITRA Youth are mainly school-based and reach about 70-80 per cent of total enrolled girls in the age group 15-18 years through increased access and consumption of Weekly Iron and Folic Acid Supplements as well as reinstate the Government's focus on the program of Public Health (MoH), Ministry of Education (MoE) and School Health Program (UKS) on the progress of iron folic acid (IFA) supplementation among school-going adolescent girls to discuss ways to improve the coverage and adherence of these programs, thereby making them more effective. NI has previously established expertise³ in implementation of WIFAS program in selected schools across 35 districts of West Java and Banten through support from Global Affairs Canada (GAC). NI has also implemented another Department of Foreign Affairs and Trade (DFAT) funded Micronutrient Supplementation for Reducing Morbidity and Mortality (MITRA)⁴ program from 2015 to 2020 which was an integrated program with an overall objective to improve access to health services for pregnant women and caregivers of children under five years of age in 20 districts of East Java and East Nusa Tenggara (ENT). Hence, with the objective of addressing malnutrition in Indonesia and with the nutrition-centric experience and expertise in the Asia region, Nutrition International with the support from DFAT, Government of Australia, and GAC, Government of Canada, together with Government of Indonesia proposed to implement 'MITRA Youth' - an initiative to reduce anaemia and improve nutritional status of adolescent girls aged 15-18 years in 20 districts of East Java and East Nusa Tenggara provinces in Indonesia.

Program goal, objectives and approach

Goal: MITRA Youth aimed to improve nutrition for adolescent girls through increased access and consumption of WIFA supplements as well as reinstate the government's focus on the program for adolescent girls for improved health and education outcomes through evidence-based advocacy among the district, province and national governments. The program activities under MITRA Youth were mainly school-based, reaching 70-80% of the total girls in the age group 15-18 years enrolled in schools (based on senior high school attendance).

Key objectives:

Reduction in anaemia levels among school-going adolescent girls

■ Increase in the proportion of school-going adolescent girls receiving and consuming weekly IFA supplements as per the recommended dose

³ Based on the successful WIFAS demonstration project in West Java and Banten, documented as global case study by PMNCH in BMJ. (Roche, M.L., Bury, L., Yusadiredja, I.N., Asri, E.K., Purwanti, T.S., Kusumiati, S., Bhardwaj, A. and Izwardy, D. (2018) Adolescent girls' nutrition and prevention of anemia: a school-based multisectoral collaboration in Indonesia. BMJ 2018; 363 doi: https://doi.org/10.1136/bmj.k4541) ⁴MITRA means 'Partnership' in Bahasa.

Three pronged Program Strategy for MITRA Youth

ENABLING ENVIRONMENT

- >>> Strengthening government commitment for procurement of IFA supplements and integration with other programs of MoH, MoE, MoRA and MoHA
- >> National technical assistance on ensuring quality of IFA supplements, HMIS and promotion of national guidelines



PROVISION



- >>> Streamlining the supply chain, forecasting for supplies at schools, the district, province and national levels
- >>> Need based capacity building of health staff, frontline workers
- Streamlining program monitoring and supervision of IFA supplements at schools
- >>> Partnership with private sector



CONSUMPTION

Supporting BCI and use of appropriate BCI strategy for creating awareness and overcoming gender barriers to school attendance and other factors that impact adherence

(60 mg elemental iron and 400 mcg folic acid as per the national guidelines)

■ Increase in the proportion of adolescent girls with improved knowledge and awareness on anaemia, benefits of IFA supplements and how to overcome side effects of IFA

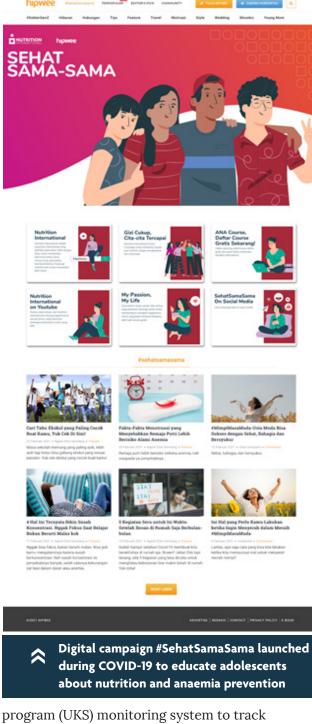
■ Increase in the proportion of adolescent girls that have knowledge on dietary diversification to improve iron intake through affordable dietary sources/fortified foods to improve iron intake and increase absorption

■ Increased commitment of the government (DHO and MoE) to provide IFA supplementation for adolescent girls **Program strategy:** To achieve the goal of the program, a three-pronged program strategy was adopted focused on (i) creating an enabling environment; (ii) improving provision; and (iii) increasing consumption.

The key approaches of the strategy included:
Strengthening government commitment towards programs for adolescent girls' health and welfare by highlighting their long-term benefits through evidence-based advocacy.

• Strengthening supply chain and forecasting of IFA supplement requirements for adolescent girls.

Refine and modify the existing school health



stocks and coverage, thereby strengthening supervision for IFA supplements administration through schools.

• Develop monitoring tools for improving the coverage and consumption of WIFA supplements among adolescent girls at school.

■ Working with the District Health Offices (DHO) and schools through the existing school health program (UKS) to improve delivery mechanisms by leveraging available opportunities for delivery as well as peer-group approaches.

Building capacity of healthcare staff, frontline workers, school-teachers and other key influencers on planning, delivery and monitoring of the WIFAS program. Facilitating behaviour change communication (BCC) interventions for increasing adherence to WIFA supplements, with focus on interpersonal counselling and nutrition education.

Geographical scope: MITRA Youth was implemented in 10 districts each of East Java and East Nusa Tenggara. Banyuwangi, Bangkalan, Bondowoso, Jember, Lumajang, Ponorogo, Ngawi, Pacitan, Sampang and Situbondo in East Java and Ende, Manggarai Barat, Nagekeo, Ngada, Sabu Raijua, Sumba Barat Daya, Malaka, Kupang Kota, Alor, Sumba Tengah in East Nusa Tenggara. NI proposed to implement MITRA Youth in the same program sites as that of MITRA, to leverage the programs' networks, operational strengths, resources and relations established with the government officials in these provinces.

Program duration: MITRA Youth grant agreement was signed in May 2017 and was to be completed on 30 September 2020. However, due to the global COVID-19 pandemic that hit the country in 2020, the program was proposed to be extended to complete the activities and ensure continued support to the Government of Indonesia (GoI) to implement the WIFAS program for adolescents even during the pandemic. To ensure the integration of lessons learned from MITRA Youth, safeguard an enhanced focus on micronutrient programming at the district and provincial levels, and complete the ongoing activities and few additional activities discussed with DFAT, the program was granted a No Cost Time Extension (NCTE) until May 2021. The key components of the NCTE phase were:

• Continuation of capacity strengethening of provincial and district governments to manage adolescent health programs.

Dissemination of lessons learned and best practices.

Advocacy for sustainable budget allocations.

- Involvement of the non-health stakeholders
- to support program implementation.

• Establishment of linkages between offline and online media for promotion of adolescent nutrition.

Contribution to improved adolescent nutrition, beyond the program's geographic scope and targets.

Program budget: The total project value was AUD 2,204,464. A detailed financial report on expenditures will be submitted to DFAT separately by 31 August 2021, as per agreement.



Relevance and Operating Context

Relevance

MITRA Youth has been a well-timed and topical intervention aligned with the GoI's national long-term and medium-term development plans - RPJMN, 2015-2019 and RPJMN, 2020-2024, which focus on the development of youth by improving human resources. The MITRA Youth program also aligns well with the 'National Strategy for Stunting Reduction' launched by the President and Vice President, that focuses on IFA supplementation for pregnant women. Based on the government's commitment, it is evident that nutrition is a national priority and MITRA Youth contributes to it. MITRA Youth also connects to DFAT's focus on addressing child undernutrition as highlighted in the ODE Brief, 2015 which states, "DFAT should ensure that the proportion of Official Development Assistance (ODA) invested in partner countries to address child undernutrition is appropriate to the country context".

Drawing from the global guidance for adolescent nutrition programming as per the Accelerated Action for the Health of Adolescents (AA-HA) report⁵, NI considers adolescents to be powerful agents of change, whose contributions need to be nurtured and augmented through meaningful engagement and participation. Therefore, in MITRA Youth in addition to the primary objective of reaching in-school adolescent girls with WIFA supplements, focus was also given on provision of nutrition counselling and engagement through evidence-based BCC strategy for engaging adolescent girls, teachers, parents and other key influencers.

Operating context

Nutrition International worked with local governments (provincial and district health offices, health facility head and staff, school-teachers) and the national government (Ministry of Health, Ministry of Education, Ministry of Religious Affairs, Ministry of Home Affairs and Coaching team of school health unit⁶) to implement various programs aimed at addressing malnutrition in the country. MITRA Youth effectively targeted schools as the delivery platform, and to create the desired impact, it successfully advocated for the inclusion of health and nutrition education in the formal curriculum.

⁵ WHO. 2017. Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. Geneva: World Health Organization; 2017. ⁶TIM Pembina UKS



In March 2020, when the COVID-19 pandemic hit the country and caused temporary closures of schools, Nutrition International tailored the program's approach and adapted to the digital route to impart nutrition education and create awareness on anaemia prevention and adolescent health.

The integrated approach additionally triggered inter-program and inter-sectoral collaborations between the health, education, social and religious affairs departments from district to the national level.

Nutrition International implemented the MITRA Youth (2017-2021) program in the same locations as that of the MITRA (2015-2020) program. This was proposed keeping in view the increased efficiency as the government counterparts overlapped for both the programs, and to capitalize on the relationships established as part of the MITRA program. Both the programs supported and strengthened the planning and implementation of government micronutrient supplementation programs. A large part of the costs associated with implementation of health and nutrition interventions were funded from local government budgets. Advocacy through MITRA and MITRA Youth programs facilitated in efficient utilization of the budgets. In addition, since NI worked closely with the PHO, NI field staff were based at PHO instead of having separate office, thereby reducing the operational costs for individual office and ensuring better engagement.

Nutrition International continues to build on the work done as part of the MITRA and MITRA Youth programs through its BISA (Better Investment of Stunting Alleviation) program which aims to reduce stunting among children through improved service delivery of nutrition services for children, pregnant women and adolescent girls in the West Java and East Nusa Tenggara provinces.

Beyond the on-ground implementation, in March 2020 when the COVID-19 pandemic hit the country and caused temporary closures of schools, Nutrition International tailored the program's approach and adapted to the digital route to impart nutrition education and create awareness on anaemia prevention and adolescent health through webinars and digital campaigns.

Child Safeguarding Policy

In 2017, at the time of signing the MITRA Youth grant contract, NI did not have a Child Safeguarding Policy (CSP). In order to fully comply with DFAT's requirements in this regard, NI developed an organization-wide CSP, which was adopted beyond this program and extended to all of NI's global and domestic programs in all countries in 2019. Over years, the CSP policy has been internalized in NI's systems and is made a default inclusion in all contracts signed with external vendors. All staff have been oriented about the policy and their role in child safeguarding



and regularly trained to making NI programs safer for children. A risk assessment exercise for CSP was completed for Indonesia's adolescent nutrition program in 2019, which was followed by the development of a risk mitigation plan.

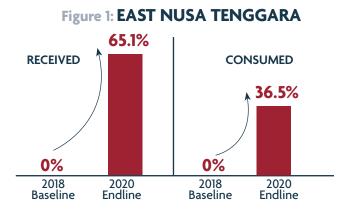


Achievement Towards Outcomes

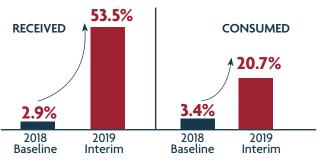
ITRA Youth was successful in ensuring an increased access and consumption of WIFA supplementsupplements by adolescent girls in schools in program districts across both provinces as reflected in figures 1 and 2.

In East Nusa Tenggara, the receipt of at least one WIFA supplements in the last six months prior to survey showed a nine-fold increase from 9.9% in 2018 (baseline) to 93.8% in March 2020 (endline). The consumption also increased ten-folds from 9% in 2018 to 89.7% in 2020. In East Nusa Tenggara none of the adolescent girls reported receipt and consumption of the recommended dose i.e 12 supplements in the last six months prior to baseline survey in 2018. This increased significantly; with two-thirds (65%) of the adolescent girls reporting receipt of the recommended dose and nearly one-third (36.5%) consuming it in the endline survey in March 2020. It was also found in the binary logistic regression analyses that those who were administered a supervised dose by the teacher were more than two times more likely to consume WIFA. In East Java, due to the sudden surge of COVID-19 in March 2020 leading to unexpected closure of schools, the survey was cancelled in consultation with DFAT. However, the results from interim

Receipt and consumption of 12 WIFA supplements in last 6 months among adolescent girls







survey conducted in 2019 showcase similar achievements as that in ENT. 54% and 21% adolescent girls reported receipt and consumption of recommended dose i.e 12 supplements in last six months prior to survey, respectively, during the interim survey (2019) as compared to 2.9% and 3.4% reporting receipt and consumption at the baseline (2018). Though the overall achievement was high, it was lower than the planned target of 80% and 60%, reciept and consumption of recommended dose respectively as per proposal. This may be attributed to the lack of availability of baseline data at the time of planning. In ENT, overall, the prevalence of anaemia (<12g/ dl) among adolescent girls remained around 50% with a reduction in moderate and severe levels of anaemia at endline. There was also a slight improvement observed in the haemoglobin levels (11.8 g/dL from 11.7g/dL) in ENT, which could be attributed to the substantial increase in proportion

of adolescent girls who received and consumed the recommended dose of WIFA supplements. This demonstrated that high consumption levels of WIFA were successful in stalling the increase in anaemia levels. In East Java, the anemia levels during the endline survey could not be measured due to the cancellcation of the survey amidst the COVID-19 pandemic.

It is important to note that the surveys were planned to measure coverage and adherence to WIFA supplements at the population level, with repeated cross-sectional surveys conducted at baseline in 2018, interim in 2019 and endline in 2020. NI cannot ascertain any increase or decline in the anaemia levels in the surveyed population as the surveys were not done on a cohort of school-going adolescent girls, rather on varied populations. It would not have been possible to follow a cohort as the original sample of school-going adolescent girls would have

KEY ACHIEVEMENTS OF MITRA YOUTH

66% (394,377) of the 600,000 girls	Reached with any WIFA supplements and nutrition education annually
54% (321,256) of the 600,000 girls	Received recommended dosage of 12 tablets in 6 months as per WHO guidelines
All the 5,859 junior and senior high schools	In 20 districts of East Java and East Nusa Tenggara were covered
1,735 front-line health workers	Received trainings on monitoring, reporting, forecasting and counselling skills
602 cross-sectoral stakeholders and 222 adolescent girls	Were trained through on the job trainings during supportive supervisits
2,376 copies of the training manuals	Distributed among school health teachers and <i>Puskesmas</i> staff
14 BCI materials developed	Distributed in 425 <i>Puskesmas</i> in 20 selected districts
More than 1.7 million people	Reached through www.hipwee.com with information about adolescents' health and anaemia prevention
3,340 participants (2,271 females and 1,069 males)	Attended webinar series all over the country
1,430,800 WIFA supplements for 7 districts in ENT	NI procured WIFA supplements after laboratory testing and attained national standard







Nutrition International developed a short video on anaemia prevention, WIFA supplementation and nutrition education for dissemination through Whatsapp among adolescent girls and boys, their caregivers and teachers



crossed the intended age group by the endline. During the course of the program, MITRA Youth had continued to reach adolescent girls with IFA supplements, provided nutrition education for health promotion and awareness, built capacity of healthcare providers, streamlined supply chain for WIFA and engaged with key officials from MoH, PHO and DHO to strengthen their commitment for the implementation of adolescent WIFAS program. The key achievements of the program are demonstrated on the previous page.

Key achievements under the program strategy components of enabling environment, provision, and consumption are listed ahead.

Enabling environment

MITRA Youth, through regular advocacy and engagement at national, provincial, district and *Puskesmas* levels, was successful in encouraging the policy makers to showcase their commitment through:

■ Increase in budget allocation for organizing declaration events, socialization meetings, procurement of WIFA supplies, printing and distribution of BCI material

 Integration of WIFA supplementation program in the overall adolescent health program and prioritizing it with the stunting reduction program
 Revision and modification of guidelines and standards* Strengthened coordination and integration among representatives from multisectoral departments

National Level

An adolescent nutrition policy brief⁷ was developed and disseminated at a national workshop that included recommendations to include adolescent nutrition in the next midterm national

Public sector policy makers renew leadership of and commitment to more effective implementation of WIFA program for adolescent girls, specifically to provide iron and folic acid (IFA) supplements to school-going adolescent girls including improved policies, guidelines, product standards and increased budget allocations.



⁷ The adolescent nutrition policy brief was developed by GAIN, with support from NI through a workshop in December 2018 and a dissemination meeting in April 2019. *Nutrition International's advocacy and engagement with MoH resulted in finalization of national guidelines in 2016 on anaemia prevention and control for adolescent girls and women of reproductive age which included recommendation to provide IFA with 60mg iron and 400mcg folic acid weekly throughout the year.

MITRA Youth helps WIFA program in East Java especially in stakeholders coordination, capacity building and program's monitoring.

-Section Head of Public Health, East Java PHO



planning (2019-2024) and to bring the policy brief to higher level of decision making to the Coordinating Ministry for Human Development and Cultural Affairs for increased focus of cross-sectoral programs on improving adolescent nutrition.

■ Representatives from multisectoral departments i.e. Health, Education, Religious Affairs and Home Affairs, PHO of East Java and ENT were sensitized on the importance of their support towards implementation of the WIFA supplementation program through regular workshops and meetings conducted by NI at national, provincial and district level.

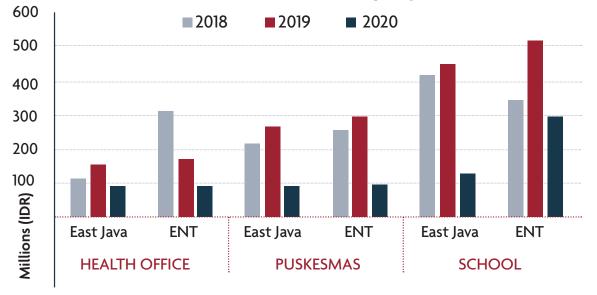
■ Recording and reporting formats to track the receipt and consumption of WIFA supplements among adolescent girls were revised and modified guidelines were printed and distributed to all districts as a result of regular NI advocacy.

Province level

■ WIFA supplementaiton program was integrated with various health and nutrition events at the provincial level. NI supported in socialization of the program among stakeholders across departments and cadres to seek greater collaboration for implementation.

• In East Java, WIFA supplementation program was promoted along with the stunting prevention campaign in all 38 districts. Provincial Education Office (PEO) socialized the program during teachers meeting and the PHO socialized it among heads of health promotion section to seek their support in printing BCI materials and promoting the program.

Figure 3. Estimated budget commitment by different institutions towards WIFAS program



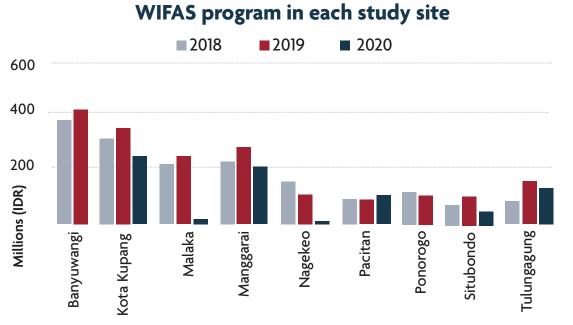


Figure 4. Estimated budget commitment towards WIFAS program in each study site

• In ENT, the PHO in collaboration with NI, conducted a WIFAS campaign in four selected schools of Kupang as part of the National Nutrition Day 2019, reaching more than 650 adolescent girls.

Stakeholders' commitment to the WIFA supplementation program was reflected in four circular letters issued from the PHO and PEO of EJ (2) and ENT (2) to highlight the use of WIFA technical guidance for planning, implementation, monitoring and reporting to support WIFA program's implementation.

■ District education office (DEO) of all ten districts in EJ committed to support the WIFAS program by including monitoring of WIFA consumption in the 'My Health Report book'⁸ which will be available to all students through the UKS program from July 2021 onwards.

■ Socialization meetings were conducted in the provinces for both – NI-supported and other districts – using the provincial budget to introduce the WIFAS program to nutrition officers, teachers, adolescents, and to increase their knowledge and awareness about the program.

Nutrition International supported the drafting of the five-year action plan of RAD-PG (Regional Action Plan for Food and Nutrition) in ENT and successfully advocated for inclusion of indicators for adolescent girls' health in the next RAD-PG targets.

■ In March 2021, NI together with EJ's and ENT's provincial and district stakeholders (including offices of Health, Education, Religious Affairs, BKKBN, National Scouts, religious leaders, academia and professional group) developed an action plan to ensure program sustainability in light of COVID-19 challenges and phase-out of NI's support.

District level

■ Commitment of the local district government, *Puskesmas* and schools to the WIFAS program was reflected by the increase in the budget allocated during 2018 and 2019 for the program (Fig 3 and 4). The estimated budget increased by 20% in *Puskesmas* in both the provinces. In schools, it was estimated to be higher in ENT (35%) compared to EJ (8%)⁹. However, in 2020, the government prioritized the budget towards management of the pandemic which resulted in a sudden decrease in the budget. This analysis is based on the information shared by DHO officials on the budget allocations during their interviews conducted by a third party.

Policy makers in 17 of 20¹⁰ districts organized events to show their commitment towards the WIFAS program through signatures on declaration,

⁸My health report book/Buku Raport Kesehatanku is a health information and recording book that consists of information about health program implemented at schools, and helps in recording heath services received (results) by students.

⁹Good Practices and Lesson Learned on Anaemia Prevention Program Among Adolescent Girls in the Province of East Java and East Nusa Tenggara

Partnership with MITRA Youth - Nutrition International, Center for Health Research Universitas Indonesia, 2021

¹⁰ WIFA declarations organized in 8 NI districts in East Java (using own budget 6 meetings - in Sampang (2 meetings), Ngawi (1 meeting), Jember (1 meeting), Banyuwangi (2 meetings); and 6 meetings using co-shared budget with NI in Bangkalan, Bondowoso, Ngawi, Ponorogo, Pacitan and Banyuwangi,

respectively). In addition, in 2 non-NI districts in East Java (using own budget 1 meetings in Tulungagung; and 1 meeting using co-shared budget with NI in Pasuruan). In East Nusa Tengarra, 9 districts (using own budget 5 meetings in Ngada, Malaka, Manggarai Barat, Alor and Sumba Barat Daya and 4 meetings using co-shared budget with NI in Ngada, Ende, Sabu Raijua and Kota Kupang)

Based on the experience of the support provided by NI, we can continue through the budget or through Dana Alokasi Umum/General Allocation Fund (DAU) or Dana Alokasi Khusus/Special Allocation Fund (DAK). It may not be exactly like NI, but we will try to do our best to implement WIFA program with the available budget, either through the Bantuan Operasional Kesehatan/ Health Assistance Fund (BOK) at the Health Office or the Community Health Center or through the DAU Sir.

(IL, DHO, Sabu Raijua)



speeches on the importance of the program and mass administration of IFA supplements to school-going girls in the presence of senior dignitaries like the Head of District and the Head of DHO using their own budget or co-shared with NI.

• In EJ, eight NI-supported districts (Bangkalan, Sampang, Bodowoso, Ngawi, Ponorogo, Pacitan, Jember and Banyuwangi) and two other districts (Pasuruan and Tulungagung) conducted advocacy events

• In ENT, nine NI-supported districts (Kota Kupang, Nagekeo, Manggarai Barat, Ngada, Ende, Sabu Raijua, Malaka, Alor, and Sumba Barat Daya) conducted advocacy events

Socialization meetings were organized in seven NI-supported districts, using their own budget to introduce the WIFAS program among the key stakeholders at province, district and school levels (including teachers and adolescents) to increase their knowledge on anaemia prevention and WIFAS, and encourage them to implement the program regularly. Some of these meetings were also budgeted through funds from education and health offices and the education and social welfare offices, reflecting increased commitment of non-health stakeholders.

■ In EJ, Bondowoso and Sampang districts conducted WIFAS celebration as part of the government's efforts to prevent stunting. The ceremony was inaugurated by the Head of District and attended by girls from junior and senior high schools.

DHOs have started conducting activities and using their own budget to support WIFAS programming, such as printing of BCI materials, and training for teachers and Puskesmas staff.

• Thirteen districts¹¹ (6 from ENT and 7 from EJ) replicated NI's BCI materials¹² using their own budget.

• Six districts¹³ (3 from ENT and 3 from East Java) used their own budget for the training of district facilitators, provincial facilitators, nutrition/UKS programmer, school management, school health teachers, and adolescent girls and boys and their representatives, to strengthen the WIFAS program implementation.

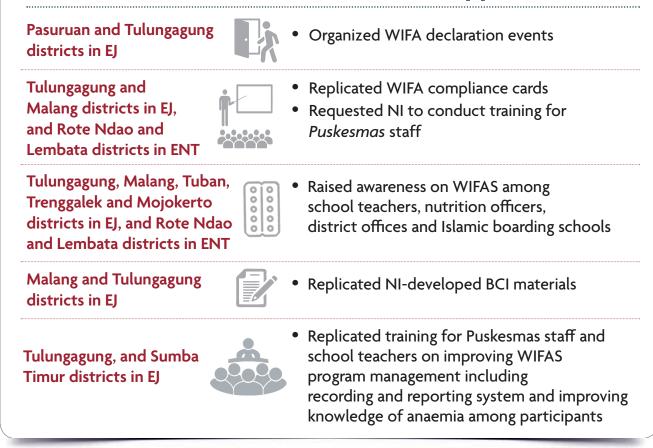
■ 8 circular letters by the health and education offices of districts in EJ (6) and ENT (2) were sent to nutrition programmers at *Puskesmas* and head masters/teachers at schools that served as a legal document to improve coordination between the *Puskesmas* and school for the implementation of WIFA program. This reflected the increased

¹¹ 7 districts in EJ (Jember, Sampang, Ngawi, Bondowoso, Bangkalan, Ponorogo and Pacitan district) and 6 districts in ENT (Kota Kupang, Sumba Tengah, Alor, Nagekeo, Manggarai Barat and Malaka district).

¹² BCI materials replicated are compliance card, poster, WIFA calendar, Video, Booklet, banner, leaflet, and flipchart

¹³ 3 districts in EJ (Ponorogo, Situbondo and Bondowoso) and 3 districts in ENT (Sabu Raijua Sumba Barat Daya, and Nagekeo).

Increased commitment to the WIFAS program demonstrated in non-MITRA Youth supported areas



Puskesmas staff and school health teachers recognize the importance of WIFA supplementation program through improved capacity for timely provision of adequate amounts of supplements and effective planning, monitoring, management and appropriate counseling



commitment to establish WIFAS programs and to ensure improved monitoring, including the reporting and recording of WIFAS distribution and consumption.

Provision

Puskesmas staff and schools' health teachers reported improved knowledge and skills to plan, monitor and implement the WIFA program. They were supported through district level trainings provided by NI, in addition to the continuous technical assistance by NI's extenders on improving the procurement, supply forecasting, recording and reporting on Health Management Information System (HMIS) formats.

■ Increase in knowledge and skills of teachers were observed in ENT from the findings of the endline survey (Feb-Mar 2020). The proportion of teachers who could answer at least two benefits of WIFA supplements, increased from 42.9% (baseline) to 64.4% (endline). Teachers who could answer at least two consequences of anaemia increased from 51.6% (baseline) to 70% (endline). The number of teachers who could answer at least one method to overcome the barriers to consume WIFA supplements increased from 76.9% (baseline) to 93.3% (end-line). Training facilitated by NI on recording and reporting system was very useful for DHO and *Puskesmas* staff

—Section Head of Family Health, West Manggarai DHO



Continuous technical assistance from NI at DHO and *Puskesmas* level helped to streamline and strengthen the HMIS for data collection on distribution of WIFA supplements among adolescent girls and monthly submission of the recording and reporting formats through continuous technical assistance from NI at DHO and puskesmas level. Further, NI supported capacity development of PHO and DHO staff by training them on recording and reporting system for the distribution of WIFA supplements to girls from schools to district level as per the updated 2020 National guidelines to improve data analysis and management.

Availability of adequate supplies was ensured through regular advocacy for adequate budget allocation and timely procurement of WIFA supplements. 18 (9 in ENT, 9 in EJ) of the 20 districts were identified as government's prioritized districts for stunting reduction program, hence, 100% WIFA supplies were provided by MoH in these districts.

■ Technical assistance provided by NI's extenders to PHOs and DHOs on real-time supply forecasting and procurement planning resulted in improved capacity for management of supplies of WIFA supplements and their timely distribution. This enhanced capacity further cascaded to the district and *Puskesmas* levels resulting in improved planning, implementation and monitoring of the program.

■ In 2020, three districts of EJ were supplement declared as red zones of COVID-19 and locked down, which consequently disrupted delivery and distribution of WIFA supplements. Upon reopening of these disricts, NI supported the schools and *Puskesmas* to re-distribute WIFA supplies and optimally utilize the IFA stocks and reduced the risk of product expiration.

Consumption

Nutrition International modified the BCI strategy and materials by accommodating inputs from MoH, PHO, PEO, PRAO for increased engagement and ownership of adolescents towards the WIFAS program. The BCI strategy included issues related to Water Sanitation and Hygiene (WASH) and promotion of deworming. The strategy utilized existing channels for promotion of nutrition education in schools, thereby ensuring continuous education of adolescent girls about the benefits of WIFAS. Adolescent boys were also included as secondary target audience, as they are also vulnerable to anaemia and require nutrition education. Continuous engagement with the adolescents resulted in many positive behaviour changes.

Adolescents became motivated to engage with fellow students, as well as their influencers/ parents. During parent meetings and/or report card distribution days they displayed campaigns and posters developed with the support of BCI materials and conducted peer counselling about

School-going adolescent girls have improved knowledge and skills on benefits, when and where to seek WIFA supplements, method of administration, including the correct frequency and duration and managing side effects to ensure adherence.



Innovation

MITRA Youth together with EJ's PHO initiated an innovative program called "Putri Ranaemia and Canting" involving UKS and Indonesian Scouts (Pramuka) to ensure compliance of WIFAS. Here, one adolescent (Scout member) monitored three adolescent girls to ensure consumption of WIFA supplements



and provided nutrition education to them. The program received endorsement from regional planning agencies and has been adopted for implementation in all districts from 2022, with budget being allocated for it.

We are close friends, if one of us take it, all of us will take the WIFA supplement

-A school-going adolescent girl, Ende district, ENT

healthy diet, reminders to take WIFA supplements and the benefits of WIFAS.

Adolescent girls and boys, part of the Adolescent Health Cadre, acted as peer counsellors. Using BCI materials, they counselled their fellow students as well as the student's influencers/parents on the benefits of WIFAS, anaemia prevention and other key messages for promoting adolescent health and nutrition.

■ Nutrition International, in collaboration along with the MoH and National Population and Family Planning Agency conducted a series of five webinars in November – December 2020 on adolescent nutrition and health. These webinars became a platform to engage with adolescents and take their views on anaemia prevention and stunting reduction as well as educate them about on reproductive health programs, thereby making them a part of the process of arriving at strategies to reduce stunting.

Nutrition International collaborated with a digital portal popular among adolescent – www. HIPWEE.com – to conduct a digital campaign¹⁴ on adolescent health and nutrition. The three months long campaign reached more than 1.7 million adolescents and helped to improve their knowledge about anaemia prevention, balanced nutrition and menstruation hygiene management.

Along with www.HIPWEE.com, NI organized a virtual content creation workshop to train 34 participants on developing digital content including blogs, infogrpahics and vlogs about good nutrition and overcoming barriers of nutrition.

■ Exposure to BCI material as well as education about and promotion of WIFA supplements by school teachers and *Puskesmas* staff resulted in increased knowledge of adolescent girls. In ENT, the proportion of adolescent girls who could describe one benefit of consuming WIFA supplements and explain how to overcome at least one typical barrier/side effect of IFA consumption increased (Refer Annex on Program Evalutaion). The proportion of school absentees due to sickness dropped from 81.5% (baseline) to 45.9% (endline). The mean number of days of absence due to sickness also dropped from around three days to under two days.

■ Nutrition International also supported teachers and students in 'learning from home' during COVID-19, by developing online materials including nutrition education videos. Through these digital materials adolescent girls became better aware of anaemia prevention and were able to voluntarily report their IFA consumption to their teachers via Whatsapp Group specially created during distance learning.

• Nutrition International developed BCI materials (posters, compliance card and video) incorporating COVID-19 health protocols. These materials will be used once the schools re-open and are aimed at improving school attendance and better equipping students to maintain COVID-19 health protocols in schools.

¹⁴ https://www.hipwee.com/sehat-sama-sama/



Constraints, Challenges and Mitigation Strategies

■ High staff turnover and recruitment at different levels: Frequent staff turnover at PHO, DHO, school and facility level was a continuous challenge. However, this was addressed through regular coordination meetings and continuous advocacy by NI at PHO and DHO level to sensitize the new staff on the program objectives and strategies.

Lack of coordination between PHO and DHO: Each department had its own priorities and often it was challenging to arrive at common consensus for meeting or training dates. Since NI had presence at both provincial and district levels the staff developed a good rapport with PHO and DHO and ensured better coordination between the departments.

Lack of awareness among the stakeholders and frontline workers from non-health sectors about their role in WIFA supplementation program:

Stakeholders from the education, religious affairs and UKS offices were unaware of and did not understand the WIFAS program. As a result, limited support was extended by them as they perceived anaemia to be tackled only as a health issue by the health department. NI focused its advocacy among these stakeholders and built their capacity to get them on board for the program implementation in all schools under their management.

Lack of adequate supply of IFA supplements from central to district level: MoH allocates only 20-25% for procurement of IFA supplements for adolescent girls and it is expected that the districts will procure the remaining from their own budgets. However, since the launch of the national stunting prevention program, few districts from the program areas were identified as priority districts and 100% supplies were provided to these districts by MoH. NI supported few districts in ENT to bridge the supply gap by providing budget for procuring IFA supplements in 2019. In other districts of EJ and ENT, NI continued to advocate for increased budget allocation for IFA procurement from district level.

■ Gaps in supply chain management: Often there was irregular distribution of supplements by DHO to *Puskesmas* and schools as few facilities received more supplies than their requirement, while others had inadequate stock or stock outs. NI assisted DHO staff to identify these gaps and provided technical assistance to first utilize supplements which are near expiration and re-distribute supplements during lockdown for efficient utilization of stocks.

■ Irregular collection and reporting of HMIS data from school to province level: Frequent revisions in the recording and reporting format for WIFA and interdistrict variations in the guidelines for the use of formats, resulted in errors and inconsistency in the HMIS data collect and reporting. Further, HMIS data reporting chain was very long – from schools to *Puskesmas* to district to province to MoH – which resulted in incomplete and untimely submission of HMIS data. NI facilitated in generating awareness and understanding among school teachers and *Puskesmas* staff about the revised recording and reporting formats, and provided regular support for compilation and submission of reports.

Lack of high-level adolescent nutrition policy:

The current policy on adolescent nutrition, issued by MoH in 2016 pertains only to WIFAS program, while the adolescent nutrition program covers many issues, requires engagement with various stakeholders, and coordination led by higher offices instead by MoH alone. NI, together with GAIN, UNICEF and other agencies developed a policy brief to bring more attention to adolescent nutrition and is continuing to advocate for the inclusion of adolescent nutrition in the next Mid Term National Planning 2019–2024.

Delays and interruption in program implementation due to COVID-19: As the

pandemic hit the country, PHOs and DHOs prioritized COVID-19 response, which resulted in de-prioritization of other nutrition programs including the adolescent program. The largescale social distancing policy resulted in school closures and delayed an/or cancelled Posyandu¹⁵ sessions. Sudden school closures also did not give a chance to teachers to liaise with *Puskesmas* and provide sufficient IFA supply to adolescent girls to consume at home during the school closures. NI sought guidance from MoH on WIFA program implementation during the pandemic and led discussions with *Puskesmas* and school staff to devise alternative ways to distribute IFA supplements to the adolescent girls at home. • Limited knowledge of local religious leaders (who lead education in Madrasah) addressed through nutrition education and advocacy with MoRA for increasing budget allocation to conduct WIFAS orientation.

During the pandemic we have allocated a meeting spot. At the meeting spot, we involved all peer (youth cadres) as coordinators, who approached their friends and distributed IFA supplements. So, if in one sub-district there are three or four meeting spots, we can coordinate with them and ensure that the WIFAS program keeps running even during the pandemic.

-(MS, MAN Kota Kupang)



 $m{\hat{s}}$ WIFA supplements being distributed via a drive-through organized during the COVID-19 pandemic.

¹⁵ Posyandu is an Integrated Health Service Post, done monthly for pregnant and lactating mother and children under five to monitor their nutritional status.



Monitoring, Evaluation and Learning

Monitoring

Strengthening HMIS for recording and reporting on WIFA supplementation program

Although the WIFA supplementation program has been in place in Indonesia since 2016, the recording and reporting was not well implemented. NI advocated for streamlining and strengthening the HMIS for the WIFA supplementation program, both at the national and sub-national levels. NI undertook a review of the existing tools and systems to identify gaps, and suggested modifications to improve the recording and reporting of WIFA supplements distribution data. Based on advocacy by NI, MoH revised the recording and reporting formats to track the receipt and adherence of WIFA supplements among adolescent girls and included them in the WIFA guidelines that were printed and distributed to all districts in August 2018. NI supported in promotion

of these revised formats in provinces and districts, and provided the required technical assistance to provincial and district-level staff for correct utilization and timely submission of reports in appropriate HMIS format from 2019 onwards. In 2020, the WIFAS program implementation was disrupted by the sudden closure of schools due to COVID-19, which caused interruption in the recording and reporting of the distribution of IFA supplements. Unique methods were conceptualised to track consumption of the IFA supplements, like reporting by Whatsapp and self-reporting by sharing videos and photos of consumption. Further, in 2020, MoH updated the HMIS based on recent technical implementation guideline on nutrition surveillance¹⁶. NI supported in building capacity of 939 PHO and DHO staff (796 females, 143 males) in EJ and ENT to orient them on the revised HMIS and improve recording and reporting

¹⁶ Pedoman Pelaksanaan Teknis Surveilans Gizi, Kementrian Kesehatan Republik Indonesia, 2020



With MITRA Youth's continuous monitoring support, the HMIS' WIFAS reporting was strengthened gradually and data collection was streamlined from schools to *Puskesmas*, districts and provinces.

for the distribution of WIFA supplements among adoelsent girls. Though staff from all districts of the two provinces have been trained on the new HMIS format, some puskesmas and DHO staff continue to require further assistance in using the new format.

Evaluation

Nutriton International hired a third party to conduct a baseline survey in February-March 2018, followed by an interim survey in May 2019 in the intervention provinces of EJ and ENT, and in one comparison (non-intervention) province of South Sulawesi. This was followed by an endline survey conducted in March 2020. However, while the endline data collection for ENT was completed, the data collection in EJ (intervention province) and South Sulawesi (comparison province) had to be suspended due to outbreak of COVID-19 and emergency travel restrictions.

The three surveys were undertaken by South East Asia Food and Agricultural Science and Technology Center (SEAFAST), Bogor Agriculture Institute. All surveys were designed as a cross-sectional survey with multi-stage ramdomized sampling design comparing the pre and post invervention program indicators with a comparison group. It was a mixed-method study including the use of both quantitative and qualitative methods for data collection. Ethical approval was obtained from the Ethics Committee, Faculty of Medicine, University of Indonesia. Research clearance and permission was also sought from authorities in the Ministry of Internal Affairs (national level), as well as province, district and schools. Assent and informed consent (including consent from parents) was obtained

from all participants involved in the studies. The objectives of the surveys were to estimate coverage and adherence of WIFAS among school-going adolescent girls and assess knowledge and practice-related indicators. The key findings from the survey are provided in Annex B and the detailed program evaluation report has already been shared with DFAT.

Lessons learned

■ Intensive advocacy and constant communication with province and district level officials is needed to ensure sustained commitment towards budget allocation for the WIFAS program. This can often be resource intensive and time consuming, hence, needs to be adequately incorporated in the project implementation at the planning stage.

• Ownership by provincial and district level stakeholders was ensured through regular engagement and consultation during the development of program materials like training manual, BCI strategy and related materials for strengthening program implementation.

Regular engagement with district level stakeholders such as staff of Puskemas and schools and multisectoral stakeholders was necessary to update them about new national guidelines and circulars and address their problems related to program implementation.
 Direct supervision by teachers played an important role in increasing consumption of the nutrition supplements. Future replication or expansion of WIFAS programs would perform better with inclusion and involvement of school

or health staff in implementation.

In the past, when we invited cross-sectors, it was very difficult to attend and coordinate. Thank God, after being accompanied by NI across sectors, I became more caring and knowledgeable. Now coordination with cross-sectors is easier, even if there are obstacles in the field.

-(FH, Dinkes Banyuwangi)



• Experience sharing and cross learning between districts was a huge success which motivated policy makers to replicate the best practices and improved coordination between departments within DHO as well as with external stakeholders outside of the DHO.

Development of BCI strategies and materials which were adapted to the local context such as use of messages in local language and pictures increased their ownership by healthcare staff and teachers and improved counselling for better coverage and adherence among beneficiaries.

Encouraging adolescents' participation in designing BCI content related to their health and well-being and anaemia prevention enriched the quality of the BCI materials and also ensured that messages on factors that needed attention such as benefits and side-effects of consuming WIFA tablets, problems faced by adolescents to receive WIFAS during the pandemic and access to nutrition counseling for successful implementation of the program are emphasized (Refer to Annex E for details).

■ Engagement of men (teachers, health care workers, fathers, cargivers etc) and adolescent boys play an important role in the successful implementation of the program. Participaton of adolescent boys in school in nutrition education sessions and as peer counsellors as well as inclusion of other male members of the community led to a buy-in for the program.

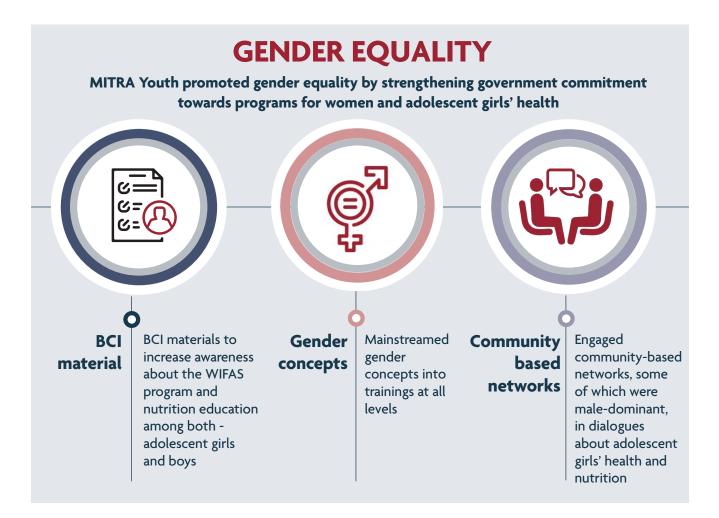
■ Use of social media to generate awareness among adolescents and their care-givers and influencers and use of digital platforms like WhatsApp and Facebook proved to be effective, especially during the COVID-19 pandemic when interpersonal counselling and routine monitoring was not possible.

Gender Equality

Programs aimed at improving nutrition and disseminating nutrition education have a significant impact on a girl's likelihood of continuing and completing higher education as well as academic success and economic productivity. With increased nutrition awareness, coupled with increased participation in nutrition and health programs, empowers girls to make informed decisions about their own and their families' nutrition and diets, for now and in future. MITRA Youth promoted gender equality by strengthening government's commitment towards programs for women and adolescent girls' health, strengthening supply chain and forecasting of IFA supplements for women and adolescent girls, developing skills and potential opportunities for economic empowerment for healthcare staff and frontline workers.

Behaviour Change Intervention (BCI) materials for MITRA Youth were developed to increase awareness about the WIFAS program and nutrition education for both - adolescent girls and boys. Male students who were also members of the school health committee were trained as peer counsellors and they also used the BCI materials for counselling their female school mates. Boys not only supported girls by reminding them to consume WIFAS, but also helped record and report WIFAS distribution and adherence.

Mainstreamed gender concepts into trainings at all levels (training of trainers, training of districtlevel health officials, school health teachers and clinic staff). In training sessions on gender, facilitators and participants were taught basic



concepts of gender, differences between gender and sex, gender roles in society with a view to understanding gender inequalities which may be common in the society, and ways these inequalities could be ratified. Most clinic staff and frontline workers are women, especially nurses and midwives. During on-the-job training, special attention was given to sensitise the health and education officials on prevalent gender barriers to reduce gender bias, and ways to provide improved gender sensitive services. NI encouraged more females to participate in program activities such as peer counselling and becoming champions for their community. The program built the capacity of health staff and cadres in the health sector, more than 80% of whom were women. At the end of the program, more than 83% of the 7,739 participants from meetings funded by NI were female and 554,156 were adolescent girls. Representation of women and girls in program meetings led to enhanced access to information, which encouraged them to make more decisions about their health. MITRA Youth engaged community-based

networks, some of which were male-dominant, in dialogues about adolescent girls' health and nutrition. The community-based networks involved in the WIFAS program ranged from school teachers, Puskesmas cadres, family members to the school-based health and red-cross groups reaching community-based youth groups. Invariably, these networks included the engagement of men and boys – fathers, brothers and adolescent boys who were members of the school health committees, and even community elders. The program engaged with these stakeholders during various meetings, trainings, webinars to raise their awareness about adolescent girls' health and nutrition. Not all family members welcomed the interventions and had divergent views. This further led to initiation of dialogues among parents, adolescent boys, youth groups and men in the community about adolescent girls' health and nutrition. Recent anecdotal reports from the program beneficiaries, school teachers and cadres show that there is increase in awareness and positive reception of the WIFAS program among family members and community. This demonstrates the important role men and boys could play in the successful implementation of the program. In the current context of COVID-19 and school closures, MITRA Youth, emerged as an important catalyst in continuing constructive participation with and empowering adolescent girls, and has resulted in creation of gender sensitive interactions in the community and at household level.

ga tercipta sinergi edukasi yang konkrit. gembangkan Teknologi Informasi dan Komunikasi dalam

belajaran dan administrasi sekolah. Ibangun kepercayaan dan kepedulian alumni terhadap Imaternya.

gembangkan jalinan kemitraan dengan lembaga-lembaga baik yang bergerak di bidang pendidikan maupun di ng lainnya.

Sustainability

ITRA Youth has been successful in introducing practices of prioritizing health and nutrition among adolescents through its program interventions which have been replicated by the districts and schools in the program provinces using their own resources. In many districts, budget has been earmarked for purchase of WIFA supplementsupplements to ensure an uninterrupted supply. MITRA Youth has been successful in building a community of young, energetic adolescents who are better informed about their health, especially anaemia, and are ready to take steps towards improving it. BCI tools introduced by MITRA Youth including the audio-visual material, flipcharts and posters have been acknowledged by stakeholders, health staff and UKS teacher to be effective in building a social and behavior change among

adolescent girls towards WIFA consumption and nutrition education for anaemia prevention. Nutrition International facilitated a Bahasa Indonesia voice over and subtitle for Adolescent Nutrition and Anaemia course (ANA course), an online course developed by NI's technical expertise that equips stakeholders with the right knowledge on adolescent nutrition to improve the health and nutrition of adolescents in Indonesia. MITRA Youth has contributed to improving adolescent nutrition even in non-intervention districts. Inclusion of all districts at the advocacy meetings resulted in an increasing interest and commitment from non-intervention districts, which conducted trainings and socialization meetings with NI as resource persons as well as requested soft copies of BCI materials which were then replicated using their own budget.

In 2017, we received assistance from NI and we were given a compliance card, flipcharts, posters and pocket books for teachers, adolescent girls and also for parents.. These materials really helped us in imparting nutrition education.

-(WB, MVT, Dinkes, Malacca)

MITRA Youth's focus was on senior high schools, however, NI provided modified copies of BCI materials for junior high school as well, so that practices of adolescent nutrition can be rooted at an earlier age. As a result, when districts conducted any events and trainings, teachers and students from junior high schools were also engaged.

The last year of the program was particularly challenging due to the pandemic. However, adapting to the new normal, NI developed new BCI tools for adolescents, teachers and parents to ensure that they have the correct information related to COVID-19 and the safety guidelines issued by the government. Additionally, an innovative intervention was conducted to engage adolescents in creating social media content to improve compliance to WIFA and strengthen anaemia prevention. MITRA Youth provided a platform to strengthen the WIFAS program and ensure its smooth continuance. Additionally, it create a network for girls to stay in touch, encourage each other to complete high school education, and pave the way to increased productivity and empowerment in the future.



Sustaining WIFAS program during COVID-19

The most encouraging steps towards sustainability of MITRA Youth have been taken during the last year when the school-based WIFAS program faced interruptions due to lockdowns and school closures. Many healthcare providers, school teachers, community members, members of youth groups and adolescent girls themselves came forward to ensure continuation of WIFAS distribution at the community and household level, developed innovative ways to monitor the supplementation, and built networks to disseminate nutrition messages. Some of these heartening sustainable practices have been documented by Nutrition International on its website¹⁷.

 v Preventing anaemia is critical to closing the gender gap. When schools closed, these teachers got creative https://www.nutritionintl.org/news/all-field-stories/teachers-prevent-anaemia-covid-19-indonesia/

Communities support adolescent health amid COVID-19 school closures https://www.nutritionintl.org/news/all-field-stories/communities-support-adolescent-health-amid-covid-19-school-closures/



Recommendations

A holistic approach to adolescent nutrition programming that includes deworming, menstrual hygiene management (MHM), and WASH integrated with WIFAS and nutrition education is required for a strengthened asolesent program.
 Best practices and learnings from MITRA Youth such as health-system strengthening, adolescent participation and coordinated multi-stakeholder engagement can be replicated and adopted nationwide for an improved implementation of Anaemia Reduction Program for Adolescents.

Establish platforms or channels of communication with adolescents, teachers and parents to seek their feedback in designing and implementing a robust anaemia reduction program for adolescents. Utilization of digital platforms such as Zoom used to conduct workshops, along with social media platforms like WhatsApp, Instagram, TikTok and HIPWEE.com help to disseminate nutrition education and generate awareness on WIFA program to a large audience.

DFAT along with NI and other global partners with the support of Government of Indonesia can explore opportunities to expand the WIFAS program for out-of-school adolescent girls.

Use of eco-friendly methods to dispose / recycle waste generated from WIFAS packaging (box and alumunium packaging) can be explored by the Government.



Annexes

Annex A: Activity Implementation (Efficiency): Key Activities and Outputs

Annex B: Program Evaluation Key Findings

Annex C: List of BCI Materials

Annex D: Project Implementation Plan

Annex E: 'Nothing about us, without us': Lessons from participatory activities implemented in MITRA Youth

Annex A: Activity Implementation: Key Activities and Outputs

Key activities

Details of the activities undertaken during the program implementation period have been detailed in the six semi-annual reports submitted previously to DFAT during 2017 to 2020. This section below presents a summary of the key activities completed during the program period.

1. Preparatory period (May 2017 to June 2018)

Implementation of MITRA Youth was initiated in May 2017 with a focus on preparatory activities such as recruitment, initial briefings with relevant stakeholders and launch of the program.

■ Program launch: Based on discussion with MOH's Director of Community Nutrition and in consultation with DFAT and Global Affairs Canada (GAC) in August 2019, it was agreed to have a joint launch of MITRA Youth and Right Start Programs in Jakarta. Later, in consultation with DFAT and GAC, the joint program launch was conducted in the form of a workshop on May 15, 2018, to coincide with International Women's Day.

■ NI facilitated meetings with PHOs, DHOs and Education and Religious Affairs officials to sensitize them about the guidelines and WIFA program for adolescent girls. From these meetings it was found that no training on WIFA supplementation was conducted for health workers or teachers, and no IEC materials were printed or disseminated in the schools.

• A WIFA program training manual was developed and finalized based on input from key stakeholders in national, province and district level including components of WASH, gender and nutrition education.

■ Formative research was completed in April 2018 in two selected provinces to gain an understanding of current knowledge, perceptions, and practices of the community with regard to WIFA which was used to finalize the BCI strategy to improve awareness regarding dosage, adherence and benefits of the WIFA supplements.

■ BCI strategy was reviewed and finalized with during a stakeholders workshop with participants from MoH, PHO, PEO, and PRAO.

Developed communication materials for

the current program that include a booklet (for adolescent girls, parents, adolescent boys, teachers), posters, flipchart for health staff and teachers and a short video intended for all target audiences.

■ A provincial-level, 4-day Training of Trainers (ToT) was conducted for participants from the PHO, the Provincial Education Office, the Provincial Religious Affairs Office the UKS office and Widya Iswara¹⁸ on the National Policy of Anaemia Prevention and Control Programs, adolescent development stages, basic concepts in gender, anaemia in adolescent girls, balanced nutrition, WIFA management, WASH to support anaemia prevention, effective communication skills, BCI, nutrition education and counselling, nutrition advocacy and facilitation techniques.

2. Program implementation period (July 2018 - September 2020)

During this time, the following activities were implemented during the program implementation period have been summarized below under Enabling Environment, Provision and Consumption:

Enabling Environment

Under this NI undertook regular meetings with PHO, DHO and *Puskesmas* staff to strengthen their commitment to WIFA program, to disseminate key findings and lessons learned from other programs, share updated guidelines, revised tools for recording and reporting and BCI materials.

National workshops conducted for finalization and dissemination of the draft policy brief for improved adolescent programming.

Conducted meetings for socialization of the new WIFA guidelines at PHO and DHO level and provided technical assistance in revision of recording and reporting formats.

• Conducted 2 advocacy meeting in EJ and ENT, for the streamlining and strengthening of the HMIS for the WIFA program both at the national and sub national level.

Conduct advocacy meetings with key stakeholders from PHOs and DHOs to sensitize

¹⁸ Widya Iswara has experience in training of civil servants. It has been included in the NI ToT to assist the provincial stakeholders trainers in conducting trainings for district stakeholders level.

them on the importance to review and monitor program implementation, and develop plan of action to ensure commitment and support for the WIFA program implementation.

■ NI conducted a national advocacy meeting for WIFAS, which was led by youth themselves to share their experiences form the field on the role of students, schools, school health program and non-health offices for WIFAS program for successful implementation of WIFA program.

Advocacy meetings conducted at the Provincial Education Office of ENT to establish a circular letter on WIFAS program to showcase increased commitment to establish WIFAS programs and also ensure improved monitoring, including the reporting and recording WIFAS distribution and consumption.

NI conducted an advocacy meeting in Jakarta with stakeholders from the MITRA Youth program and NI's GAC funded Right Start program, which is also implementing an WIFAS program, to share best practices, lesson learned and studies results.
 Economic analysis of the Right Start adolescent nutrition program undertaken in 2019 presented. NI supported DHO through advocacy and technical assistance to ensure effective implementation of

WIFAS program during pandemic situation.

Provision

■ NI activities were focused on strengthening program delivery through capacity building of DHO, *Puskesmas* and school level staff on planning, management, monitoring, reporting of WIFA program and ensuring adequate supply of WIFA through streamlining the supply chain and regular forecasting of supplies at schools, the district, and province levels. Training of district-level officials (health staff workers and school health program teachers) was conducted to provide a basic introduction to developing and implementing adolescent nutrition activities with a focus on the WIFA Supplementation program to effectively plan, implement, monitor and supervise the program.

Copies of training manuals were printed and distributed to school health program teachers and *Puskesmas* staff.

■ On the job training was conducted through visits by trained district level government staff in 113 schools (55 in ENT and 58 in East Java) to observe the program implementation, discuss challenges, and examine efforts in improving the program. The findings were shared during an advocacy meeting at district level, which included

findings from schools that have taken an innovative approach to the WIFAS and nutrition education so that other schools and *Puskesmas* in the meeting can learn from them.

■ NI procured and distributed 1,430,800 IFA supplements¹⁹ in 7 districts in ENT after completing third-party laboratory testing. East Java PHO confirmed that NI support on WIFA supplements was not required as DHOs have received sufficient stocks from central and some districts procured locally.

■ Support provided to DHO to manage WIFAS stock distribution. NI worked with the head of the storage division, along with the programming staff at the DHO level to conduct a campaign in *Puskesmas* and schools for WIFAS distribution. The campaign was conducted in 5 districts in East Java, which included Pacitan, Ngawi, Ponorogo, Sampang and Jember.

Continued to provide technical assistance through NI extenders to PHOs and DHOs at provincial level on real-time supply forecasting and procurement planning and further facilitated in cascading this to district and *Puskesmas* level for improved planning, implementing and monitoring of WIFAS programs.

Consumption: Increased awareness of WIFA among adolescent girls

■ BCI materials were printed and distributed to puskesmas and senior high schools for use by health workers and school health teachers during WIFA distribution for counseling and nutrition education.

■ Webinar on anaemia prevention was conducted by MoH and facilitated by NIon YouTube on anaemia prevention among adolescents. NI developed and compiled video testimonials from adolescent girls and boys from the MITRA Youth program areas. In the video, adolescent girls shared their experiences of consuming WIFAS and expressed that regular WIFAS consumption helps to improve their health and concentration in school. They also encouraged other adolescents to consume WIFAS. Approximately 2,500 people viewed the live session on YouTube²⁰.

3. Exit strategy period (October 2020 – May 2021)

The activities during this period focused on completing the activities that were paused due

¹⁹The NI-procured IFA supplements contain sufficient Ferrous Furmarate (Actual content 94.4%, 56.64 mg, acceptance criteria 90.0-105.0%, 54 – 63 mg.) and Folic Acid (Actual content 98.3%, 0.39 mg, acceptance criteria 90.0%- 105.0%, 0.36 – 0.42 mg) that meets quality standards. ²⁰ ttps://www.youtube.com/watch?v=-Q6MhgVUeD8

to surge of COVID 19 pandemic in March 2020 and new activities proposed to respond to the COVID -19 and build in sustainability by the end of program:

■ Conducted a meeting with DHO PACITAN for "Strengthening of WIFA program in *Puskesmas* level". WIFA supply chain and its management at *Puskesmas* level were the main agenda of the meeting.

Conducted refresher training on HMIS data collection for PHO, DHO and *Puskesmas* staff to strengthen and improve skills of nutrition programmers regarding the recording and reporting system of WIFA program in East Java and East Nusa Tenggara since MoH have updated a new guideline in 2020.

■ NI together with MoH and National Population and Family Planning Agency conducted a series of 5 webinars to consult with adolescents and make them part of the solution to reduce prevalence and prevent stunting, as well as increase awareness of adolescents on reproductive health programs.

■ Organized the WIFA Digital Campaign to increase awareness about Anaemia prevention through WIFAS program and to increase knowledge about balanced diet, good nutrition and other ways to keep immune system healthy during COVID-19 pandemic.

Conducted a webinar to disseminated best practice guidance on COVID-19 and nutrition programming to the school and *Puskesmas* level in East Java, including how best to use technology to gather data that could inform how policies should be further adapted to the COVID-19 context.

Conducted Workshop on 'Optimizing Anaemia Prevention among Adolescent Girls (WIFA) program implementation'. During the workshop participants developed an action plan to ensure program sustainability despite COVID-19 challenges and the end of NI's assistance.

Printing and distribution of training and

communication materials to the district health office and health centres, in both MY and non-MY provinces

■ Through MITRA Youth extenders, continued to support *Puskesmas* staff in completing the HMIS and use of data for program decision making.

Developed a process documentation report on the best practices and learnings, including how the program strategies were incorporated by the local government and integration among health programs.

Developed a video to improve student's attendance once schools re-open.

■ Facilitate a Bahasa Indonesia voice over and subtitle for Adolescent Nutrition and Anaemia course (ANA course), an online course developed by NI's technical expertise and deep understanding.

Disseminated the program's best practices and learnings involving key stakeholders, including the MoH, civil society organizations, stakeholders in province and district level by showcasing the importance of WIFAS program as program under the nutrition specific interventions for stunting reduction.

Two advocacy workshops were organized to share the progress and lessons of the MY program with support of the provincial government. The primary objective of these workshops was to facilitate sustainability of the MY interventions.

■ A virtual participatory content creation workshop was organized in which 35 adolescents, including both boys and girls participated and developed articles/ videos/ photographs on problems of nutrition and well being among adolescents and ways to address the factors affecting those. An e-book containing the content created by adolescents has been developed to document the products and showcase participation by adolescents. It is hoped that similar activities to engage adolescents in developing nutrition messages will be undertaken in schools in future.

KEY OUTPUTS ACHIEVED

The table below describes the key results achieved against the activities completed during the program period July 2017- May 2021.

Outcomes and Outputs	Indicators	Target	Results	Qualitative assessment
1100: Enabling environment: Public sector policy makers renew leadership of and commitment to more effective implementation of WIFA program for adolescent girls. Specifically to provide iron and folic acid (IFA) supplements to school- going adolescent girls including improved policies, guidelines, product standards and increased budget allocations	 Standards and Guidelines: % of districts that are implementing program with (a) product standard-consistent with new revised guideline on WIFA from MoH (b) guidelines that are consistent with the new revised WIFA guidelines from MoH Budget allocation: # of districts where there is an increase in budget allocation (supplies/ training / operational cost) for the WIFA program. 	80% 15 of 20 districts	100% 19 of 20 districts	Overall, all the districts had WIFA products in line with the MoH guidelines. 18 (9 in ENT, 9 in EJ) of the 20 districts of identified as Government's prioritized districts for stunting reduction program, hence, 100% of the WIFA supplies are provided by MoH as per national guidelines. NI's monitoring showed that the remaining 2 districts also procured supplies in line with national guidance. Increase budget allocation can be seen from declaration events, socialization meetings, replicated BCI materials and trainings conducted by districts using own budget.
1110 Knowledge, Skills and Capacity: Policy makers have committed to revitalizing and strengthening WIFA program through changes in policy instruments, and to increase budgets to effectively plan, implement and monitor these programs.	 Plan and implement: # of districts with policy makers who know how to plan and budget appropriately for (a) national and district procurement of WIFA supplies (e-procurement) (b) improving service delivery to increase coverage of WIFA program 	20 districts	20 districts	Regular advocacy meetings were undertaken at district level to identify gaps in the WIFA program action plans to overcome the identified issues were agreed and developed by DHO representatives. In few selected districts like Bangkalan of EJ and Sumba Barat Daya of ENT, NI facilitated in stock management to ensured there is no overstock and timely delivery from PHO to DHO as well as from DHO to puskesmas.
	Monitoring: # of districts that have modified HMIS to track key coverage and stock indicators.	20 districts	13 of 20 districts	MoH printed and distributed the updated guidelines with revised recording and reporting formats to all districts in 2018. Only 13 of the 20 districts were using the MoH 2018 format before revised 2020 technical guidelines were released by MoH. Hence, NI conducted a socialization on the revised format in Dec 2020-Jan 2021.
1111 Key information received: Policy makers have received information about gaps in WIFA program (including product; packaging; dosage, service quality etc); and on the scope for improvement based on the results from the Nutrition International demonstration programs	# of provincial program launching organized to inform policy makers and influencers	2 launches (1 for each province	1 National launch for both province	MoH hosted the launch event through a seminar on Adolescent Health and Nutrition on International Women's Day showing the support and the engagement of central government towards the program. MoH encouraged all stakeholders to prioritize nutrition within the adolescent health program as well as target adolescents in the nutrition program.
1112 T ools received: policy makers have received updated guidelines and approaches to monitoring to help them plan and implement these programs effectively	# of districts in which key policy makers and influencers received relevant tools	All 20 districts	All 20 Districts	Nearly 536 participants in 10 districts in East Java and 10 districts in East Nusa Tenggara were sensitized on the revised MoH guidelines for the WIFA program including the revised tools such as training manuals, BCI materials etc.

¹⁷ Can include: Guidelines on counselling, product standards, approaches to monitoring, distribution policies; BCI policy/strategy

Outcomes and Outputs	Indicators	Target	Results	Qualitative assessment
1113: Learning completed: Policy makers have received briefing on the above	# of workshop conducted for policy makers at national level	1 meeting/ year	3 meetings at National level during 2017-2021 (once every year) (April 2018 July 2019 May 2021)	 These meetings brought together the representatives from 4 departments i.e. Health, Education, Religious Affairs and Home Affairs, representatives from East Java and ENT province to ensure clarity on their roles and responsibilities on anaemia prevention for adolescent girls including budget allocations for IFA procurement from MoH and the roles of different ministries The meetings were successful as they were attended by all districts. Both provincial offices and non NI districts appreciated the meetings since it included dissemination of updated information on the WIFA supplementation program, sharing of lesson learned and results from NI WIFA supplementation program implemented through GAC support. It also included progress from NI supported districts and testimonies from teachers and students. The meetings not only invited the Health offices, but also representatives from the Education, Religious affairs and Social Welfare offices hence providing an opportunity for integration. Interest from non NI districts was also expressed, with some districts inviting NI staff as resource persons for dissemination meetings.
	# of workshop conducted for policy makers at provincial level	2 meetings/ year	6 meetings (3 for each province during April 2018, April 2019 and Mar 2021)	 From these meetings, it was agreed to make an integrated effort among stakeholders i.e. Health, Education, Religious Affairs, and Faith-Based Organizations in socializing WIFA activities so all stakeholders can support data provision and socialization, as well as issue a joint letter to the Religious Affairs and Education offices at the district level. During the meetings, NI shared presentations from teachers and testimonies from students, lessons learned and best practices from other districts where NI program was implemented. Circular letter was established that advised on WIFAS program implementation in schools and also emphasized the importance of WIFAS monitoring.
	# of workshop conducted for policy makers at district level	2 meetings/ year	32 meetings (6 in 2018, 20 in 2019 6 in 2021)	• These meetings were conducted for all NI districts and were used to identify gaps and develop action plans to be taken forward not only by health stakeholders, but also by stakeholders from the Education, Religious Affairs offices and the Planning Bodies in each province.

Outcomes and Outputs	Indicators	Target	Results	Qualitative assessment
1200: Provision : improvements in the extent to which health workers, supervisors and health service managers, prioritize the timely provision of IFA supplements	Capacity for monitoring: # of districts that actively compile HMIS data on Stock and Coverage of MN supplements	20 districts	20 districts	All districts continue to compiled HMIS data. NI provided technical assistance on socialization of the formats at puskesmas and school levels and supported in issues related to the completeness and timeliness of recording and reporting.
to school-going adolescent girls and are capacitated for effective planning, monitoring, management, and appropriate counselling to adolescent girls	Adequacy of supplies: % of districts with adequate supplies of WIFA available at the DHOs	100% (all 20 districts)	100% (all 20 districts)	18 (9 in ENT, 9 in EJ) of the 20 districts identified as Government's prioritized districts for stunting reduction program, hence, 100% of the WIFA supplies are provided by MoH as per national guidelines. NI provided technical assistance for supply forecasting and redistribution from DHO to Puskesmas and school level to ensure adequate supplies in all districts.
1210: Knowledge, Skills and Capacity health workers, supervisors and managers, and school health program teachers have recognized the importance of prioritizing WIFA program through improved capacity for timely provision of adequate amounts of supplements and effective planning, monitoring, management and appropriate counselling.	% of health workers who can correctly describe dosage, duration, benefits and side effects of WIFA % of school health program teachers who can correctly describe dosage, duration, benefits and side effects of WIFA	Increase by 50%	Puskesmas staff in ENT: Dosage and duration: 55% to 74.1% Benefit: 98% to 100 Side effects of consuming IFA: 98% to 100% Teachers in ENT: Dosage and duration: 4% to 47% Benefits: 88% to 100% Management of side effects: 26% to 80% Teachers in East Java: Benefits: 94% to 98% Side effects: 75% to 93% Management of side effects: 32% to 75%	East Nusa Tenggara: Baseline in 2018 and Endline in March 2020 East Java: Baseline in 2018 and Mid term in 2019. No data on this indicator. No Endline data available Refer to the Program evaluation in Annex Refer to the Program evaluation in Annex
1211: Supplies ensured: bottlenecks and gaps in supply chain IFA supplement stock assessment is undertaken with consultation with provincial and district staff	% of IFA supplement supplies provided	80%	100%	 East Java PHO confirmed that support from NI is not required as the stock received from central and procured locally is sufficient to last until 2020. For ENT, after cross checking with DHOs, NI confirmed that 3 districts out of 10 (Ngada, Kota Kupang, and Malaka) have sufficient stocks until end of 2019. NI procured 1,430.800 IFA supplements and distributed to 7 districts in ENT in February 2020
	Stock outs: % of districts with stock out of IFA supplements at frontline distribution points	20%	38% (ENT: Endline survey Mar 2020)	 ENT: Endline survey in Mar 2020, showed that the proportion of schools that experienced stock out of WIFA supplements during the last 6 months before the survey was 38%. East Java: No endline survey data. Refer to Program evaluation Annex

Outcomes and Outputs	Indicators	Target	Results	Qualitative assessment
1212: Tools received: puskesmas staff and school health program teachers supported by their supervisors and managers have effective system, tools, curricula, etc for improving skills in provision of IFAs and nutrition counselling to adolescent girls	% of managers, supervisors, health workers and school health program teachers who receive an improved package of tools	80%	100%	 In 2018, all 658 staff in 430 puskesmas and 1,913 senior high schools received copies of training manuals, BCI materials and revised HMIS Recording/Reporting (R/R) formats during August-November 2018 In 2021, reprinted additional training manuals (2,246) and flipcharts (1,867) enough for all puskesmas and schools in 20 districts in East Java and East Nusa Tenggara
1213: Learning completed: puskesmas staff and school health program teachers have completed participatory training on skills forecasting, recording and reporting of stock, modified HMIS system, use of job aids for appropriate and effective counselling for adolescent girls of IFA supplementation and nutrition education	 a. formal training # of managers and supervisors trained on improved package of tools # or % of puskesmas staff and school health program teachers trained on improved package of tools 	116 480 (80% of the 600)	110 548 (91% of 600)	 ToT for provincial stakeholders and training for district-level officials has been completed in June-July 2018. The training for puskesmas staff and school health teachers employed various methods to ensure the participants actively participated and have improved knowledge and skills. Facilitators also used icebreakers to maintain/increase the energy level of participants. Based on feedback at the end of the training, participants from schools expressed appreciation for the training since the topics were new for them and useful for their students. They also appreciated having facilitators from various offices such as health office, education, religious affairs, and social welfare offices.
	b. on the job training % of manager, supervisors, health workers and school health program teachers provided on the job training during program review meetings	60%	41% (248 of 600)	 On the job training was conducted by DHO for staff from puskesmas and school to support them in resolving issues e.g. untimely reporting from puskesmas, teachers and students need to be more involved, as well as the initiatives from schools to support the WIFA supplementation program were shared for program improvement.

Outcomes and Outputs	Indicators	Target	Results	Qualitative assessment
1300: Consumption: Adolescent girls have improved receipt and adherence of WIFA supplement	IFA Coverage: % of adolescent girls who received the recommended course of IFA supplements in a year. (12 supplements over 6 months/ or 24 over 12 months)	80%	ENT: 0% to 65% East Java: 3% to 54%	East Nusa Tenggara: Baseline in 2018 and Endline in March 2020 East Java: Baseline in 2018 and Mid term in 2019. No Endline data available Refer to the Program evaluation in Annex
	Utilization: % of adolescent girls who consumed the recommended number of IFA supplements in a year.	60%	ENT: 0 to 37% East Java: 1% to 21%	
1310: Knowledge, Skills and Capacity: school-going adolescent girls are willing and able to correctly consume and report, as well as for influencers who provide social support are supportive on IFA supplementation for adolescent girls program	% of adolescent girls who can describe one benefit to consuming IFA supplement % of all adolescent girls who can explain how to overcome at least one typical	Increased by 40% Increased by 40%	Benefit of IFA: ENT: 78% to 76% East Java:74% to 68% Overcome side effect to IFA consumption: ENT: 67% to 88%	East Nusa Tenggara: Baseline in 2018 and Endline in March 2020 East Java: Baseline in 2018 and Midterm in 2019. No Endline data available Refer to the Program evaluation in Annex
1311: Evidence-informed BCI approaches uptake and use : BCI strategy and IEC materials focusing on nutrition education and increasing awareness on the importance and benefit of taking IFA supplements for girls are to be made available	barrier/side effect to IFA consumption BCI plan reviewed and revised.	BCI plan reviewed and revised	East Java: 66% to 59% BCI plan reviewed and revised.	 The BCI strategy is gender sensitive and includes boys for nutrition education. The BCI strategy is based on the local context such as different pictures between East Java and ENT. Besides WIFAS, BCI also emphasizes on nutrition behavior, WASH and deworming.
1312: Messages received on correct use: school-going adolescent girls are willing and able to correctly consume and report, as well as for influencers who provide social support are supportive on IFA supplementation for adolescent girls program	% of adolescent girls who received correct messages on benefits and mitigation of side effects for IFA supplementation	Increased by 60%	Counseled by teacher atleast once a week ENT: 58% to 93% Counseling to manage side effects of WIFA: ENT: 3% to 24%	East Nusa Tenggara: Baseline in 2018 and Endline in March 2020 East Java: Baseline in 2018 and Mid term in 2019. No data on this indicator. No Endline data available Refer to the Program evaluation in Annex

Annex B: Program Evaluation

Summary of key findings of the program evaluation of the MITRA youth program (2018-2021) in Indonesia

The program evaluation included a baseline, and an interim survey conducted in 2018 and 2019 respectively in the two provinces (East Java and East Nusa Tenggara) where the program was implemented and in one comparison province of South Sulawesi. An end-line survey was conducted in 2020, the data collection for ENT was completed during February and March, however due to the outbreak of the COVID-19 pandemic and emergency travel restrictions, the data collection in East Java (program area) and South Sulawesi (comparison area) had to be suspended. The three surveys were undertaken by one research agency, the South East Asia Food and Agricultural Science and Technology Center (SEAFAST), Bogor Agriculture Institute. Ethical approval was obtained from the Ethics Committee, Faculty of Medicine, University of Indonesia. Research clearance and permission was also sought from authorities in the Ministry of Internal Affairs (central level), as well as province, district and schools. Assent and informed consent was obtained from all participants involved in this study including informed consent by parents. The objectives of the surveys were to estimate coverage and adherence of WIFAS among school-going adolescent girls and assess selected knowledge and practice-related indicators.

Study design and sample size: These studies were designed as repeated cross-sectional surveys with multi-stage randomized sampling design comparing the pre and post intervention program indicators with a comparison group. These surveys comprised of mixed-method data collection methods including the use of both quantitative and qualitative methods for data collection. The achieved sample sizes from three rounds of surveys are mentioned in Table 1 below:

Receipt of WIFA: In ENT, the receipt of WIFA supplements in the last six months has shown an increase from the baseline to endline. The national scheme indicated that the optimum regimen for each school-going adolescent girl is to receive and consumed 24 supplements within 6 months. In the end-line survey, the mean number of supplements received by the school going adolescent girls was found to be ~15 supplements compared to the baseline, where it was less than one supplement. About two-thirds (65.1%) had received the optimum dosage of 24 supplements in 6 months. However, more than half (66%) had already received the recommended dose i.e12 supplements within the last 6 months (table 2).

The interim survey in 2019 (conducted between April and September 2019) showed, that there was an increase in the number of WIFA supplements received by adolescent girls in both the provinces in the past six months (November 2018-April 2019). The average number of WIFA supplements received by school girls also showed a significant increase from the baseline survey (p<0.05) (table 2) in both provinces.

Consumption of WIFA supplements: Table 3 shows the consumption of WIFA supplements among school-going adolescent girls based on the number of WIFA supplements consumed during the last six months in East Nusa Tenggara. The consumption of WIFA was reported to have increased in both provinces from baseline in interim and endline surveys. There was also an increase in the mean WIFA consumed, from less than one supplement at the baseline, to six supplements at the mid-term survey and about ten supplements at the end-line (table 3). It was also found in the binary logistic regression analyses that those who were administered a supervised dose by a teacher were more than two times likely to consume at least 12 WIFA supplements in the past six months [OR=2.762 (95%CI: 1.516-5.033, p=0.001].

Table 1 Sample sizes for baseline (2)	2018), interim (2019) aı	nd end-line surveys (2020)
---------------------------------------	--------------------------	----------------------------

Assumptions	Baseline survey (2018) ²	Mid-term survey (2019) ²	End-line survey (2020) ²
Program areas : East Java (10 districts)	934	907	±
Program areas : East Nusa Tenggara (10 districts)	922	906	909
Comparison areas (areas in South Sulawesi) (10 districts)	919	-	±
Total	2,775	1,813	909

±: Due to the outbreak of the COVID-19 pandemic and emergency travel restrictions, the data collection in East Java (program area) and South Sulawesi (comparison area) had to be suspended.

Table 2Receipt of WIFA supplements among school-going adolescent girls duringthe last six months in three rounds of surveys (baseline, interim and end-line) [n (%)]

	Intervention Area						
Indicators	East Ja	ava [1]	East Nusa Tenggara				
	Baseline survey, (2018)	Interim survey (2019)	Baseline survey, 2018	Interim survey (2019)	End-line survey (2020)		
	(n=934)	(n=907)	(n=922)	(n=906)	(n=909)		
Received at least 1 supplement of WIFA supplement within 6 months	291 (31.2)	759 (83.7)	91(9.9)	671 (74.1)	853 (93.8)		
Received at least 12 supplements of WIFA within previous 6 months	27 (2.9)	485 (53.5)	0 (0.0)	325 (35.9)	592 (65.1)		
Received at least 24 supplements of WIFA within previous 6 months	11 (1.2)	209 (23.0)	0 (0.0)	124 (13.7)	93 (10.2)		
Mean ± SD amount of WIFA supplements over 6 months	1.4 ± 3.5	13.0 ± 10.1	0.4 ± 1.3	8.4 ± 9.2	14.9 ± 8.6		

Table 3 Consumption of WIFA supplements among school-going adolescent girls during the last six months in three rounds of surveys (baseline, interim and end-line) [n (%)]

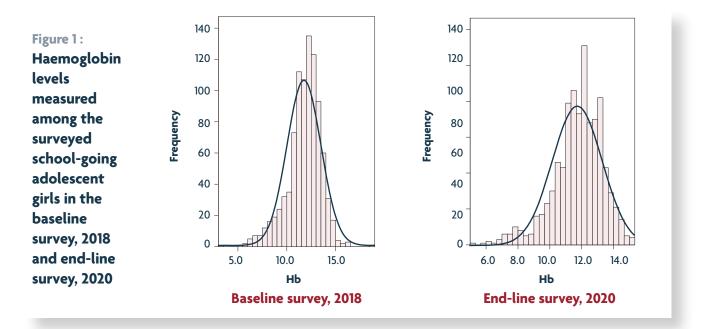
	Intervention Area						
Indicators	East Java ²		East Nusa Tenggara ²				
	Baseline survey, (2018)	Interim survey (2019)	Baseline survey, 2018	Interim survey (2019)	End-line survey (2020)		
	(n=934)	(n=907)	(n=922)	(n=906)	(n=909)		
Consumed at least 1 supplement of WIFA supplement within six months	168 (18.0)	615 (67.8)	83 (9.0)	637 (70.3)	815 (89.7)		
Consumed at least 12 supplements of WIFA within previous 6 months	10 (3.4)	188 (20.7)	0(0.0)	204 (22.5)	332 (36.5)		
Consumed at least 24 supplements of WIFA within previous 6 months	9 (1.0)	29 (3.2)	0 (0.0)	51 (5.6)	5 (0.6)		
Mean ± SD amount of WIFA supplements over 6 months	0.7 ± 2.7	5.7 ± 7.0	0.4 ± 1.2	6.0 ± 7.6	10.2 ± 6.6		

Anaemia Prevalence: The prevalence of anaemia among pregnant women in Indonesia has registered an increase from 37.1% to 48.9% in 2018 (Riskesdas). According to the last conducted Riskesdas, 2018, it is reported that more than eight out of ten in the age group of 15 to 24 years pregnant women were found to be anaemic (84%).

In the current program, among school-going adolescent girls, in the end-line survey, it was found that there was a slight improvement in the mean hemoglobin level and anemia at the endline compared to the base line in the intervention areas of East Nusa Tenggara province. The mean hemoglobin was measured to be 11.7 g/dL in the baseline, and it was 11.8 g/dL in the end-line among the surveyed school-going adolescent girls in ENT province¹ (Table 3). There was a slight decline in the prevalence of severe and moderate levels of anemia but an increase in mild anemia in the end-line survey. The normal probability curve and the histogram plotted in Figure 1 shows that there seems to be a shift in the levels of anaemia (Figure 1). However, the overall prevalence of anemia remained at about 50%.

A binary logistic regression analyses among the surveyed school-going adolescent girl students between 16 and 18 years of age, revealed that those who had consumed at least 24 WIFA supplements in the past one year, were more likely have a lower risk of anemia, which

²⁰ As the surveys were planned to measure coverage and adherence to WIFA at the population level, repeated cross-sectional surveys were conducted at baseline in 2018, mid-term 2019 and an end-line in 2020. So, we cannot ascertain any increase or decline in the anaemia levels in the surveyed population as we did not follow a cohort of school-going adolescent girls. It would also have been not possible to follow a cohort as the original sample of school going adolescent girls would have crossed the intended age group, we set out to work with in the project.



is statistically significant at 10% level [OR=0.713 (95%CI: 0.506-1.005, p <0.1]. It seems that the high consumption levels of WIFA might have in some way successful in stalling the increase in anaemia levels, though as the cross-sectional nature of the surveys do not allow us to establish the causal relationship.

Mechanism of supplement distribution:

The mechanism for the supplement distribution to students in schools was not uniform and largely depended on the school policy. Despite the variation in supplements distribution, students reported that there was a significant increase in counseling by teacher (table 4).

Knowledge and practices related to Anaemia: Health staff's knowledge about one typical side effect of consuming WIFA was also increased from 92.6% to 98.5% at the end-line. The most common message delivered by the health staff during WIFA distribution in schools, was about the benefits of WIFA. Other common messages delivered include management of side effects, and dosage of WIFA.

There was an increase in the per cent of teachers who could answer at least one benefit of WIFA presented in East Java 86.8% (Baseline) to 100% (Interim) and East Nusa Tenggara 94% to 97.8%. this shows that teachers were more aware of the benefits of WIFA for student's health. Increasing understanding among teachers can make them as the driving force for quality implementation of WIFA program in schools.

	East Nusa Tenggara ²					
Indicators	Baseline survey, 2018 (n=922)	Interim survey, 2019 (n=906)	End-line survey, 2020 (n=909)			
WIFA distribution mechanism received at school	n received= 91	n received= 671	received= 853			
The supplements were given to be consumed at home	40(44.0)	374 (55.7)	409 (48.0)			
The supplements were given to be consumed at school	50(54.9)	224 (33.4)	338 (39.6)			
The supplements were given sometimes to be consumed at school and sometimes at home	0 (0.0)	73 (10.9)	104 (12.19)			
No response	1 (1.1)	0 (0.0)	2 (0.2)			
Frequency of counselling by teacher (n=received)	n received= 91	n received= 671	n received= 853			
Once a week	53 (58.2)	592 (88.2)	789 (92.5)			
Twice a week	10 (11.0)	2 (0.3)	9 (1.06)			
Once in 2 weeks	0 (0.0)	1 (0.1)	1 (0.12)			
Once a month	10 (11.0)	75 (11.2)	51 (5.98)			
Once a year	0 (0.0)	1 (0.1)	9 (1.06)			

 Table 4 Mechanism of supplement distribution and counselling by teachers in three rounds of surveys (baseline, interim and end-line) [n (%)]

Table 5 Knowledge, Attitude and Practice about Anaemia and WIFA supplementation program among Health Staff during the last six months in three rounds of surveys (baseline, interim and end-line) [n (%)]

	East Nusa Tenggara ²			
Indicators	Baseline survey, 2018	End-line survey (2020)		
	(n=922)	(n=909)		
Knowledge of health staff about the dosage and duration of IFA to be given to adolescent girls	111 (55.0)	149 (74.1)		
Percent of PUSKESMAS who are aware about at least about one side effect of consuming IFA (all options)	198 (98.0)	200 (99.5)		
Percent of health workers who responded that last year they distributed IFA tablets to school	199 (98.50)	201 (100)		

Table 6 Knowledge, Attitude and Practice about Anaemia and WIFA supplementation program among Teachers during the last six months in three rounds of surveys (baseline, interim and end-line) [n (%)]

	East Java ²		East Nusa Tenggara ²			
Indicators	Baseline survey, (2018)	Interim survey (2019)	Baseline survey, 2018	Interim survey (2019)	End-line survey (2020)	
	(n=91)	(n=30)	(n=91)	(n=30)	(n=90)	
Knowledge of teachers about the dosage and duration of IFA to be given to adolescent girls	31 (34.1)	24 (80.0)	31 (34.1)	24 (80.0)	68 (75.6)	
Percent of teachers who are aware about at least one benefit of consuming IFA	79 (86.8)	30 (100)	86 (94)	38 (93.3)	88 (97.8)	
Percent of teachers who could tell at least one way to overcome the side effects	70 (76.9)	24 (80.0)	70 (76.9)	27 (90.0)	74 (82.2)	

Table 7 shows an increase in knowledge and practices related to anemia and WIFA supplementation amongst adolescents.

Table 7 Knowledge about Anaemia and WIFA supplementation among school-going adolescent girls during the last six months in three rounds of surveys (baseline, interim and end-line) [n (%)]

- Indicators	East	Java²	East Nusa Tenggara ²								
	Baseline survey, (2018)	Interim survey (2019)	Baseline survey, 2018	Interim survey (2019)	End-line survey (2020)						
	(n=934)	(n=907)	(n=922)	(n=906)	(n=909)						
Percent of girls who observed at least one benefit of consuming IFA	446 (47.8)	617 (68.0)	640 (69.4)	687 (75.8)	722 (79.4)						
Could answer one way to overcome at least one typical barrier to consuming WIFA supplements.	362 (38.8)	533 (58.8)	373 (40.4)	702 (77.5)	798 (87.7)						

Annex C: List of BCI materials

MITRA Youth adopted a balanced approach in developing BCI strategy to influence both supply and demand interventions. Along with a regular supply of IFA supplements and mobilization of adolescents to ensure regular consumption, nutrition education on the consumption of iron-rich and balanced diet was also necessary. A formative research was conducted in districts of EJ and ENT to generate insights from school-going adolescents girls, teachers and other individuals who influence nutrition behaviours of adolescents, including parents and relatives. The formative research aimed to understand the current knowledge, perceptions and practices to improve awareness regarding dosage, adherence, benefits of WIFAS, dietary practices and, myths and misconceptions associated with anaemia and WIFAS.

Based on the findings of the formative research, a robust behaviour change communication strategy was developed, that leveraged appropriate messages and channels for encouraging behaviour change to promote acceptance and consumption of WIFA supplements as well as consumption of iron-rich food. In addition to the adolescent girls, their supporting groups including parents, teachers, health staff and adolescent boys, were also the target of the BCI strategy. The communication materials developed were pre-tested to make them relevant to the socio-cultural context of the target locations, to build the capacity of health staff and teachers and create awareness on anaemia prevention and WIFAS.

The BCC materials contributed immensely in improving the knowledge and skills of health staff and teachers to carry out effective counselling as well as proper monitoring of WIFAS at schools. They were a big hit among adolescent girls and circulated on various social media platforms. The BCC materials were fully owned by the government and rolled out with their own funds in some district, especially the anaemia prevention video, which was displayed on Videotron at prominent places by the government. Considering the positive response of the government stakeholders towards the BCC materials developed as part of MITRA Youth, these materials have also been adopted in another stunting reduction program led by Nutrition International and Save The Children in Indonesia - Better Investment for Stunting Alleviation (BISA).

In March 2020, due to the COVID-19 pandemic

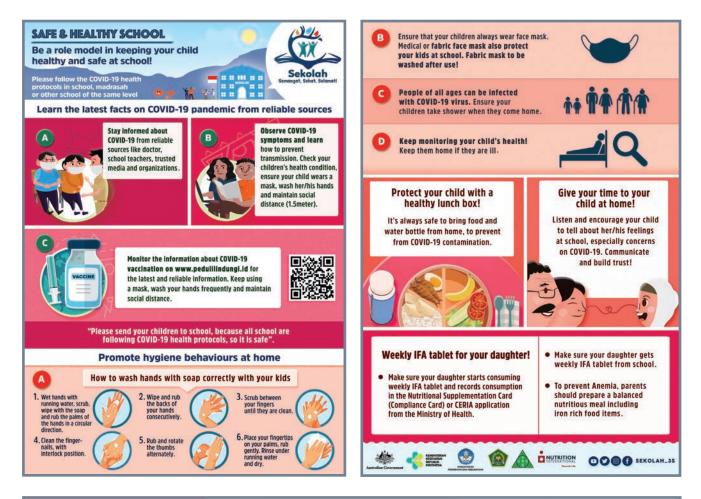
the schools were shut. As the pandemic improved in the country and the lockdowns eased, the governments started planning to re-open schools. However, necessary measures had to be adopted to bring back the school attendance and to build the trust among students and parents that schools are safe and are running the WIFAS program smoothly with precautions. Nutrition International developed BCC materials with a focus on increasing awareness among adolescents, teachers and parents about the COVID-19 health protocols followed in schools, with a clear and actionable guidance for a safe return to schools. A well-designed social media campaign was also run for a fortnight to spread awareness and socialize these materials through Instagram, WhatsApp, Youtube, and Facebook.



A poster on COVID-19 health protocols to be followed in schools upon re-opening

A list of the BCC materials developed as part of the MITRA Youth program are included ahead.

- Formative Research Report and a brief for external circulation
- Behaviour Change Intervention Strategy
- Flipchart on anaemia prevention for junior and senior high schools, also adapted in COVID- 19 context
- Poster on anaemia prevention for junior and senior high schools
- Parents Booklet' on anaemia prevention for junior and senior high schools
- Training module on anaemia prevention for healthcare staff and teachers, also adapted in COVID-19 context





Top: A factsheet for parents to educate about preparations to be followed before sending children to school Bottom: Compliance Card for IFA supplements adapted to COVID-19 health protocols

- Booklet on anaemia prevention for adolescent boys of junior and senior high schools
- Booklet on anaemia prevention for adolescent girls of junior and senior high schools
- Pocket Book on anaemia prevention for teachers of junior and senior high schools
- Videos to create awareness and build knowledge on anaemia prevention and bust myths and answer some some frequently asked questions about WIFAS
- Poster for schools to maintain COVID-19 health protocols

- Poster for school teachers to maintain COVID-19 health protocols
- Poster for students to maintain COVID-19 health protocols
- Factsheet for parents to maintain COVID-19 health protocols
- Compliance card to track the WIFA supplement compliance among adolescent girls and woman of reproductive age. These are printed and distributed in schools and Puskesmas
- Video to maintain COVID-19 health protocols in schools

Annex D: Program Implementation Plan

PIP updated: 12 Jul 2020

REPORTING PERIOD: Jan-Jun 2020

Project Title	MITRA Youth: Weekly Iron Folic Acid Supplementation for prevention and reduction Iron Deficiency Anaemia among school-going adolescent girls, in selected districts in two provinces of Indonesia: East Java and East Nusa Tenggara	Responsible Party		Preparato	ory phase												
Start date	1 July 2017																
End date	31 September 2020		FY 20	017-18	FY 2	018-19	FY 20)18-19		FY 20)19-20		FY 20	020-21		FY 2020-21	
	Outputs + Activities		July- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun
1100	ENABLING ENVIRONMENT																
1111	1111 Key information received: Policy makers have received information about gaps in WIFA programs and on the scope for improvement based on the results from MI support																
	Conduct advocacy workshop at national level	NI, MoH, MoEd, MoR		х		х	х										
	Conduct advocacy meeting with other donors and/or SUN movement (such as GAIN, GIZ, Save the Children, WFP, UNICEF) related with adolescent girls health and nutrition program	NI						х	x			х					
1112	1112 Tools received: policy makers have received updated guidelines and approaches to monitoring to help them plan and implement these programs effectively																
	Facilitate meetings and discussions for updating existing guidelines of IFA for adolescent	NI, DHO	х	Х													
1113	1113 Learning completed: Policy makers have received briefing on the above																
	Conduct advocacy meetings with MoH, MoEd, MoR officials at central level to ensure commitment and support for the program implementation including budget and IFA supply procurement	NI, MoH			x					x							x
	Conduct advocacy meeting with PHO and province- level stakeholders to sensitize them on the program, program review and monitoring to track program implementation, and develop plan of action to ensure commitment and support for the program implementation	NI, PHO			x				x							х	

Project Title	MITRA Youth: Weekly Iron Folic Acid Supplementation for prevention and reduction Iron Deficiency Anaemia among school-going adolescent girls, in selected districts in two provinces of Indonesia: East Java and 	Responsible Party	Preparatory phase							NCTE							
Start date																	
End date			FY 2	017-18	FY 2	018-19	FY 2018-19		FY 2019-20				FY 2020-21		FY 2020-2		21
	Outputs + Activities		July- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun
	Conduct advocacy meeting with DHO and district- level stakeholders to sensitize them on the program, program review and monitoring to track program implementation, and develop plan of action to ensure commitment and support for the program implementation	NI, MoH, PHO, DHO			x	x				x						x	
1200	PROVISION																
1211	1211: Supplies ensured: bottlenecks and gaps in supply chain IFA tablet stock assessment is undertaken with consultation with provincial and district staff																
	MI procures IFA tablets	NI							Х	Х	Х	Х					
	Supporting PHO and DHO staff in estimating requirements of IFA supplements to facilitate provision of adequate IFA supplement at the health centres	NI, PHO, DHO					х	x	x	х	х	x	x	x	х	х	x
	Advocate with the DHO and the pharmacy at the district level through the district coordinator to facilitate adequate and timely supply of IFA supplements at the district level and further to the puskesmas and school level	NI, DHO					x	x	x	x	x	x	x	x	x	x	x
	Facilitate provincial and district level project progress reviews to troubleshoot problems in supply chain for e.g. facilitate pharmaceutical district manager to check stocks of IFA supplement on a regular basis to ensure uninterrupted services to the health facility and catalyse distribution of IFA supplements from the buffer stock maintained at the province in case of inadequate availability of supplies at the central pharmacy	NI, PHO, DHO					x	x	x	x	x	x	x	x	x	x	x

Project Title	MITRA Youth: Weekly Iron Folic Acid Supplementation for prevention and reduction Iron Deficiency Anaemia among school-going adolescent girls, in selected districts in two provinces of Indonesia: East Java and East Nusa Tenggara	Responsible Party		Preparate	ory phase					NCTE							
Start date	1 July 2017																
End date	31 September 2020		FY 2017-18		FY 2018-19		FY 20	018-19		FY 20	019-20		FY 20	020-21	l	FY 2020-2	1
	Outputs + Activities		July- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun
1212	1212: Tools received: puskesmas staff and school health program teachers supported by their supervisors and managers have effective system, tools, curricula, etc for improving skills in provision of IFAs and nutrition counselling to adolescent girls																
	Review and modify the existing training manual to focus on use and importance of WIFA supplements, estimation of supplies, provision of WIFA supplements, dose, benefits, how to handle side effects and effective counselling for better compliance, program monitoring and reporting	NI		x													
	Printing of training module	NI				Х											
	Distribution of training module	NI, DHO				Х											
1213	1213: Learning completed: puskesmas staff and school health program teachers have completed participatory training on skills forecasting, recording and reporting of stock, modified HMIS system, use of job aids for appropriate and effective counselling for adolescent girls of IFA supplementation and nutrition education																
	Conduct provincial level ToT on systems, tools and product specifications for planning, delivery and monitoring of the program	NI, MoH			x												
	Training of district-level officials on systems, tools and product specifications for planning, delivery and monitoring of the program	NI, PHO				x											
	Training of health staff workers, school health program teachers on effectively plan, implement, monitor and supervise of the program	NI, DHO				х											
	On the job training at selected schools	NI, PHO, DHO							х								

Project Title	MITRA Youth: Weekly Iron Folic Acid Supplementation for prevention and reduction Iron Deficiency Anaemia among school-going adolescent girls, in selected districts in two provinces of Indonesia: East Java and East Nusa Tenggara 1 July 2017	Responsible Party		Preparato	ory phase					NCTE							
Start date																	
End date	31 September 2020		FY 20	017-18	FY 20	018-19	FY 20)18-19		FY 20	019-20		FY 20	020-21		FY 2020-2	1
	Outputs + Activities		July- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun
	Ensure that the HMIS data is regularly collected and compiled at the district levels and sent to the province (PHO) for feedback and necessary action.	DHO					х	х	x	x	x	x	x	x	x	x	x
	Conduct sensitization meeting among the pharmaceutical representatives and professional organization to promote WIFA program	NI, MoH							x								
	Conduct refresher training on HMIS data collection for PHO, DHO and puskesmas level staff	NI, MoH, PHO, DHO													x	x	
1300	CONSUMPTION																
1311	1311: Evidence-informed BCI approaches uptake and use : BCI strategy and IEC materials focusing on nutrition education and increasing awareness on the importance and benefit of taking IFA supplements for girls are to be made available																
	Undertake review of existing BCI plan developed for the demonstration phase and modify on the basis of recommendations	NI, MoH, PHO, DHO		x	х												
	Identify appropriate channels, messages and communication materials	NI, MoH		х	х												
	Printing and distribution of IEC materials	NI					Х		Х	Х							
	Utilisation of BCI materials by health staff, and School Health Program Teachers in school	DHO					х	х	х	х	х	x	х	x	х	х	х
1312	1312: Messages received on correct use: school-going adolescent girls are willing and able to correctly consume and report, as well as for influencers who provide social support are supportive on IFA supplementation for adolescent girls program																

Project Title	MITRA Youth: Weekly Iron Folic Acid Supplementation for prevention and reduction Iron Deficiency Anaemia among school-going adolescent girls, in selected districts in two provinces of Indonesia: East Java and East Nusa Tenggara	Responsible Party		Preparato	ory phase		Implementation phase									NCTE		
Start date	1 July 2017 31 September 2020																	
End date			FY 20	017-18	FY 2	018-19	FY 20	018-19		FY 20)19-20		FY 2020-21			FY 2020-2	1	
	Outputs + Activities		July- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sept	Oct- Dec	Jan- Mar	Apr- Jun	
	Initial and refreshing meetings for school-going adolescent girls and influencers with DHO/schools/ primary health centers' support as a forum to disseminate key messages developed from consultancy on BCI and IEC materials	DHO					x	x	x	x	x	x	x	x	x	x	x	
	Digital Campaign to increase awareness about Anemia prevention through WIFAS program and to increase knowledge about balanced diet, good nutrition and other ways to keep immune system healthy during COVID-19 pandemic	NI, DHO										x	x		x	x		
	Conduct orientation session and produce BCI activities as part of back to school preparation post COVID.															х	х	
	Program monitoring and evaluation																	
	Conduct baseline and end line survey in the 2 provinces			Х	Х							Х	Х					
	Conduct interim monitoring survey								Х	Х	Х							
	Conduct a study on economic analysis of government's commitment towards replication of WIFAS program														х	х		
	Results of the program evaluation are disseminated to policy makers																х	
	Staffing Costs																	
	Indirect Cost (10%)																	

Annex E: 'Nothing about us, without us': Lessons from participatory activities implemented in MITRA Youth

The MITRA Youth project engaged schoolgoing adolescent boys and girls through existing networks to ensure their participation in effectively implementing the project activities, primarily IFA supplementation and nutrition education. Gradually, this collaboration became an important feature of the project where adolescents led key activities and provided crucial support to ensure continuation of WIFA supplementation during the pandemic. Adolescents' participation was central in the implementation of the following activities:

Distribution of IFA tablets and nutrition education

Over the course of the project, adolescents emerged as change agents supporting the implementation of foundational project activities, distribution and uptake of IFA tablets, awareness on anaemia and nutrition issues among peers. In East Java, the distribution of WIFA tablets from Puskemas to schools was done by Intra-School Student Organization (OSIS), Scouts, UKS and Rematri (adolescents) cadres. In East Nusa Tenggara, each school had health cadres comprising of adolescent girls and boys who helped in distribution of IFA tablets in the classroom and recording and reporting of the consumption to the UKS teacher. In both the provinces, Puskesmas staff formed cadres of adolescent schoolgirls who were given different titles such as 'Si Jari Merah' (Red Finger), 'Permata Beta' (My Gems), 'Husada' (Leader of Support Group on Anaemia Prevention), etc. These adolescent cadres received additional training on peer counselling skills to motivate other girls to consume IFA tablets. During the process documentation of MITRA Youth, these cadres reported that the trainings helped them to effectively communicate with their fellow students about the benefits of the WIFAS and other health and nutrition issues. Adolescent girls also set an example for others, supported, and supervised their friends to ensure consumption of IFA tablets. Under the supervision of schoolteachers and with training from Puskesmas staff, these cadres of adolescent boys and girls proved to be highly effective in motivating their peers in continuing consumption of WIFAS during the pandemic. They coordinated with the adolescent girls in their area to ensure that they come to the gathering point to take their stock of IFA tablets. Adolescent boys also

supported the WIFAS distribution and reporting processes in schools, in the community and households. Adolescents' participation and their evolution as change agents is an important lesson in programming for adolescent nutrition interventions and needs to be replicated to make in all future programs more acceptable and resilient.

Participation in social media campaign

During the pandemic when all education resorted to online means, Nutrition International engaged with adolescents through social media campaigns to building awareness about anaemia and WIFAS. Thesewere designed to impart education through entertainment, thereby ensuring that adolescents had fun while learning. Nutrition International partnered with www.HIPWEE.com, a leading website popular among adolescents in Indonesia, to create a three months digital campaign on adolescent health and nutrition. Through Facebook and Instagram, the campaign engaged with youth in discussions about anaemia, menstrual health and nutrition. Inputs received from them during live sessions and writing challenges helped to make the project messages more inclusive and responsive to adolescents' needs and perspectives. A participatory content creation workshop was

also conducted by Nutrition International along with www.HIPWEE.com where adolescents were trained on digital content development skills. This workshop led to the creation of an e-book which compiled all blogs and vlogs developed by the young participants.

Development of BCI materials

Various measures were adopted to ensure participation of adolescents in the designing and development of the BCI materials. The materials were based on the inputs received from the adolescents and responsive to their current issues and concerns. Some of the issues identified by them included myths around WIFAS and COVID-19 cases in their families and communities. Their engagement also helped to understand their prime influencers and their preferred channels for gathering information. Adolescents' feedback was also taken while developing the 'back-toschool' posters, aimed at preparing the schools and encouraging adolescents to return when schools re-opened after the pandemic.

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