

Securing a Nutrition-Conscious Young Generation Through A School Based Intervention: The SEAMEO RECFON Nutrition Goes to School Program Experiences

Jesus C. Fernandez^{1,*}

¹ Deputy Director for Program, SEAMEO Regional Centre for Food and Nutrition (RECFON)

*Corresponding author. Email: jcfernandez@seameo-recfon.org

ABSTRACT

Malnutrition is a global and multisectoral concern that affects human capacities to contribute to national development. Efforts to speed up national economic growth and reduce social problems toward creating a conducive living environment for all would require quality human resources that are forward-looking, smart, responsible and practice an active and healthy lifestyle. Balanced nutrition contributes to producing this kind of human resources. SEAMEO RECFON promotes balanced nutrition among school-aged children through its flagship program on Nutrition Goes to School (NGTS). Launched in 2016, the NGTS program is a school-based multi sectoral program designed to build the character and improve students' learning outcomes and active participation in school activities by practicing proper nutrition, hygiene and sanitation. It is being piloted in 6 districts in East and West Java, and West Kalimantan provinces in Indonesia involving 55 primary, junior high and vocational schools. This program is SEAMEO RECFON's modest attempt to contribute to Sustainable Development Goal 2 Target 2 and SEAMEO Priority Areas 1 and 2. This paper presents the experiences and contributions of SEAMEO RECFON's NGTS programs thus far in Indonesia to help secure a nutrition-conscious young generation to support the creation of a Society 5.0.

Keywords: Adolescent Nutrition, School Based Intervention

1. INTRODUCTION

Malnutrition is a global and multisectoral concern that affects human capacities to contribute to national development. The so-called triple burden of malnutrition (i.e. underweight, overweight, and nutrient deficiencies) does not discriminate age, socioeconomic class and gender that could result in different types of illness and mortality. These forms of malnutrition can co-exist in the same individuals, within households and communities across different countries and regions. Thus in 2015, the UN member states agreed to "end malnutrition in all its forms" as Target 2 under the Sustainable Development Goal (SDG) 2 by 2030. SDG 2 focuses on ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture. The UN also declared 2016-2025 as the Decade of Action on Nutrition to accelerate the implementation of this target globally towards a healthy and productive population.

Under-five and school-aged children up to adolescence are considered among the sectors of the society that are most vulnerable to malnutrition. Malnourished children are most likely to experience slow or poor brain development which then affect their performance in school. In the long run, this may limit their opportunities to find a decent job during adulthood and thus affect the country's economic growth

Southeast Asian countries experience varying forms of malnutrition. The Global Nutrition Report 2018 [1] indicates that overweight is prevalent in Brunei Darussalam, anemia in Singapore, stunting in the Philippines, overweight and anemia in Thailand, stunting and anemia in Cambodia, Indonesia, Lao, Myanmar, Timor Leste and Vietnam, and overweight, anemia and stunting in Malaysia.

In support of the SDGs, the Southeast Asian Ministers of Education Organization (SEAMEO) identified seven priority areas in 2015 wherein the mandates and expertise

of its 26 specialist centres could be fully tapped. The seven priorities are (1) Achieving Universal Early Childhood Care and Education, (2) Addressing Barriers to Inclusion, (3) Promoting Resilience in the Face of Emergencies, (4) Promoting Technical and Vocational Education and Training, (5) Revitalizing Teacher Education, (6) Promoting Harmonization in Higher Education and Research, and (7) Adopting a 21st Century Curriculum.

As one of the specialist centres of SEAMEO, the Regional Centre for Food and Nutrition (RECFON) initiated a flagship program under its Second Five-Year Development Plan (2016-2021) called Nutrition Goes to School (NGTS) to address SEAMEO’s second priority area. The NGTS Program is also the Centre’s modest attempt to contribute to achieving SDG 2 Target 2. SEAMEO RECFON believes that promoting proper nutrition to the young generation could help them secure a better future and allow them to respond to the demands of the Industrial Revolution 4.0 and conform to the vision of Society 5.0. The Centre sees the critical role of the school system to achieve this.

2. METHOD

SEAMEO RECFON adopts mitigation and prevention approaches for its NGTS flagship program in combatting malnutrition among school-aged children. The NGTS Program deals with prevention approach to avoid new born becoming malnourished by providing nutrition education to adolescent school children who would eventually become parents.

SEAMEO RECFON uses the Demand, Supply, Policy and Information System (DSPIS) framework (Fig.1) in implementing its NGTS Program. The program is expected to respond to and/or create the demand for target stakeholders to choose healthier and nutritious foods that could be made available within and in the immediate vicinity of the school. The program is also expected to ensure that target stakeholders have access to supplies of safe, affordable, locally available and nutritious foods, as clean water, as well as learning materials and facilities conducive to learning. The program believes that having practical and easy to implement policies to create an environment conducive to practicing good health and nutrition habits in schools among its stakeholders is critical. The information system is meant to facilitate the creation of communication platform for sharing, monitoring and evaluating program experiences and lessons learned for improvement and scaling up eventually.

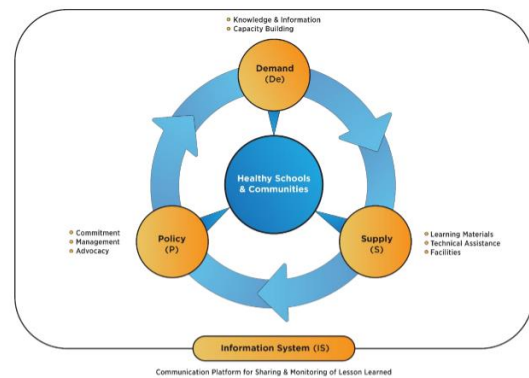


Figure 1. The DeSPIS Framework for NGTS Program

The NGTS Program targets school-aged children because it is in this period when eating habits are developed and/or acquired either within or outside the household and school environments that could affect their nutritional status later during adulthood. Thus, it is the opportune time to help improve dietary behaviors of this group of children. The program aims to develop AWESOME (i.e., Active, Well-nourished, and Smart Of Me) school children that is expected to be manifested in their school performance both in class and extra curricular activities. An active student means performing any form of physical activity everyday in a week for at least 30 minutes per day as recommended by the Ministry of Health of Indonesia [3]. A student is well-nourished if his/her body mass index (BMI) fall in the normal range

as indicated in the growth curve published by the World Health Organization [4]. Being smart is measured through the improvement in the academic performance of the students in class.

SEAMEO RECFON considers the combination of nutrition-sensitive and nutrition-specific strategies to implement its NGTS program. These strategies are carried out through SEAMEO RECFON's community development, capacity building, knowledge management, and research mandates. The Centre conducts school readiness mapping, stakeholders consultations and forging partnerships with schools, academic institutions and local government units, capacity building of school heads, teachers and local education and health officers, conducting research and development of learning materials, and continuous technical assistance and monitoring to initiate the establishment of the Program in selected partner-schools. The Program follows a three-phase implementation approach from initiation to strengthening to institutionalization phase.

3. RESULTS AND DISCUSSION

SEAMEO RECFON is currently piloting the NGTS flagship program in Indonesia. It is being implemented in six sites, namely: Sambas in West Kalimantan Province, Klaten in Central Java, Malang in East Java Province, and Bogor, Cimahi and Cirebon in West Java Province involving 55 primary, secondary and vocational schools.

The NGTS Program has developed five research-based learning modules on health and nutrition literacy, healthy school canteen and school garden as a medium for nutrition education for all school levels. It has built the capacities of 396 school teachers from the 55 school partners resulting in the formulation of action plans to incorporate nutrition concepts and principles in their lesson plans for classroom and extra-curricular teaching-learning activities. The Centre has also trained 2,223 teachers from 587 schools from different levels all over Indonesia, who do not belong to the partner-schools within the program sites, via online mode on NGTS for free. Training materials are made available at the Centre's youtube channel.

The NGTS Program has also produced five compilation books and five infographics on School-Based Nutrition Promotion (SBNP) programs in Indonesia. These materials are targeted for academicians, policymakers, program implementers, school community, and the general public and media. They were developed in collaboration with the Indonesian NGTS-SBNP Working Group members from University of Airlangga, University of Diponegoro, University of Gadjah Mada, University of Hasanuddin, University of Sriwijaya, University of Udayana, Health Polytechnic in

Semarang, Kendari, and Nutrition Academy of Surabaya. The compilation books, as well as the infographics, are written in English and Indonesian versions and are accessible at SEAMEO RECFON's NGTS SBNP microsite.

Some partner-schools have become finalists in the Healthy School Award at district/city, provincial and national levels. In Cirebon site, two primary schools became finalists at the district/city level, one junior high school at provincial level, and one junior high school at national level in 2019. In Sambas, one junior high school is a finalist at national level for 2020.

At least 83 schools that have received training on NGTS (face-to-face and online modes throughout Indonesia) joined SEAMEO RECFON's NGTS Awards in 2019. This competition was aimed at recognizing school teachers who have integrated nutrition education concepts and principles in their lesson plans for classroom and extra-curricular activities. Ten best schools were selected as grantees of the awards in primary, junior, and senior/vocational school levels.

The NGTS Program has been endorsed by the 11 Ministers of Education of Southeast Asian countries for scaling up in the region during their 50th annual SEAMEO Council Meeting in July 2019 in Kuala Lumpur, Malaysia. SEAMEO RECFON has already initiated the implementation of NGTS in Timor Leste in December 2019 and negotiations are underway this year to implement the program in Lao PDR in 2021.

The NGTS Program is now at its strengthening phase starting in 2020 and is expected to end its piloting period in Indonesia in 2021. Focused group discussions with partner schools, academic institutions and local government units are ongoing towards the institutionalization phase also in 2021.

SEAMEO RECFON has generated the following lessons in implementing its NGTS Flagship Program: 1) Painting the bigger picture of the NGTS Program including their relevance to global protocols and national policies and programs is critical to obtain the buy-in of stakeholders. 2) Clarifying the specific roles of partners, emphasizing shared ownership of the Program, and formalizing the partnership help facilitate program implementation. 3) Support/Endorsement from top provincial/district government officials helps ensure program sustainability and wider coverage of implementation. 4) Using existing national government programs as one entry point can boost the relevance and acceptance among partners. 5) Research results provide for better evidence/informed-based decision making from among the partners involved thus strengthening their commitments to the Programs. 6) Selection of schools by district education offices and consensus with academic partner-institutions enhances program ownership and commitment to implement planned

activities. 7) Encouraging academic and government partners to integrate NGTS program in their regular activities could help reinforce implementation. 8) Sustained and timely technical assistance to school teachers is critical to ensure achievement of program objectives and targets 9) Aside from the face-to-face monitoring, the proper use of social media maintains continuous communication, sharing of experiences, and documentation of progress between and among partners. 10) Providing proper recognition of efforts by school teachers deepens their personal and school advocacy to promote NGTS and ECCNE activities.

4. CONCLUSION

Because the NGTS Program is still at its piloting stage, the direct implementation is limited to selected partner-schools in specific sites in Indonesia. However, SEAMEO RECFON continuously provides opportunities for school teachers all over Indonesia to learn about the Program through offering online courses for free as well as providing free access to NGTS learning materials through its website and youtube channel.

The implementation of NGTS Program during the school period of children is critical because it is in this period when eating habits are developed and/or acquired either within or outside the household and school environments that could affect their nutritional status later during adulthood. Thus, it is the opportune time to help improve dietary behaviors of this group of children through school-based nutrition interventions.

School teachers that have attended NGTS training courses have become more aware of the importance of educating school children about balance nutrition to improve their cognitive and physical attributes. This is evident from the action plans they formulated as a major requirement of the NGTS training courses. The NGTS Program's goal of developing AWESOME (i.e., Active, Well-nourished, and Smart Of Me) school children is significant as it will enable the school children to become productive citizens and eventually contribute to national growth and development and the creation of Society 5.0. SEAMEO RECFON has yet to conduct an impact assessment of the NGTS Program to reinforce the Centre's advocacy to make it as national program in Indonesia and thus benefit more schools.

REFERENCES

- [1] Development Initiatives, 2018. 2018 Global Nutrition Report: Shining a light to spur action on nutrition. Bristol, UK: Development Initiatives.
- [2] Lancet. "Early Childhood Development Series Advancing Early Childhood Development": from Science to Scale Extended Executive Summary (Online) Available:

<https://www.thelancet.com/series/ECD2016> (accessed 26 September 2020). 2016

- [3] Indonesia Ministry of Health Indonesia (2014). *Balanced Diet Guidelines*. Available: <https://kesmas.kemkes.go.id/perpu/konten/permenkes/pmk-no.-41-ttg-pedoman-gizi-seimbang>. (Accessed 24 September 2020)

- [4] World Health Organization. "WHO Child Growth Standards". Available: www.who.int/childgrowth/standards/en. (Accessed 24 September 2020). 2006