



# THE LINKS BETWEEN MALNOURISHMENT AND EDUCATION

*A Policy Brief on a Whole Child Approach*

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- Siloed programs that seek to tackle education or nutrition independently will be unsuccessful in improving the quality of life of the child.
- Programs like the School Feeding Program which follow a whole-child approach can simultaneously tackle the issues of lack of education.
- These Programs are sustainable because their benefits outweigh their costs by a large value.



## Context

Recognizing the potential that the younger generation possesses to change the world for the better, the EU has taken steps to increase its investments in education globally. According to the annual activity report of 2022, “The EU has the political ambition to increase the investment in education over the period 2021- 2027 from 7% to at least 10%. This includes investing in quality basic education for all and in 21st century skills and employability” (Annual Activity Report 9). DevCo is investing in education in developing countries through programs like “EU-Africa: Global Gateway Investment Package Education Initiatives” (Annual Activity Report 9). **Improving access to education is the best way to boost the economies of low-income countries.** According to marketing analyst Brent Radcliff, “In economies, productivity rises as the number of educated workers increases since skilled workers can perform tasks more efficiently” (Radcliff). Investment in education, from the perspective of the EU and DevCo is also profitable in the long-run. When there is a growing percentage of educated youth, economies which are currently stagnant or backward will develop. Fast developing economies can afford to be more global and open up their markets for the exchange of goods and services. This will allow countries within the EU to find a larger consumer base for their products. But more than the economic benefits, the social benefits of education are tremendous, both to the country and the world. According to Gleditsch et al, “Education can affect individual decisions about crime through its effect on actors’ expectations about further returns of schooling, namely lowering the risk of unemployment and

increasing future income.” (Gleditsch et al). Thus, the economic payoffs of education can deter educated individuals from engaging in crime. The power of education in boosting up the economy by increasing productivity and also by increasing the social security of nations through the reduction of violent crime, points to the need to continue investing in education.



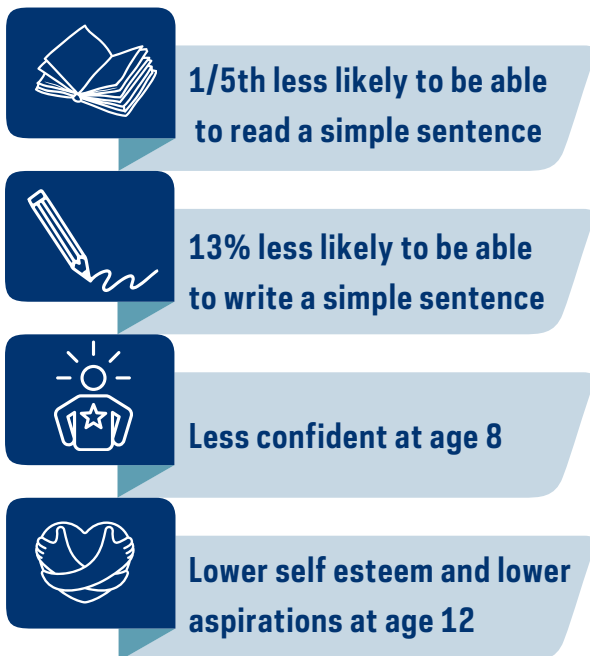
But investing in quality basic schooling cannot by itself solve the problems of high illiteracy levels and low school attendance rates. A child’s ability and willingness to access the educational support depends on a variety of factors. In most societies, the decision to send children to school is taken by parents and other members of the household. According to a report by the International Monetary Fund, some of the factors that influence parents’ attitudes on education are the low demand for education in families from low-income countries that are struggling to meet their basic needs like food and shelter, and parents who see no economic value in education

and want their children to engage in productive work either outside or within the household instead of going to school (Jenkner). These factors clearly show that focusing on improving the quality of education cannot be the perfect solution, when education itself is not valued by parents. One of the first factors identified by the IMF is that parents are unwilling to send their children to school because they are struggling to meet their basic human needs like hunger. According to UNICEF, worldwide “an estimated 45 million children under the age of 5 years suffer from wasting, 149million have stunted growth and development due to a chronic lack of nutritious food in their diets” (The State of Food Security). When parents are struggling to put food on the table for their children, educating their starving children will be the least of their priorities. But more importantly, even if parents believed in the value of education and were willing to send their children to schools, how would these chronically Malnourished and stunted children be expected to learn.

## A GLOBAL CRISIS

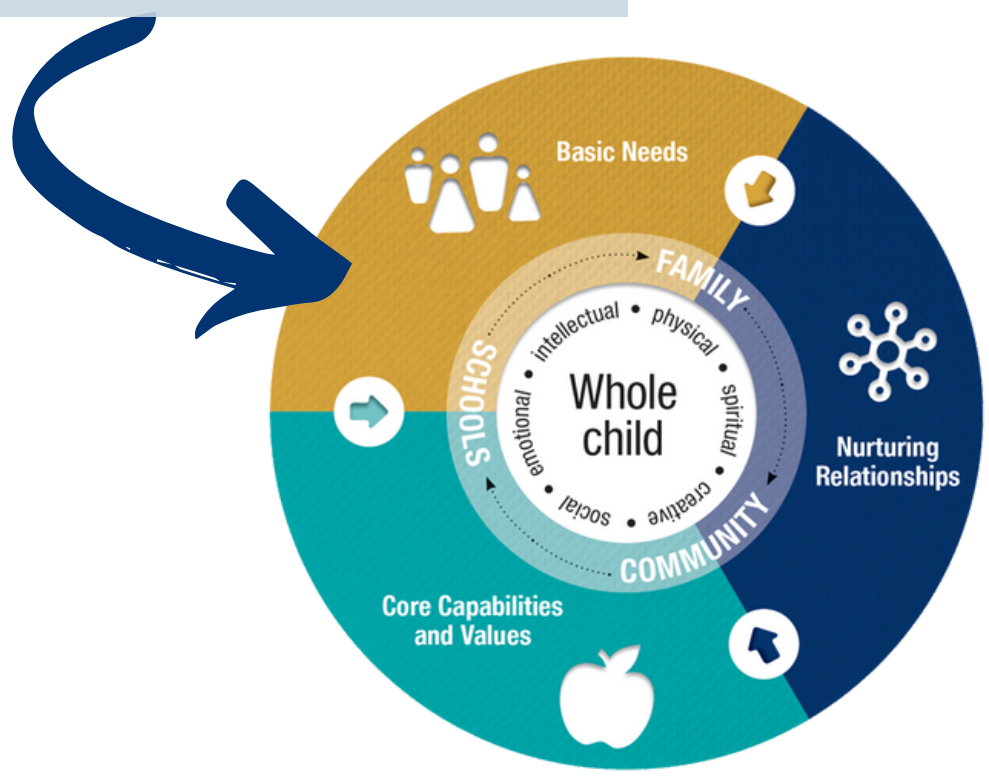
An estimated **45 million** children under the age of 5 years suffer from wasting, **149 million** have stunted growth and development due to a chronic lack of nutritious food in their diets.

“Young Lives” group, associated with Oxford’s Department of International Development conducted research on the links between Mal-nourishment and academic performance by measuring the learning gap between two cohorts of students (stunted and nonstunted children) at age 5 and then reassessing the learning gap at age 8, in the 4 countries of Ethiopia, Peru, India and Vietnam (The Learning Gaps Experienced). According to their results, “Effects associated with stunting at the age of five meant that children were nearly 1/5ths less likely to be able to read a simple sentence and nearly 13% less likely to be able to write a simple sentence. As stunted children fell behind with their work, they were more likely to be kept back with younger children. These children who had to resit their grades were more likely to leave school earlier” (The Learning Gap Experienced). Another finding in Peru and Vietnam is that Mal-nourished children were less confident at 8 years of age, and had lower self-esteem and lower aspirations at age 12 (The Learning Gap Experienced). **The results of the study show that Mal-nourishment can negatively influence basic indicators of access to education like literacy, but also goes beyond that to influence the motivation, confidence and aspirations of children, leading them to believe that they are powerless and lack any agency to better their life chances even when quality education is provided.** Thus there is overwhelming evidence to show that investment in education will not lead to positive results if the problem of Mal-nourishment and food insecurity in children is not simultaneously dealt with.





# Siloed Vs. Whole-Child Approaches



Historically, world actors have channelled their funds to programs that met only one need of the child, e.g. education, while neglecting others like nutrition. The disadvantage of such siloed approaches is that they often see issues like illiteracy or low school attendance rates as isolated from the social and physical environment of the child. An alternative to these siloed approaches is the whole-child development approach, which focuses on the overall development of the child within the context of his environment. A whole-child approach therefore would be interested in formulating programs and policies that simultaneously met the nutritional and educational needs of children.



# School Feeding Programs

One example of this would be a School Feeding Program which aims to provide nutritional meals to children who attend school. The benefits of the school feeding program will be bidirectional. On one hand, it will improve the nutrition of children. **The systematic review and meta analysis conducted by Wang et al found that School feeding resulted in a significant “increase in height, (mean difference = 0.32cm) and weight, (mean difference : 0.58kg) over 12 months” (Wang et al).**

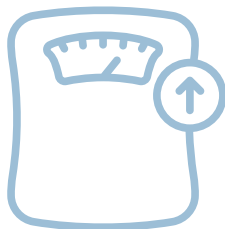
One of the most successful examples of the school feeding program is the Mid Day Meal Scheme introduced by the Indian government in all its public Schools. “A mid-day meal is a school lunch provided to children in government and government-aided schools in India to improve their nutritional levels” (Mid Day Meal in India). and support their education” A study conducted by Sing et al, which sought to assess the effectiveness of the midday meal program in protecting children against the negative effects of the droughts that affected the country in 2002 and 2003, found overwhelmingly positive results. “Drought exerts a substantial negative effect on both nutrition indicators (weight and height), but these negative effects are entirely compensated for by the midday meal schemes ” (Singh et al). The ability of the midday meal program to protect the children from the shocks of an unforeseen event like a drought in a country that is still heavily dependent on agriculture for its survival, speaks to us about the effectiveness of the program in meeting the nutritional needs of children.



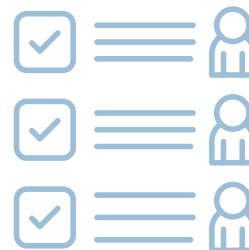
But improving child nutrition is just one benefit of a school feeding program. School feeding programs encourage parents in low-income countries to send their children to school, since now they are motivated by the prospect that their children will be able to get at least one full meal a day. This positive attitude that is created in parents leads to an increase in school attendance rates. **According to Wang et al, "School feeding resulted in a significant increase in the percentage of school days attended (2.6%)" (Wang et al).**



**Increase in height  
(0.32 cm mean difference)**



**Increase in weight  
(0.58 kg mean difference)**



**Increase in percentage of  
school days attended  
(2.6% increase)**

As discussed above, if lack of proper nutrition affects the literacy levels, confidence, self-esteem and aspiration of children, then it is also true that well-nourished children will show a positive improvement in all these indicators and traits. Thus the school feeding program, by providing proper nutrition to children physically and emotionally prepares them to make full use of the education that they receive. Even with all the evidence that points to the bidirectional advantages offered by school feeding programs, it still can be a daunting task to implement this program at a large-scale level. This is the same problem that India, the largest middle-income country, with a population of more than 1.4 Billion (The World Bank in India) and more than 431million children below the age of 18 (How Many Children) faced.

To make the program less cost-effective while also expanding it to the entire nation, the government established partnerships with local NGOs and community partners. "This involvement of the NGOs in multilateral/bilateral programs raised the level of co-operation.. The successful public-private partnership to feed children in government and government-aided schools served as a precedent, opening up an opportunity for the Government of India to successfully leverage the skills and resources of the private sector" (The Mid Day Meal in India). Since one of the objectives of DevCo is to evolve "from a donor-recipient model towards a stronger emphasis on mutual interests, covering not only social sectors, but sustainable investments, trade and the high value-added economic sectors" (Annual Activity Report 3), it could be of interest to DevCo to involve local and community partners within the countries to implement an economically and socially sustainable school feeding program to simultaneously meet the goals of child nutrition and education.

It is also important to consider that the school feeding program, though requiring an initial investment, produces large returns in different sectors. According to an analysis of the school feeding programs conducted in 14 low-income countries by the National Institutes of Health, approximately “190 million children benefit from school feeding programs with total program budgets reaching USD11 Billion per year. Estimated annual human capital returns are USD180 Billion: USD24 billion from health and nutrition gains and USD156 billion from education. In addition, school feeding programs provide annual social protection benefits of USD7 Billion and gains to local agricultural economies worth USD23 Billion. **This suggests that the overall benefits of school feeding are several times greater than the returns to public health alone, and that the overall cost-benefit ratio of school feeding programs could vary between 7 and 35” (Verguet et al).**



## Conclusion

School feeding programs which follow a whole-child approach, simultaneously responding to lack of nutrition, education and adequate health, will in the long-run prove to be more viable and sustainable options to both DevCo and its partner countries, compared to investing in 3 separate programs that seek to tackle healthcare, nutrition and education independently.



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