

A photograph of four people standing in a rural setting, likely a cocoa farm. From left to right: a man in a striped polo shirt holding a large woven basket filled with cocoa beans; a man in a patterned shirt holding a bunch of green cocoa pods; a woman in a white top and patterned skirt holding a bowl of green cocoa pods; and a woman in a yellow and white sari holding a bunch of green cocoa pods. In the background, there are wooden racks filled with cocoa beans and a simple building with a corrugated metal roof. The text is overlaid on a semi-transparent dark band across the middle of the image.

**THE COCOA NUTRITION INNOVATION PROGRAMME IN GHANA:
HARVESTING THE BENEFITS OF NUTRITION FOR FARMERS, FAMILIES
AND WORKFORCE**

Summary

There are many complex and political challenges faced by companies working with large and diverse supply chains. For the cocoa sector, child labour, attaining a living income and deforestation are often seen as the most urgent. However, one area that affects productivity, profitability and reputation but is relatively easy to solve is workers' nutrition. Improving workforce nutrition is relatively uncontroversial. It can be added to existing business structures without significant cost and can help build resilience and healthy immune systems that help protect against the worst effects of COVID-19. Workforce nutrition can even promote new income streams for smallholder farmers.

Building on the success of the Seeds of Prosperity programme, a workforce nutrition programme in the tea sector, the Cocoa Nutrition Innovation Project (CNIP) gives major cocoa companies and the small-scale farmers in Ghana a way to work together to improve the farmers' nutrition. It has improved the diet of the cocoa farmers involved, and contributed to healthier lives and better finances. This has been achieved through increasing access and demand for nutritious food, and training and behaviour change techniques, benefiting health, productivity and relationships.

Challenge

Malnutrition affects one in three of us across all continents, costing countries billions in healthcare, loss of earnings and reduced productivity. Adults who were malnourished as children earn at least 20% less on average than those who weren't. [1] Poor nutrition of workers has been shown to increase sick days, reduced performance, under-developed immune systems and even premature death, all as a result of deficiencies in workers' diets. [2]

In Ghana, there are around 800,000 small scale cocoa farmers who are working small plots of land. Because of low yields and plot size, it's difficult for farmers to earn high incomes or grow food for themselves and their families. This leads to high levels of malnutrition and anemia within the farming communities, where the effects are felt particularly acutely by women and children. However, through initiatives like CNIP, there is an excellent opportunity to open up access to and demand for safe and nutritious food.

How CNIP works

Through collaborative training and behaviour change communications (BCC), CNIP is supporting farmer communities to understand the value of eating healthily and producing their own food alongside the cocoa they sell. This food they produce not only means they have access to more and more affordable food for healthier meals, but it also gives them an additional source of income, by selling excess stock.

[1] Grantham-McGregor et al (2007) Development potential in the first 5 years for children in developing countries. The Lancet. 369: 60-70.

[2] <https://www.gainhealth.org/sites/default/files/publications/documents/evidence-for-workforce-nutrition-programmes-overview-2019.pdf>

CNIP activities

CNIP worked with two cocoa trading companies, Ecom and Touton across three of their cocoa brands: Lindt, Hershey and Ferrero, in 71 farming communities. Using a BCC approach, farmers were given training on hand washing and food hygiene, and the need to appreciate and diversify what they eat using foods that are high in micronutrients and easily accessible, particularly leafy green vegetables, orange fleshed vegetables and fresh meat and fish.

CNIP places the farmer at the centre of the learning process, ensuring they are actively participating and quickly beginning to put their new knowledge into practice. To make sure the training was delivered correctly but inclusively, a master trainer provided training for field trainers, who were picked both from the farming communities and the cocoa companies themselves. Using friendly and effective techniques that allow learners to identify needs and problems themselves, BCC allows farmers to work together to take steps to change. The project used lots of hands-on activities to bring the training to life, including how to select, handle and cook foods so not to miss out on their essential micronutrients.

The farmers were also trained and guided to devote more time and space to growing food and rearing animals for them to eat, considering carrots, cabbage, garden eggs, and sweet potatoes, and animals such as grasscutters, rabbits, chicken and snails. Although the original intention was just to produce food to eat, the idea of selling excess produce quickly became an important idea, to help them make more money

during the quieter times of cocoa production. Finally, a number of reinforcement activities took place, such as home visits to check how well farmers and their families were eating, cooking competitions, life skills training and video documentaries shown to the communities.

CNIP had positive impact on food and hygiene behaviour

By taking a bottom-up, inclusive behaviour-change approach, CNIP has increased knowledge in these key areas, producing positive results for the farming communities and the cocoa companies that participated in the programme. The training has also helped communities understand the importance of eating orange-fleshed fruit and vegetables, leading to an increase in households eating them at least three times a week.

Although consumption of fresh meat and fish was already high, it is common practice in Ghanaian communities to give adult men the biggest and best parts of meat. Through the project, many farmers discussed how the training had taught them to give more meat to their children, pregnant women and women of reproductive age.

The hygiene training was able to strengthen the farmers' knowledge on when to wash hands and the most effective way to do it, using soap and running water, including practical lessons such as setting up tippy taps for the farmers to access running water.

CNIP activities

“ I consume green leafy vegetables and fruits very often now because I heard that they are important for my health. [3] ”

“ After receiving the training, at the beginning, it was difficult to comply with giving my children more meat or fish than myself but over time I have been able to follow that seeing how beneficial it has been for my children. [4] ”

“ We also talked about the different times we need to wash our hands which includes washing our hands with soap and water after visiting the toilet. [5] ”

CNIP helped farmers with their farming and life skills knowledge

The project has helped farmers and their community understand more about vegetable production, affordable animal rearing and finances. Farmers could work on a demo farm, where they had the opportunity to learn about and cultivate new vegetables such as carrot and cabbage, and practice rearing small livestock, for example, rabbits. The ECOM-Hershey programme also taught farmers about savings and accessing finance and loans to help them through the lean seasons. Overall, CNIP has addressed some of the fundamental challenges that have stopped farming communities gaining access to, or being able to afford varied, nutritious food on a regular basis.

There are still lessons to learn

CNIP also tried to introduce some initiatives that were less successful. An ECOM-Hershey training programme on nutrition for schools proved too difficult to implement successfully, and Touton planned a programme to promote fortified foods, especially to women, but this was unsuccessful because the necessary foods were unavailable.

The ECOM-Hershey training also found it was challenging to get communities to accept new crops like potatoes and orange fleshed vegetables, and so some crops were replaced, and more training on how to use the vegetables was needed.

Touton found some of the seeds used for the demo farm were not as resilient as local varieties, and that farmers wanted to work on their own rather than collectively to secure their own produce and potential profits.

For ECOM-Lindt, only 5.5% of those taking part in the demo farm have developed their own garden crops, although it's hoped over time, more farmers will start. ECOM is still committed to supporting farmers to produce vegetables for themselves and for profit.

How the companies adapted through CNIP

CNIP was introduced in 2018 as a prototype to test the programme content in cocoa growing communities in Ghana. This phase focused on building the internal capacities of the cocoa companies to implement nutrition interventions including raising awareness among cocoa farmers on good nutrition and dietary diversity.

[3] Participant, Antwikrom Focus Group Discussion.

[4] Participant, Focus Group Discussion, Obuobikrom.

[5] Participant, Women Focus Group Discussion, Obuobikrom.

Farmers were introduced to vegetable production and animal rearing and some companies added new components such as life skills and financial literacy training. There were significant changes to the approach and contents of the program based on the companies' own experiences as learnings from the ongoing process evaluation came in. The main changes were:

- Redesigning the training curriculum to be more context relevant and practical, because to begin with it was too formal and theoretical for the level of education the farmers had.
- A change in the delivery approach from teaching to facilitation, to give the farmers more opportunities to get involved with the teaching, rather than just being 'talked to'.
- Changes in delivery plans from using a few facilitators to recruiting community facilitators to enable the companies to reach more communities at the same time.
- Introduction of quality improvement (QI) at the adaptation phase to support the field trainers with the quality of their facilitation.

Conclusion

CNIP has shown there is a great opportunity for companies to improve nutrition among smallholder farmers by increasing access and demand for nutritious foods. Poor nutrition of farmers is likely an issue in most supply chains and it is easy and low cost for companies to invest in nutrition programmes.

Behaviour change does take time, but despite some challenges, CNIP has improved the diet of the cocoa farmers involved, and contributed to healthier lives and better finances. They reported significant changes in their dietary habits and some reported positive changes in the health of their households. In all, the idea to influence dietary behaviours through BCC facilitation appears to have worked well.

Using a 'quality improvement process' significantly helped improve the programme along the way, and having access to frequent and regular results meant the companies could respond to challenges quickly and effectively, improving the quality of the training.

We have seen farmers are keen to continue animal rearing and vegetable production, despite challenges across production, knowledge and popularity of the certain vegetables. Not all farmers have benefited from their efforts as yet, however, in some communities farmers are beginning to sell their produce, and many more intend to start growing more vegetables to sell.

Lastly, income is a major motivation for farmers. Even though the original idea of animal rearing and vegetable production was to encourage home consumption, what is actually motivating farmers to participate is the potential extra income from selling excess produce.

Companies are in the perfect position to improve the nutrition of their workers, bringing benefits to themselves, the farmers they work with and their communities.