



# COLLABORATE.LEARN.ADAPT. CASE COMPETITION CASE STORY TEMPLATE



Collaborating, learning, and adapting (CLA) have long been a part of USAID's work. USAID staff and implementing partners have always sought ways to better understand the development process and USAID's contribution to it, to collaborate in order to speed and deepen results, to share the successes and lessons of USAID's initiatives, and to institute improvements to programs and operations. Through this case competition, USAID and its LEARN mechanism seek to capture and share the stories of those efforts.

Case Title \* (10 word limit)

#### Nutrition Sensitive Agricultural Education in Ethiopia: From Non-existence to Existence

#### What is the general context in which the story takes place? \* (250 word limit)

Set the scene by providing some background details about the country and/or activity context. Was the CLA activity part of a larger project, mechanism or initiative? Who were some of the key stakeholders involved?

Ethiopia has the highest rate of malnutrition in Sub-Saharan Africa. As a result of the poor feeding practices, the level of nutritional indices (stunting, wasting, and underweight) and micronutrients deficiency are high. Despite the Agriculture sector's lion share roles to address malnutrition with nutrition sensitive agricultural practices, Agriculture cadres graduated from the Ethiopian Agricultural Colleges did not have the competencies to address the issue as their pre-service education curriculum lacked the basic nutrition competencies. Therefore, the nutrition sensitive Agricultural practices remained untouched resulting in the current state of malnutrition.

Jhpiego-Ethiopia's ENGINE<sup>1</sup> project under the USAID flagship has been working on the pre-service nutrition education in selected three Ethiopian Agriculture Technical and Vocational Education Training Colleges since 2011. Core nutrition competencies for mid-level Agriculture cadres were identified and integrated to selected relevant Crop Production and Animal Sciences courses using an approach called "add-on". The colleges' staff technical capacities were also strengthened by effective teaching skills and nutrition technical up-date trainings.

After completing their education, the Agriculture graduating class students taught by the revised syllabi were assessed for their Nutrition Sensitive Agriculture knowledge, skill and attitude competencies. The assessment indicated a significant improvement to address malnutrition with Nutrition Sensitive Agricultural practices.

As the add-on approach success, the Ministry of Agriculture also endorsed nutrition as a separate course for Agriculture cadres' pre-service education. Now, the non-existing nutrition competencies among mid-level Agriculture cadres is introduced to enable the graduates with nutrition competencies that enable them to address the malnutrition at community level.

What was the main challenge/opportunity you were addressing with this CLA approach or activity? \* (500 word limit)

What prompted your team/organization to undertake this activity or implement this approach? Was there a particular opportunity for new or improved collaboration, learning, and/or adapting? Or was there a problem or pain point you were trying to solve?

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<sup>&</sup>lt;sup>1</sup> Empowering New Generation to Improve Nutrition and Economic Opportunities

The first and most important opportunity that enabled the Jhpiego/ENGINE team to pioneer on advocating the nutrition competencies among Agriculture cadres was the Ethiopian National Nutrition Program (NNP); which was revised in 2011 with the strategy of strengthening implementation of Nutrition Sensitive intervention across nine sectors and also an initiative of the NNP to incorporate nutrition in to the curricula of higher learning institutions to address malnutrition.

The foundation laid by the Ethiopian government's five year (2011-2015) Growth and Transformation Plan (GTP) to ensure high economic growth and achieving Millennium Development Goal (MDG) has also made a platform for community based nutrition service delivery in both the Health and Agriculture sector as a system and structure to reach communities and households.

The main challenge in the Ethiopian nutrition service was assignment of the health sector alone in addressing nutrition services in a limited scope due to the misconception that nutrition service is merely addressed by the health sector. Badly, the 2008 NNP did not address comprehensive community based nutrition or nutrition sensitive agriculture roles to alleviate malnutrition. It focused mainly on the clinical management of chronic malnutrition cases at health facility level rather than promotion and preventive interventions. As a result, the Agriculture sector did not give attention to nutrition and the pre-service educational institutions curricula lacked nutrition competencies.

The high course burdens and short academic calendar of the selected Agriculture Colleges for intervention were one of the main challenges to incorporating nutrition in to the Agriculture curriculum.

#### Describe the CLA approach or activity employed \* (600 word limit)

What were the objectives or anticipated outcomes of the CLA initiative? What were the main strategies, tools, or methodologies used to carry out this approach or activity? Was it something new, or did you amend/improve an existing process or activity to promote stronger collaborating, learning, and/or adapting? Was it a one-off action, ongoing, or recurring over time? Who was involved?

Baseline assessment was conducted in March 2012 to identify the competency component gaps of Agriculture cadres at selected Agriculture Technical and Vocational Education Training (ATVET) colleges. Some of the identified gaps were limited information of Agriculture cadres on the nutritional value and benefits of food products, and the absence of promoting diversified food production and consumption for different groups of population. Based on the identified gaps, the following, core competencies were developed.

- 1. Apply basic principles of human nutrition,
- 2. Promote production and consumption of diversified foods,
- 3. Promote safe handling of agricultural food products from farm to fork and
- 4. Apply Nutrition promotion and behavior change communication.

To manage the integration of these competencies into the Agriculture courses, fourteen potential courses relevant to address the competencies, seven from crop production and animal sciences, were selected and their syllabuses were revised to integrate the competencies using the add-on approach at three ATVET Colleges: Alage from Oromia Region, Shire from Tigray Region and Wolaita Soddo from Southern Nation, Nationality and People Region.

Diary Processing was one of the potential courses that was revised and enriched with the nutritional value of milk for children, pregnant and lactating women, youths, adults, sick person and the impact of milk processing on the nutrient value of the products. Fruits and Vegetable Production course was another potential course revised to address the macro and micro nutrients benefit. In addition, the Agriculture Education and Communication course syllabus were enriched with the competencies of promoting diversified food production and consumption.

Following the syllabus revision, nutrition technical up-date and effective teaching skill trainings were given to all instructors of the three colleges to enable them deliver the course efficiently. Skill teaching farms for both plant and animal science were also established and strengthened. Those who do not have farm were technically assisted to have farms; and for those colleges who had farm, supports like labeling the Agro-food items with their





nutrition value and posted on farms was made so that students can easily understand the nutritional value of each food items and promote their consumption. Posters with core nutrition Information, Education and Communication and social Behavioral Change Communication tools were handed over to the Colleges. Different food, nutrition and agriculture reference books for further references and teaching aids including computer and projector were also delivered and placed in the Colleges' libraries for further reference.

To ensure the quality of nutrition education delivery in the Colleges, a nutrition education quality improvement team composed of five members was formed and trained on a tool called "Standard Based Management and Recognition (SBM-R)", a practical approach used to monitor and improve pre-service education. Then, the teams routinely assessed the quality of nutrition education and developed an action plan and communicated to the Colleges' top management.

Agriculture graduating students taught by these revised syllabuses were assessed for their competencies and more than ninety percent of them demonstrated the above mentioned core competencies perfectly. But the need for having separate nutrition course in addition to this approach became a pressing demand of the teaching faculty and the management team of Agriculture College. Based on this strong demand, two nutrition syllabi were developed and integrated into the agriculture curriculum of not only the three ENGINE project supported ATVET colleges, but also for more than twenty ATVET colleges throughout the nation. This time onwards, Agriculture cadres are in an opportune time to take their lion share position towards promoting nutrition sensitive Agriculture so that malnutrition will be mitigated in Ethiopia.

## Were there any special considerations during implementation (e.g., necessary resources or enabling factors)? \* (500 word limit)

Describe the critical success factors or particular implementation challenges. Did you need any special tools or skills? What type of resources (e.g., financial and/or non-financial) were required? Were there any conditions or factors (e.g., leadership buy-in) that contributed to or inhibited implementation?

Educational quality improvement is among the current priorities in the higher education institutions including the Agriculture Colleges in Ethiopia as an enabling factor during the implementation of the project. The strong commitment and leadership of the Colleges' management body and instructors of the two departments from the inception to the current stage and keeping on track to sustain the success was also another biggest factor that significantly contributed to the project's outcome. The physical space availability for having adequate skill teaching farm in the colleges and the instructors' educational levels were also another enabling factor for the project's success.

The Agriculture Colleges have an existing well established system that enables them to monitor the quality of education i.e. higher education quality assurance office. This system is another opportunity for the project's success. The commitment of the Agriculture Colleges to address quality of education and the role of Agriculture sector to address the nutrition problem is a good opportunity for the success and sustainability of the interventions.

The misconception of considering nutrition services as of the health sector's role alone is the other challenge that inhibits the idea of nutrition competencies in agriculture curriculum.

The approach used to integrate core nutrition competencies into the Agriculture curriculum and the technical update trainings with the necessary teaching resources were also the critical in the successes.

SMB-R tool introduced to the Colleges to enhance the delivery of quality of nutrition education for the cadres was the special one as it enabled the progressive improvement of quality.

What have been the outcomes, results, or impacts of the activity or approach to date? \* (300 word limit) Have you been able to qualitatively track or measure any outcomes, results, or impacts of the activity or approach thus far? What have you seen? Did you use any particular M&E methodology? If you do not yet have any noticeable outcomes or results, what are you doing to monitor the value provided by the approach or activity?

After the program interventions, the most prominent outcomes are:

- The non-existing nutrition competency in the former Agriculture curriculum is now in place to address nutrition sensitive agriculture and institutionalized in to the existing system.
- Before the project intervention, there were no nutrition courses, but now two separate nutrition courses are in place and synchronized to the existing system to teach nutrition sensitive agricultural education.
- Agriculture graduating class students' nutrition competency does not exist before the project intervention;
  but now 93.8% of the students are competent in promoting nutrition sensitive agriculture.
- The Agriculture colleges started to allocate budget for the nutrition sensitive activities in the colleges.
- Practical teaching farm sites are established and strengthened both for teaching and assessment purposes of nutrition sensitive agriculture.
- Agriculture instructors are capacitated with nutrition technical competencies and deliver effectively.
- An active team that strives towards quality delivery of nutrition education is in place at the project sites and
- The Colleges started to integrate nutrition in to their community service programs.

#### What were the most important lessons learned? \* (300 word limit)

How will your organization use this experience moving forward? If others wanted to implement a similar approach or activity, is there anything they should consider? What worked or did not work?

Jhpiego/ENGINE's pre-service nutrition education program laid a strong foundation for investment to address the prevailing nutrition problem with new Agriculture cadres equipped with nutrition competencies. Investing on the existing system is the most cost effective and sustainable means to address nutrition sensitive pre-service Agricultural education.

The multi-sectorial nature of nutrition is a good opportunity to address the significant intervention of Agriculture sector to address the burden of malnutrition. The most important lesson learnt from the ENGINE intervention is, with few resources input and technical update trainings, the higher learning institutions can hand over and sustain the concept and practice of nutrition sensitive agriculture.

### Any other critical information you'd like to share? (250 word limit)

Use this optional space to provide any additional information not already included.

Pre-service nutrition education at Agriculture College is a one-time investment that can sustainably address the malnutrition problem than other similar interventions. Therefore, local and national government strategy should give due attention for the pre-service education.

As multi-sectorial nature of nutrition, it is good if all the nutrition stakeholders under one umbrella intervene on the pre-service nutrition education.