

IMAGINE

Economic Evaluation

Part 1: Findings on Costs and Efficiency

Executive Summary

In summary, all activities of the IMAGINE program were found to be relevant in achieving overall objectives. However, some challenges with practical execution, particularly for the vocational training and market linkage components, appear to have limited the effectiveness and cost-efficiency of some activities and need to be addressed during scale-up or replication.

The IMAGINE budget was **driven overwhelmingly by the vocational training components**, which made up 79% of the total budget for Bangladesh and 63% for Niger. Although project staff said they believe these activities were relevant, they were found to be the least efficiently delivered given both their high cost and the significant challenges in linking adolescent girls to markets, maintaining their engagement, and elevating their earnings to more meaningful thresholds. The relative value of these activities, at least as implemented in IMAGINE, merits re-examination. Habbanye, the goat-rearing and rotation model implemented in Niger, is the exception to this experience, with sustainable achievements and quite low unit costs.

In both contexts, the **girls' collectives appear to be the most efficiently delivered**, given their cost and strong relative importance based on staff experience. These groups made up 13%-14% of total budgets for Bangladesh and Niger, and costs fell within ranges similar to those previously documented. Likewise, **couples counseling and Fada groups were both found to be relatively efficiently delivered with a reasonable cost basis.**

The **health worker transformation** component, while not a significant cost driver in either setting (3% of total budget in Niger and 10% in Bangladesh), **could benefit from efficiencies by integrating more firmly in the broader health system** or larger health-system strengthening-focused programs. **Social Analysis and Action (SAA) community groups in Niger were thought to be important** by staff in order to mitigate against potential backlash and ensure community buy-in but less so than girls' collectives and Fada groups, which focused more explicitly on the target groups (married adolescents and their partners) for behavior change. Regardless, the SAA groups were not a significant cost driver, contributing to just 3% of costs in Niger.

Preliminary Recommendations

- **Address the cost inefficiencies in the vocational training and market linkage components.** One option is to eliminate this component, which would reduce costs dramatically. A second option is to invest more significantly in this component to realize true transformation of market sectors. As implemented, the program took a middle-ground approach. Without the resources required to truly *transform* the entire market, the middling investment was less efficient than either of the two options proposed above.
- **Health worker transformation activities would benefit from economies of scale,** namely institutionalization within broader health worker training and / or supportive supervision work done throughout the health system or through larger health system strengthening programs.
- **Look for opportunities to combine some activities.** For example, the project could significantly lighten the vocational training activities mentioned above in order to add more generic, less sector-specific elements to girls' collective components.
- **Reduce the frequency and focus of the Social Analysis and Action community groups component** in order to focus most intently on components like girls' collective and Fada groups that were found to be more cost-efficient. Although, it should be noted, as this was not a significant cost driver the efficiency gains would be marginal.
- **Girls' collectives, Fada groups and couples counseling could benefit from some small adaptations in design to improve relevance and efficiency,** and potentially reduce costs to a minimal degree in some cases.

The recommendations above will be updated, and likely will be expanded and refined in the second part of this economic evaluation, when brought together with the effectiveness data.

Objectives

This report is the first part of a two-part economic evaluation of the IMAGINE program, with the overall objective of understanding a cost structure for an efficient and effective future program like IMAGINE to be delivered at scale.

Part 1 (this report) evaluates the costs and efficiency of the IMAGINE program in Niger and Bangladesh. Part 2 will evaluate costs against effectiveness findings from the forthcoming quantitative evaluation and bring all the findings together to recommend a cost structure for a future program benefiting from IMAGINE's cost efficiency and cost-effectiveness lessons.

Evaluation Questions

1. What is the cost of implementing IMAGINE?
2. Which IMAGINE program components likely are most cost-efficient?
3. What is the cost-effectiveness ratio for the IMAGINE program (e.g., cost per month of pregnancy delay)?
4. How could the cost of implementing IMAGINE change at scale?

This report will seek to answer questions 1 and 2. The second report will answer questions 3 and 4 and draw overall conclusions.

Scaler Perspective

This evaluation is taken from the standpoint of an implementing agency that wishes to replicate and scale up IMAGINE in a similar country contexts. These user or adopting organizations could be the governments of Niger and Bangladesh, or other non-government actors, that may wish to widen and roll out elements of this programming and understand the costs and benefits of doing so. For this reason, the cost analysis only includes costs that would be relevant for a government or other user organization in replicating, institutionalizing or otherwise scaling elements of the programming. With this in mind, the *following types of costs were excluded*, as it was determined that they would not be incurred by future scalers or replicators and / or are not critical to operationalization of the IMAGINE program:

- Design costs (e.g., costs for formative research, human-centered design process, curriculum and tool development).
- Evaluation costs (e.g., data collection sub-awards, evaluation and research design and management).
- Knowledge management and dissemination costs (e.g., costs of attending international, regional conferences, developing briefs and learning materials).
- Grants management and donor relations costs (e.g., costs associated with regular calls and updates to the donor, annual reporting etc.).
- International NGO overhead.
- Costs donated in-kind (e.g., private-sector partner's time to coach entrepreneurs).
- Costs incurred by the end-user (e.g., girls', Fada members' and community members' time to participate), although it should be noted that these costs likely are marginal.

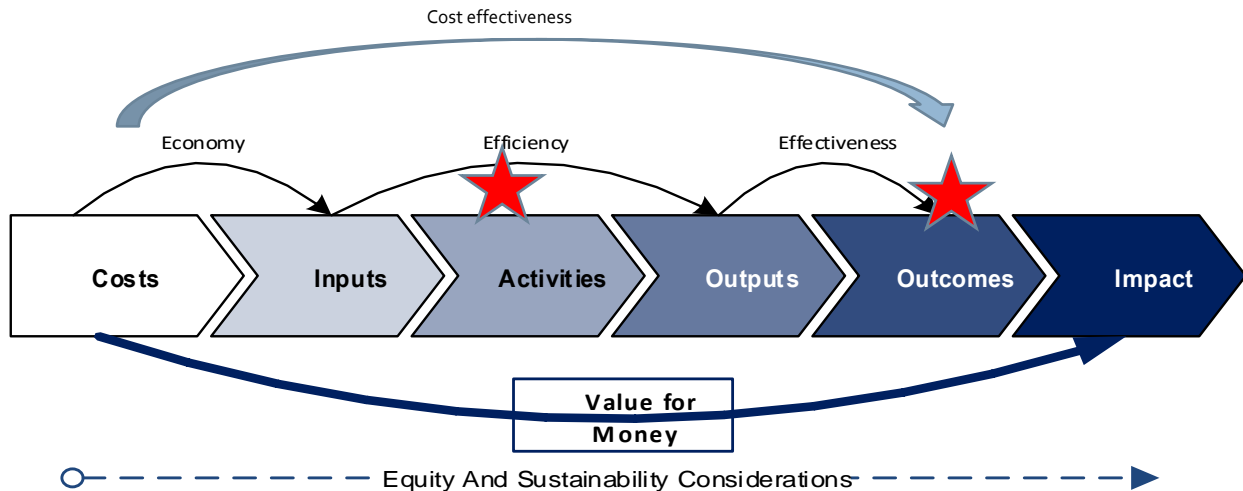
Methodology and Analytical Framework

Cost-Effectiveness Framework

The Value for Money framework is built on the standardized U.K. Department for International Development (DFID)/National Audit Office 4E Framework¹ (Economy, Efficiency, Effectiveness and Equity). As shown below in Figure 1, sustainability and cost-effectiveness also are considered within the framework.

¹ <https://www.nao.org.uk/report/framework-to-review-programmes/>

Figure 1: General DFID/NAO Value for Money Framework



The framework comprises four concepts: economy, efficiency, effectiveness and cost-effectiveness.

- **Economy**, defined as “a measure of what goes into providing a service.” This examines the costs of inputs, holding their quality constant.
- **Efficiency**, defined as “a measure of productivity, in other words how much you get out in relation to what is put in.” This examines the relationship between inputs and outputs, such as resources and time required for establishing and maintaining a girls’ collective group.
- **Effectiveness**, defined as “the qualitative and quantitative measurement of outcomes showing that a program is delivering its intended objectives.” This examines the relationship between outputs and outcomes, testing whether the design of the program is the cheapest way to achieve intended outcomes. This also covers the overall value add of the program – the value provided relative to other programs and counterfactual scenarios.
- **Cost effectiveness**, defined as “the outcomes an intervention can achieve relative to the inputs invested.”

The red stars in the diagram are the most relevant points of analysis for the overall study and all four of the above concepts are integrated into the analysis. This first report only covers economy and efficiency. Part 2 will cover effectiveness and cost-effectiveness.

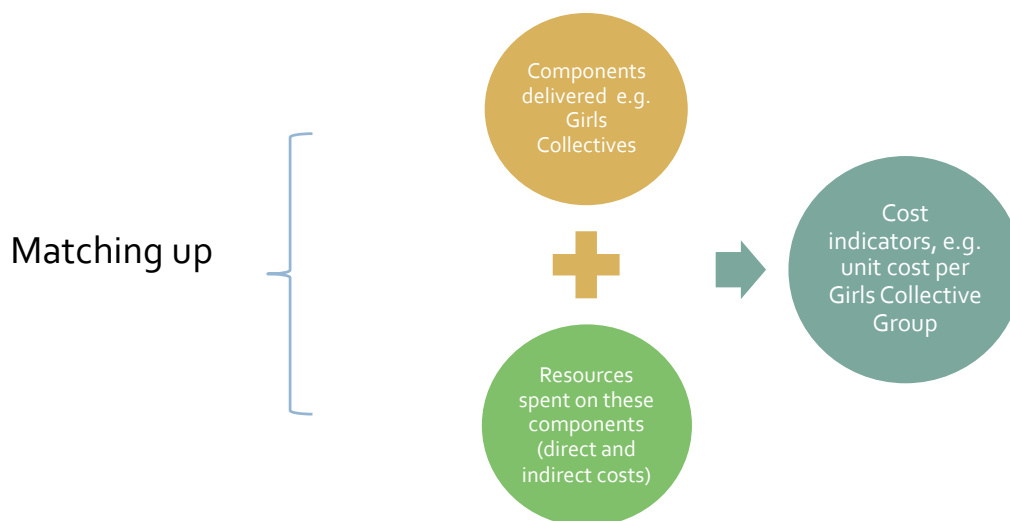
Estimating the Costs (Economy)

To understand the costs incurred by the different activities within the IMAGINE program, it was necessary to undertake an activity-based costing exercise. This required defining discrete activities (e.g., girls’ collectives), then estimating their direct costs and allocating an appropriate contribution of cross-cutting costs such as financial management and administrative support in addition. The inception report explains the methodology in more detail. A key point to note is that evaluation costs, design costs and INGO overheads were stripped out of the overall costs because they would not necessarily be incurred in a future rollout scenario by government or other user organizations. The program is designed so those costs do not need to be repeated. The activity-based costing exercise gives rise to a total expenditure per activity for Niger and Bangladesh.

Estimating Efficiency of IMAGINE: A Quantitative Approach

This involves estimating cost efficiency using relevant indicators for the main activities. Moving from economy to efficiency involves using the expenditure of each intervention within the programs above, and then linking these to the relevant units of output for those interventions to create unit cost indicators, (e.g., cost per girls’ collective). To do this, we first collectively defined the units of interest with the scaler-perspective in mind (e.g., girls’ collectives). We then identified the count of each unit achieved during the costed period, (e.g., the number of girls’ collectives rolled out each in Niger and Bangladesh). Finally, we brought this together with the specifically estimated expenditures from above, so the cost estimated for the component was divided by the number of units achieved. This methodology is illustrated below.

Figure 2: Methodology to Create Cost-Efficiency Metrics



(Annex 1 displays the numbers of the units of each output for both countries.)

Tables 1 and 2 display the units of outputs (first column) and the resulting cost-efficiency indicators (second column). The costs are annualized so they are standardized and more easily comparable across contexts and programs.

Table 1: Unit Cost Indicators – Niger

IMAGINE Components	Cost-Efficiency Indicators
Girls’ Collectives and VSLAs	Annual cost per girls’ collective + VSLA groups and per participant
Vocational Trainings	Annual cost per participant in each vocational training package – goat rearing, feed / fodder processing, cowpea processing
Fada Groups	Annual cost per Fada group and per participant
Community Social Analysis and Action	Annual cost per SAA group and per participant
Health Worker Transformation	Annual cost per health center and per health worker participant

Table 2: Unit Cost indicators - Bangladesh

IMAGINE Components	Cost-Efficiency Indicators
Girls' Collectives	Annual cost per girls' collective and per participant
Couples Counseling	Annual cost per couples' counseling sessions and per couple
Vocational Trainings	Annual cost per participant in each vocational training package – handicrafts, mobile phone retail, IT entrepreneurship
Health Worker Transformation	Annual cost per health center and per health worker participant

Cost-Efficiency of IMAGINE: A Qualitative Approach

In addition to assessing cost efficiency quantitatively, we also collected qualitative data via key informant interviews that could be used to supplement the above quantitative indicators and help us understand the metrics in more detail – in particular to understand which components CARE and partner staff felt could be more efficiently delivered in the future. The staff members offer a unique perspective, given that they have first-hand knowledge of waste or inefficiency. The interviews were based on three areas of inquiry:

- Which components of the project worked best to achieve the intended goals?
- Which project components may not have been as critical to the success of the intended objectives?
- If we were to implement the project again, where could we be more effective with our time, resources, etc.?

(The interview guides used to conduct these key informant interviews are in Annex 2.)

Replication Costs Modeling

This stage now remodels the activity-based IMAGINE costs from above to simulate a cost structure that is more cost-efficient and effective. To do this, we integrate cost-efficiency and effectiveness findings into the cost calculations and adjust them accordingly. In practice, we create five different scenarios, adjusting the cost base each time.

Scenario 1: IMAGINE baseline costs excluding design and evaluation (this was done in Stage 1).

Scenario 2: Reducing costs by removing the INGO overhead (this was done in Stage 1).

Scenario 3: Further reducing costs by applying efficiency learnings (e.g., repackaging or streamlining certain activities).

Scenario 4: Further reducing costs by applying cost-effectiveness learnings (e.g., removing or adapting the costs of less effective interventions – to be completed in the next report).

Scenario 5: Final reduction of unit costs by integrating scale effects, (i.e., the unit cost reduces further due to the large scale, over which fixed costs are spread).

This report focuses on the costs and efficiency aspects of the above framework and covers scenarios 1-3 in the replication costs method. Report 2 will cover scenarios 4 and 5.

Key Findings

Main Component Costs

The following two figures summarize the activity-based budgeting exercise. As seen below, the bulk of costs are driven by vocational training activities – 63% of total budget in Niger and 79% in Bangladesh. The girls’ collectives are second, at 13%-14% of total budgets. In Niger, the remaining budget was allocated to the implementation of health worker transformation (10%), Fada groups (9%), and community Social Analysis and Action (3%). In Bangladesh, the remaining budget was allocated to couples counseling (5%) and health worker transformation (3%).

For Niger, the total revised expenditure is \$0.87 million, and \$1.08 million for Bangladesh. (*Annex 3 provides the exact figures.*)

Figure 3: Niger Expenditure % of Total Budget by Component (March 2019 – October 2021)

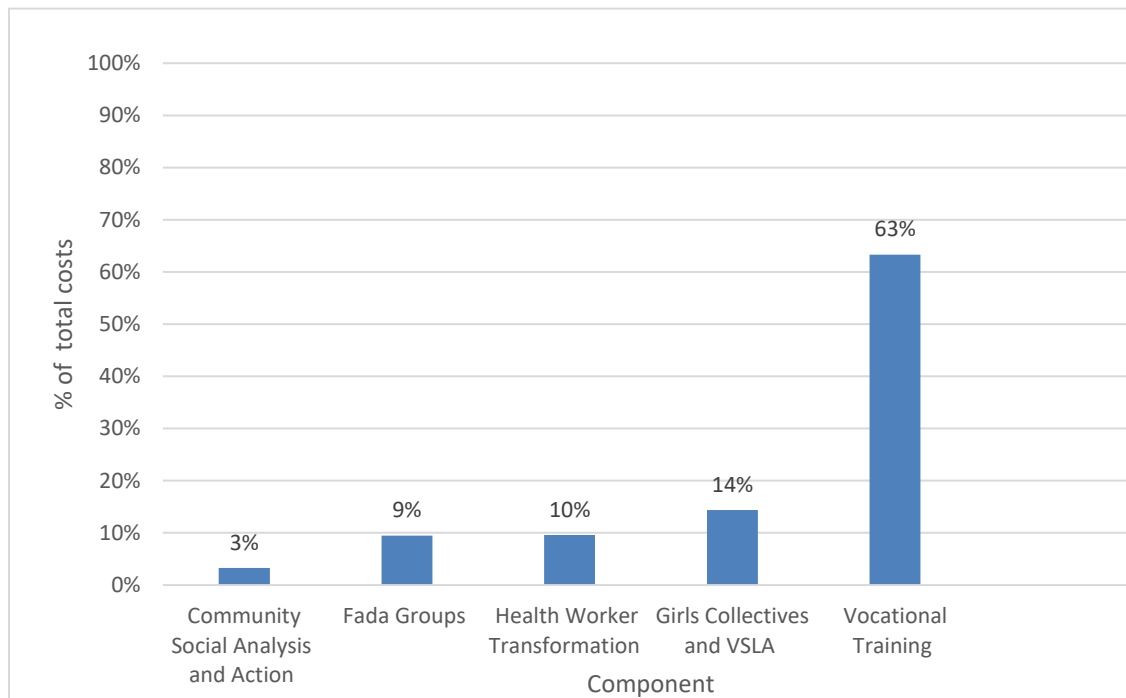
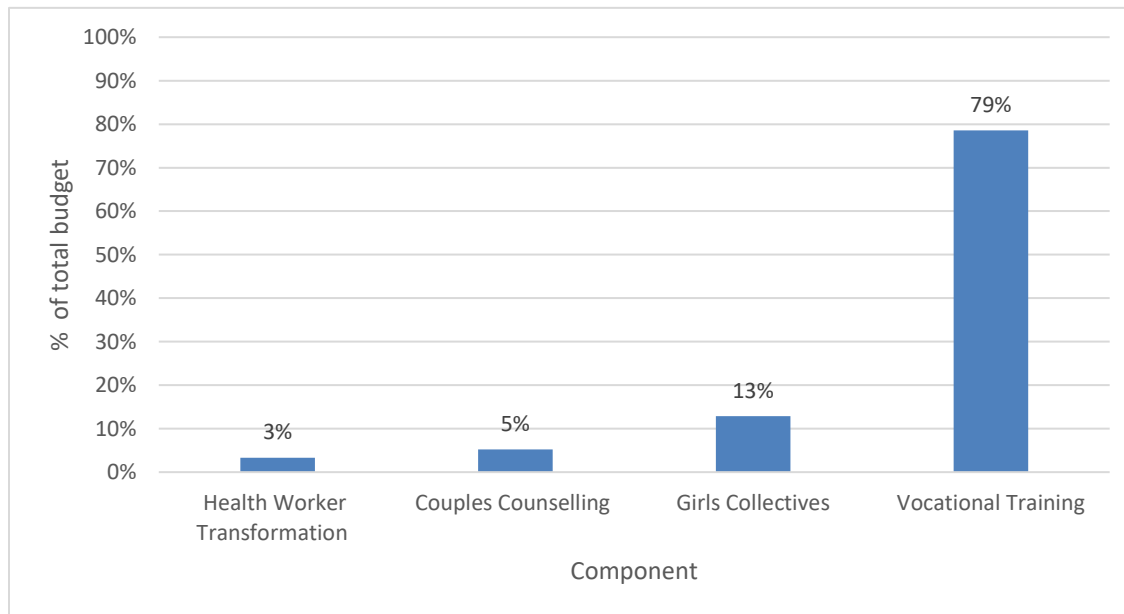


Figure 4: Bangladesh Expenditure % of Total Budget by Component (March 2019 – October 2021)



Cost-Efficiency Metrics

We next took the activity-based budgets from the figures above and divided them by the number of corresponding units to estimate the unit costs, annualized so that they are more easily comparable within and beyond the IMAGINE project. Tables 3 and 4 summarize results.

Table 3: Annual Unit Cost Metrics for Niger

Unit	Annual Cost
Girls' Collective and VSLA Group	\$1,333
Girls' Collective Participant	\$56
Habbanye Training Participant (Goat Rearing)	\$113
Feed/Fodder Training Participant	\$1,110
Cowpea Training Participant	\$523
Fada Group	\$874
Fada Group Participant	\$45
Community SAA Group	\$421
Community SAA Participant	\$14
Health Center	\$7,341
Health Worker Transformation Participant	\$502

Table 4: Annual Unit Cost Metrics for Bangladesh

Unit	Annual Cost
Girls' Collective Group	\$1,173
Girls' Collective Participant	\$49
Couples Counseling Session	\$8
Couple	\$72
Mobile Phone Retail and Repair Training Participant	\$1,035
Digital / IT training Participant (Cohort 1 and 2)	\$2,298
Handicraft Training Participant	\$739
Health Center	\$14,574
Health Worker Transformation Participant	\$1,030

As seen above, unit costs vary widely across activities and across the two countries. For girls' collectives, the unit costs were broadly similar across Niger and Bangladesh, with an annual cost per participant of \$56 and \$49, respectively. Table 5 displays some relevant external benchmarks that are most closely aligned to girls' collective activities. It must be noted that for the reasons of costs being driven by local contexts and differing program designs, no benchmark is a perfect comparison. In addition, we do not have perfect information as to which exact costs were included in the benchmark figures. Despite these limitations, the benchmarks can offer broad indications of whether IMAGINE costs are on par with similar interventions.

Among these other projects, the benchmarks of annual costs per participant ranged from \$26 to \$354. The latter, from the *Recently Married Adolescents* project – which was implemented in a similar context as IMAGINE in Niger – is high, as the figure is per household. If we assume two participants per household, the cost would be \$178 per person. For the *Adolescent Girls Initiative* in Kenya, the implementing costs were high due to the challenging geography in rural Wajir. Excluding the highest two figures, the benchmarks are on par with the IMAGINE girls' collective annual costs per participant. We could not find comparable costs for Fada or men's groups in the literature, but it is worth noting that those unit costs for IMAGINE are on par with the girls' collective costs. Fada groups took a similar format and were implemented with a similar intensity and methodology.

Table 5: Relevant External Benchmarks for Girls' Collectives

Project	Country	Program	Unit Costs Per Year (in USD)
Recently Married Adolescents Program ²	Niger	Conducted monthly small group sessions at the village level through peer mentors	\$354 per household \$178 per group participant (assuming 2 participants per household)

² Pathfinder International. Interventions to reach married adolescents for increased contraceptive use in Niger. Watertown, MA: Pathfinder International, 2019. <https://www.pathfinder.org/wp-content/uploads/2019/09/Niger-RMA-Pub-Spreads-Format-9.13.2019.pdf>

Her Spaces ³	Ethiopia	Adolescent girl group sessions; one-time orientation meetings for boys and parents	Cost per Her Space participant, \$32
Act with Her ³	Ethiopia	Adolescent girl, boy, parent group sessions	Cost per <i>Act with Her</i> group session participant, \$26
Adolescent Girls Initiative ⁴	Kenya - Kibera	Violence prevention, education, health, wealth creation	Annual cost per girl per year safe space, \$72
Adolescent Girls Initiative	Kenya - Wajir	Violence prevention, education, health, wealth creation	Annual cost per girl per year safe space, \$229
Safe and Smart Saving Products ⁵	Kenya	Savings accounts, safe spaces, mentoring, admin, M&E	Cost per girl per year safe space, \$58
Safe and Smart Saving Products ⁵	Uganda	Savings accounts, safe spaces, mentoring, admin, M&E	Annual cost per girl, \$61

In terms of vocational training, for Niger, costs vary widely according to sector, from \$113 per person annually for goat rearing to \$1,110 for feed/fodder, and \$523 for cowpeas. We can infer that the large expenditure of vocational training is driven by the feed/fodder and cowpea sectors, goat rearing less so, due to its large number of participants and the cost recovery mechanisms built into the approach (i.e., girls for whom goats were initially purchased rotate at least one offspring of that initial goat to new program participants) that keeps the unit cost down.

For feed/fodder, the unit costs decrease significantly if we include participants who were trained informally through a cascading system initiated by trained girls. These girls formed producer groups that included additional peers and friends, so many people were *indirect* beneficiaries of the program. The unit cost figure would be \$283 if including indirect and direct beneficiaries. We can conclude that the direct beneficiary unit cost figure stated is thus likely to be an overestimate of true unit costs.

Overall, without finding comparable costs in the literature, we turn to secondary school costs in an attempt to put these costs in context. Our rough calculations of government education expenses per secondary student per year is approximately \$225⁶, making only goat rearing comparable and both cowpea processing and feed/fodder production training and market linkage much higher. Of course, these are rough calculations based on expenditure and enrollment and, it is important to note,

³ Pathfinder International, CARE, Ministry of Health Ethiopia. What costs are involved in multi-facted adolescent programming? Perspectives from the frontline. Watertown, MA: Pathfinder International, 2020. <https://www.pathfinder.org/wp-content/uploads/2020/08/AWH-Costing-Brief.pdf>

⁴ <https://www.popcouncil.org/research/adolescent-girls-initiative-action-research-program> and adapted with author's own refinements from project raw data

⁵ Sewall-Menon, Jessica, Judith Bruce, Karen Austrian, Raven Brown, Jennifer Catino, Alejandra Colom, Angel Del Valle, Habtamu Demele, Annabel Erulkar, Kelly Hallman, Eva Roca, and Nadia Zibani. 2012. "The cost of reaching the most disadvantaged girls: Programmatic evidence from Egypt, Ethiopia, Guatemala, Kenya, South Africa, and Uganda." New York: Population Council.

⁶ Republique du Niger. Plan de transition du secteur de l'éducation et de la formation 2020-2022. 2019. <https://www.globalpartnership.org/sites/default/files/document/file/2020-19-NigerTEP.pdf>

IMAGINE's market linkage activities included much more than just training, such as supervision and coaching, marketing and demand generation, purchasing of inputs and supplies etc.

For Bangladesh, the large expenditure on vocational training is driven by digital (\$2,298 per participant). The primary reason for this high cost was a "false start" with the service provider Women in Digital, which was paid \$49,759 to provide the first cohort of digital training. Unfortunately, the training was low-quality and had to be redone. If we exclude this figure from the unit cost, the annual figure drops to \$878, which is on par with the other two sectors of mobile and handicrafts, with unit costs of \$1,035 and \$739, respectively. Again, with the same caveats as above, comparing to the national estimate of annual costs per secondary student of \$286 puts IMAGINE costs in context.⁷

For the cost per health worker training, the unit cost for Niger (\$502) is less than half of Bangladesh (\$1,030). Because the percentage of total cost of this component is similar across contexts, the difference in unit costs is largely driven by the fact that only 22 health workers were trained in Bangladesh, compared with 117 in Niger. This is due to the fact that the Bangladeshi health centers in general include far smaller cadres of community-based health workers than those in Niger, so the unit cost does not benefit from economies of scale, whereas the Niger unit cost most likely does.

An external benchmark comparable to couples counseling activities for the *Digital Subwallet* and *Household Decision-Making* program indicates a total cost of \$480 per couple. The program ran for two years, indicating an estimate of \$240 per couple per year, which is significantly higher than the IMAGINE cost of \$72 per couple per year. The Niger-based *Recently Married Adolescents* program utilized household visits for couple/household-level counseling conducted by community relays, and these cost \$342 per year per household.⁸ The IMAGINE Bangladesh couples counseling per couple figure of \$72 appears to be cost-efficient when compared to these benchmarks, and just slightly higher than the group-based girls' collective cost per participant.

Qualitative Cost-Efficiency

The findings from the key informant interviews with CARE and implementing partner staff are summarized below for each country and across each of the interventions.

BANGLADESH

Girls' Collectives

In general, collectives were found to be:

- Highly relevant.
- Relatively efficiently delivered, although they could benefit from efficiencies in targeting if implemented outside the context of a rigorous evaluation (i.e., less restrictive in terms of participant selection).
- Potentially sustainable if linked to government, perhaps through health worker outreach or facilitation that would further support linkages to the health system.
- Well positioned for lower replication costs within the same regions with peer leadership (which is cost-effective and could have been deployed earlier) and the reuse of existing training materials.

⁷ Government of Bangladesh. Education Sector Plan for Bangladesh Fiscal Years 2020/21-2024/25.2020 <https://www.globalpartnership.org/sites/default/files/document/file/2020-12-Bangladesh-ESP.pdf>

⁸ Pathfinder International. Interventions to reach married adolescents for increased contraceptive use in Niger. Watertown, MA: Pathfinder International, 2019. <https://www.pathfinder.org/wp-content/uploads/2019/09/Niger-RMA-Pub-Spreads-Format-9.13.2019.pdf>

It was flagged that the existing foundational sessions on financial literacy/entrepreneurship could be expanded to replace the sector-specific vocational training component.

Couples Counseling

In general, counseling sessions were found to be:

- Highly relevant but could be sharpened with more family counseling and managing participation of mothers-in-law.
- Efficiently delivered, with some improvements possible in terms of better streamlining within health worker job responsibilities, which would underpin sustainability and further improve linkages to health services.
- The public events were less efficient and perhaps less transformative for communities, although their marginal costs were quite small.

Health Worker Transformation

In general, activities were found to be:

- Extremely relevant in addressing a key gap in health worker skills.
- Lacking in efficiency due to the time it took, particularly at the beginning, to overcome government bureaucratic barriers and difficulties in engaging health workers, many of whom viewed this project as “extra work.” An MoU with the government from the start would have helped.
- Lacking in efficiency due to the limited number of health workers who could be reached through any one health center, especially when compared with Niger.
- Potentially sustainable if integrated into a broader health systems approach.

Vocational Training

Overall, these activities were found to be:

- Highly relevant, but there were insufficient resources allocated to make a dramatic impact on the selected markets and optimal depth of training, coaching and market linkage that seemed required to firmly establish large numbers of girls in these markets.
- The COVID-19 pandemic also created inefficiencies with these activities in particular, as training had to start and stop several times, actors had to be engaged and re-engaged, and general economic activity stalled due to uncertainties and limited household incomes.
- It is also unclear if the markets are strong enough to absorb the supply, which may have jeopardized in practice what was a critical component in theory. Again, COVID-19 also weakened markets.
- Inefficiently implemented at the start of the project with the wrong partner choice for the first cohort of digital training (Women in Digital).
- It is necessary to consider depth vs. breadth and choosing the right sectors – mobile repair was the most successful.
- Needs a redesign for sustainability, including broader market sector strengthening and a longer timeline for systematic impact and establishment of entrepreneurs.

NIGER

Girls' Collectives

In general, the activities were found to be:

- Highly relevant.

- The design could be sharper and more targeted if the collectives were connected to literacy training, as the low literacy levels limited the learning. Or they could be split into two groups for literate and illiterate girls, but this would increase costs.
- The peer support method enabled efficient spreading of learning inside and outside the groups. Switching earlier to peer or near-peer facilitation could lead to even further efficiencies.
- Nomadic girls could be more efficiently housed in a mobile girls' collective, by seeking a mentor in the community instead of using a facilitator.
- Replication and sustainability are likely to be feasible with lower unit costs if eligibility criteria is relaxed during subsequent group formation, and having a federation of collectives, and designated spaces in villages would underpin sustainability.
- Efficiency could be improved with less frequent and shorter meetings, giving rise to a lighter approach and more sustained motivation to attend, although attendance was quite consistently high across the implementation period.

Fada Groups

These were found to be:

- Highly relevant – evidence that Fada members become champions and are more likely to facilitate the participation of wives in girls' collective groups than non-Fada participants.
- Including income-generating activities for men would incentivize attendance.
- Efficiency could be improved by sharpening the targeting to actual husbands of the girls, and potentially including elder husbands, too. But this kind of targeting also might reduce efficiency, as the population reached is smaller, more dynamic and harder to mobilize.

Vocational Training and IGAs

These activities were found to be:

- Highly relevant.
- There were significant implementing inefficiencies, including targeting errors whereby married adolescents without children were targeted in alignment with the project objectives but they were not always the most eager or self-motivated to participate.
- Despite significant formative work and market analysis, the sector choices were challenging due to their relatively high capital requirements. Sectors that require lower capital costs might be more successful, or sufficient budget and scope to make capital investments are needed.
- The requirement of girls to collectively share capital equipment / materials (e.g., cowpea processing) was inefficient due to the scattered nature of girls in villages and their still limited mobility, resulting in significant personal sacrifice in terms of time needed to travel to and from different far-flung villages.
- The design of the activity was not immediately mindful of the geographical context and capacity of the girls (many of whom are illiterate) and so materials that had been developed for older, more literate adults had to be adapted significantly.

Health Worker Transformation

These activities were found to be:

- Very relevant, addressing the fact that frontline health workers often were not offering family planning services to adolescents.
- Health workers at the *case santé* and community levels participated well and were very motivated by the curriculum and active in thinking through their action plans.

- There were some implementing inefficiencies, and higher costs than originally budgeted, especially due to the necessity for per diems and the lack of ability to layer this component on top of other broader training or health system strengthening activities as originally envisioned.
- Health workers did not attend the girls' collectives as often as desired and efforts to capitalize on parallel health system strengthening efforts implemented in the district were challenging due to unexpected misalignments in roll out of those activities.

Community Social Analysis and Action (SAA) adult groups

Among the findings:

- While this activity was cited as relevant to ensure buy-in and prevent backlash from community members, all staff members felt it was less critical than other components.
- It could have benefited from a better design of dividing people into subgroups, and then coming back into plenary, to elevate the voice of less powerful people. But this may have been less cost-efficient and, notably, participation remained equal over the life of the project between male and female participants.
- Investing in a SAA specific manual that pulled in religious texts may have sharpened the focus in the support of social norms.
- The sessions did not include technical training / information on sexual and reproductive health (puberty, fertility, etc.) but instead focused on norms around these issues. Including this technical information may have been helpful but more costly, as it would have required more sessions.

Combining Quantitative and Qualitative Efficiency Findings

1. Vocational Training

As seen in the unit cost metrics, for Niger, cowpeas and feed/fodder vocational training and market linkage components were significant drivers of IMAGINE expenditures, thus indicating *a priori* that these were not the most cost-efficient activities. This is further confirmed via the qualitative findings, which describe the inefficiencies in delivery, challenges in market integration, and the time and effort required to overcome geographic-related challenges. These findings lead to the conclusion that these were likely not cost-efficient sectors in which to invest. It would have been more cost-efficient perhaps to eliminate these components and invest more heavily in integrating generic financial literacy into girls' collective and VSLA components or, alternatively, investing more in this component to overcome the market system-wide challenges. In contrast, the Habbanye approach appears quite cost-efficient, with relatively low costs per participants.

The costs for vocational training for Bangladesh also were high particularly for the digital vocational training and market linkage component. The digital sector clearly suffered high costs due to the wrong partner choice. Excluding those costs brings down digital unit costs on par with those of mobile and handicrafts. Qualitative findings on all these sectors brought up questions regarding the absorptive capacity of the sectors, questionable sustainability and whether or not the required depth of training had been reached to make a difference. However, mobile was cited as the most successful sector due to the close engagement and support of private-sector partner Robi. Overall, these findings indicate that vocational training for both countries was a high-cost activity, with significant potential future gains in efficiency.

2. Girls' Collectives (and VSLAs for Niger)

On girls' collectives, the data so far indicates no real cost inefficiencies, and strong findings on their

relevance in terms of meeting needs and barriers. For Niger in particular, a few recommendations were flagged in terms of improving delivery efficiency to low-literacy and nomadic girls, and both countries' staff indicated good foundations for lower cost replication and sustainability.

3. Couples Counseling and Fada Groups

A similar finding has emerged for the Bangladesh couples counseling activities and the Niger-based Fada groups. When benchmarked externally, costs seem within the right ballpark, and quite a bit lower than other programs. Couples counseling was found to be broadly efficient, with some reflections on improving delivery and perhaps combining more with health worker engagement efforts to gain efficiencies. For Fada groups, the findings were generally positive on delivery efficiency, with some small adjustments to improve the design and strengthen the desire and motivation of males to engage. While directly comparable external benchmarks were not found, when benchmarked against girls' groups – which have a similar delivery method and format – these costs seem well within the industry range.

4. Health Worker Transformation

Health worker transformation activities in Bangladesh were particularly expensive, mainly driven by the fact the nature of the health worker system in the country doesn't allow for the same economies of scale as observed in Niger. In addition, the qualitative findings indicate some time-consuming bureaucratic delivery delays. The Niger qualitative findings also discuss significant implementation inefficiencies and the need to incur per diems due to the fact that the component could not be integrated into larger health system strengthening efforts. Despite this, it appears that the per diems and inefficiencies in Niger were offset by scale effects. To conclude, both countries display evidence of cost inefficiencies in the health worker activities that could be largely overcome through system integration, though these activities were not strong drivers of IMAGINE costs overall – 5% of the Bangladesh budget and 10% of Niger's budget.

5. Social Analysis and Action groups

In Niger, the SAA groups cost \$421 per group and \$14 per session. While this element was quite cost efficient and contributed minimally to the overall cost of the model, the qualitative findings revealed that, in comparison to the other project components, staff and key informants felt that the SAA groups, were less important than those that reached adolescent girls and their husbands most directly (ex: Girls' Collectives and Fada groups). However, project staff noted that engaging the broader community in some way is absolutely essential in order to ensure buy-in and mitigate the potential for backlash and other harms. The primary question was whether that engagement of the broader communities needs to be as regular as community-level SAA groups or if these resources, however minimal, could be diverted in part to other components to lighten the model. These costs were marginal when compared with other components, and so, even if this element was reduced in intensity and scope, the efficiency gains would be marginal.

Summary

- The highest-cost activity in both countries was vocational training, making up 79% of the total budget in Bangladesh and 64% in Niger. For both countries, the findings indicate that although receiving training and potentially engaging in income-generating activities were highly appealing for girls and their families, the activities suffered from implementation inefficiencies and design challenges that resulted in high costs. Future adaptations to the design, choice of sector, depth of training, method of delivery and / or choice of implementation partner should be explored prior to replication and could result in cost reduction and improved efficiency of the vocational training

- activities.
- Girls’ collectives in both countries were generally found to be highly relevant and cost-efficient, on par with external benchmarks. Only a few inefficiencies and design faults were reported.
- Couples counseling in Bangladesh and Fada groups in Niger were found to have reasonable cost bases when benchmarked externally, with some adjustments suggested to improve design, relevance and delivery.
- Health worker transformation activities for both countries were found to be costly, more so for Bangladesh, where the activities did not benefit from economies of scale due to the nature of the health system. Both countries’ activities display evidence of implementation inefficiencies that increased costs but could be reduced or illuminated if integrated more formally into the health system by government or larger health system strengthening initiatives.
- Social Analysis and Action group activities were identified by project staff as important to ensure community buy-in, including mitigating against potentially backlash, but perhaps not as essential as those components that directly reached adolescent girls and their partners. If cost reductions are necessary, this may be a place where minimizing this component to the bare minimum that still engenders community support is a justifiable re-allocation of funds.

Figures 6 and 7 below graphically display the findings, with implementation efficiency and relevance on the Y axis, and level of investment on the X axis. The upper-left quadrant represents the highest efficiency and lowest costs. The circle sizes represent the relative cost of activities. As can be seen, for both countries, girls’ collectives are within the upper-left quadrants, but these are outweighed by the larger vocational training circles in the bottom-right quadrant – low efficiency and relevance and high investments.

Figure 6: Efficiency vs. Costs for Bangladesh IMAGINE

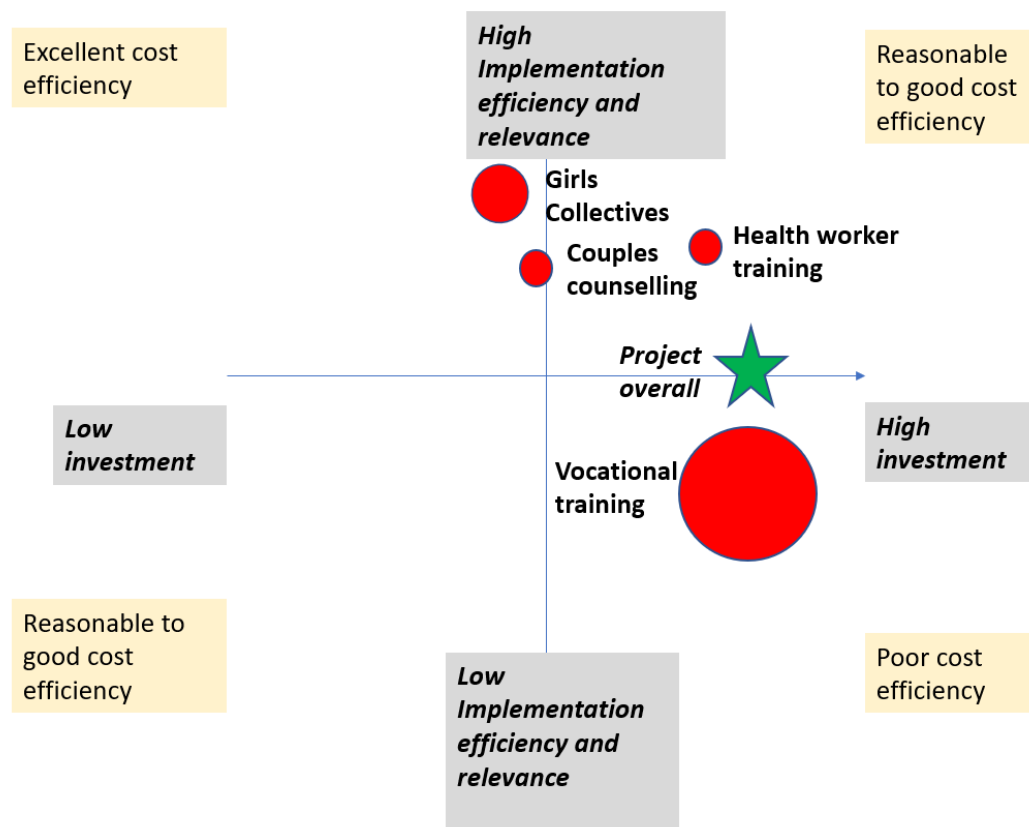
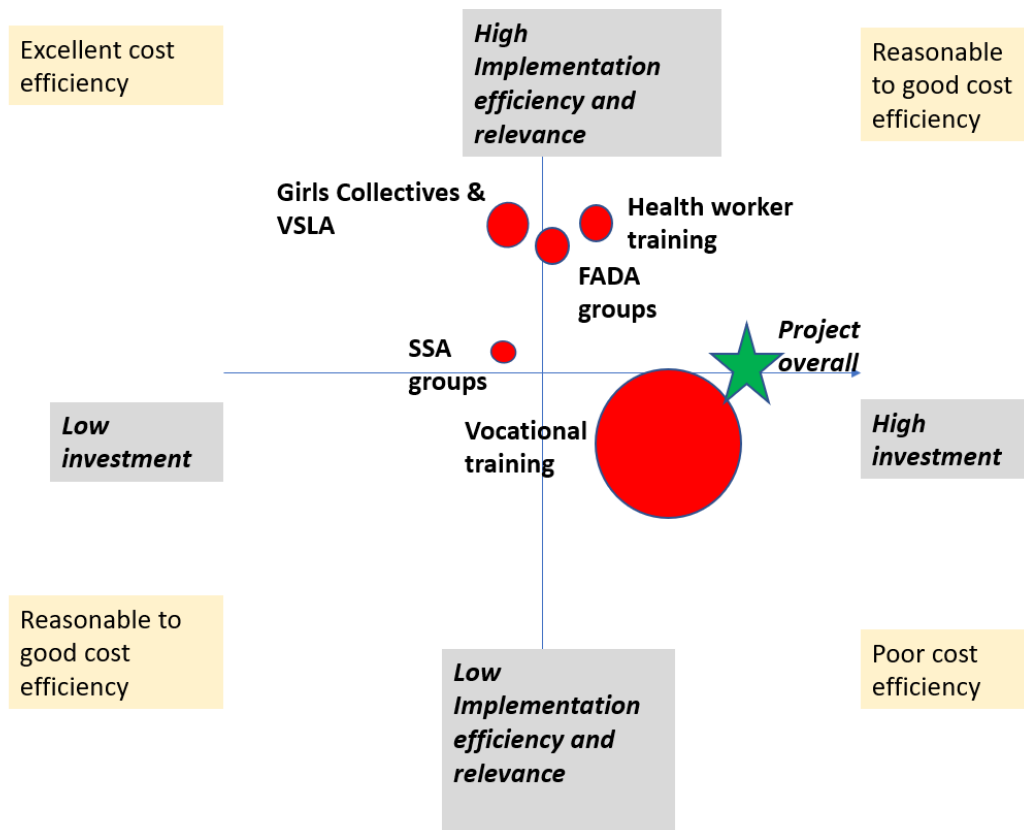


Figure 7: Efficiency vs. Costs for Niger IMAGINE



Annex 1: Number of Units in Key Activities

Country	Unit	Count	Notes
Niger	Girls' collectives and VSLA groups	55	
	Girls' collective and VSLA participants	1,318	
	Participants in Habbanye/goat rearing vocational training	713	
	Participants in feed/fodder processing vocational training	67 trained 164 non-trained	For untrained girls: The training was spontaneously diffused by participants; we engaged these girls during follow-up support activities alongside trained girls. Note that 164 is a high, and most months were well below this number.
	Participants in cowpea processing vocational training	193 trained 164 non-trained	For untrained girls: The training was spontaneously diffused by participants; we engaged these girls during follow-up support activities alongside trained girls. Note that 164 is a high, and most months were well below this number.
	Fada groups	55	
	Fada participants	1,079	
	SAA groups	41	
	SAA participants	1,256	
	Integrated health centers	8	

Niger	Health workers	117	
Bangladesh	Girls' collectives	60	
	Girls' collective participants	1,430	
	Couples counseling sessions	3,043	
	Couples in counseling sessions	353	
	Participants in mobile retail vocational training	100	
	Participants in digital vocational training	Cohort 1: 75 trained Cohort 2: 41 trained Cohort 1+2 = 116 trained.	
	Participants in handicraft vocational training	419 trained	
	Health centers	2 Union Health Centers	
	Health workers	22	

Annex 2: Key Informant Interview Questions

Description of IMAGINE Project

I'll start by asking a bit about the IMAGINE project itself.

- How would you describe the primary goal of the IMAGINE project? In other words, what is the IMAGINE project trying to achieve?
- I understand the IMAGINE project or model has several components, or sets of activities, with different actors. Can you briefly describe what you view as each distinct component of the project?

Role in IMAGINE Project

Now that we've defined a common understanding of the IMAGINE project, I'm going to ask you a bit about your role.

- When did you first start working with the IMAGINE project?
- What was or is your role on the IMAGINE project?

Effectiveness and Implementation

Of the components listed above, how would you rate their effectiveness in contributing to the project goals (from 1 to 5)?

- **1:** Not at all essential to reach project goals.
- **2:** Generally not very important to reach project goals.
- **3:** Not sure of the importance of this component in reaching project goals.
- **4:** Quite important to reach project goals.
- **5:** Absolutely essential to reach project goals.

For the ratings provided above, why did you give the ratings you did? Why do you think this component was/was not very important in reaching our project goal?

For the components that were not very important (≤ 3):

- *What did not work as well as it could have with this component? (Probe: How did COVID-19 pose a specific challenge?)*
- *What were the most challenging aspects of the implementation of this component? (Probe: time, budget resources, human resources, reaching the intended participants, technical components, management)*

For each component, what improvements or changes would you make if you were to implement them again or design another project with these components? (Probe: changes in content, changes in delivery, changes in frequency, changes in target population, etc.)

What changes would you recommend specifically that would, in your opinion, make the component more cost-efficient or less expensive?

March 2022

Annex 3: Overall Activity-Based Expenditures

Bangladesh

Component	Total Expenditures (March 2019- October 2021)	% of Total
Girls' Collectives	\$140,722	13%
Couples Counseling	\$50,774	5%
Vocational Trainings	\$857,249	79%
Health Worker Transformation	\$34,005	3%
Total	\$1,082,749	

Niger

Component	Total Expenditures (March 2019 - October 2021)	% of Total
Girls' Collectives (including VSLAs)	\$122,206	14%
Fada Groups	\$80,086	9%
Vocational Trainings	\$559,449	63%
Health Worker Transformation	\$83,198	10%
Community Social Analysis and Action	\$28,776	3%
Total	\$873,715	