



WORLD EDUCATION

Assessment of Income-Generating Activities Intervention

Strategic Approaches to Girls' Education



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EXECUTIVE SUMMARY

Project Background: This study presents the findings of the assessment of the income-generating activities (IGA) component of the Strategic Approaches to Girls' Education (STAGE) project. The STAGE project focuses on areas in Ghana that have high rates of severe poverty and ingrained societal and cultural norms around gender roles (early marriage, unplanned pregnancies, school drop-outs, among others). These cultural norms have detrimental effects on the capacity of girls to complete their education and find quality jobs. STAGE has currently trained over 9,000 highly marginalized adolescent girls between 15 and 19 years old in seven regions (Northern, North East, Upper East, Upper West, Central, Eastern and Oti). The girls have never been to school or dropped out before grade 4. The Vocational Skills Training (VST) they received included income generating activities such as Weaving (Kente weaving, smock sewing), Hospitality and Catering (e.g., pastries, bread-baking), Soap making (liquid and cake), Beading (e.g., sandals, bags, jewelries, etc.), Cosmetology (e.g., facial, hair-braiding, and cosmetics- pedicure, manicure) and Event Decoration.



The Scope of the Assignment: In accordance with the project's core objectives, the main project implementer, World Education (WEI) hired an external consultant to analyze the IGA component of the STAGE project in terms of the effectiveness of the VST/IGA training, variables that contribute to the IGA's success, IGA challenges, and lessons learned.

Evaluation Approach: The assessment was conducted using a mixed research methodology that included both qualitative and quantitative data from 380 girls sampled from 21 districts in the seven project regions. The project's downstream partners (DSPs), master crafts persons (MCP), Accelerated Learning Program (ALP) facilitators, and other stakeholders participated in focus groups and key informant interviews to gather primary data.

Key findings and lessons learned: The evaluation findings show that girls found the VST program to be highly effective, and their level of satisfaction with the delivery of the module is high. The girls generally concluded that the STAGE-IGA program was highly effective. They agreed that the program was smoothly run by the facilitators and MCPs, the materials were appropriate, and the delivery style was excellent. It was observed that this had a high impact on the socioeconomic well-being of the girls. In terms of IGA product profitability, all IGA are profitable, with pastries, specifically doughnuts, being the most profitable, followed by hair-

braiding and beading (slippers and sandals). Kente weaving is the least profitable businesses. There were, however, challenges that might pose a risk to the sustainability of the IGAs. The main ones include having to travel over long distances to access both the input and output markets, short duration of some of the IGAs (particularly kente weaving) and the recent increases in the cost of goods and services.

Recommendations: The evaluator offers the following key suggestions for future program: (i) lengthening the duration for the training for some of the IGAs, particularly kente weaving and smock-making; (ii) identifying and engaging the value chain members to link up with the girls before transition to IGA employment, and (iii) maintaining and strengthening the program's life-skills component. Other recommendations include (iv) assisting the girls to form cooperative or join existing cooperative to help in group marketing; and (v) Conduct a market survey to explore expanding the program's focus by including other vocational skills like mushroom and snail production and beekeeping.



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SECTION I - BACKGROUND

I. Introduction

Although the government of Ghana has demonstrated its commitment to improving girls' education over the years, for example, by establishing the Girls Education Unit (GEU), girls' education still remains lower than expected. For example, 45% of girls do not complete primary and lower secondary schools¹. Many factors contribute to this high rate of drop-out, including cultural norms, early pregnancy, early marriages, traditions and customs, insufficient access to education infrastructure, and misconceptions. These factors, among others, cause girls to never attend formal school or to drop out at a young age. According to a World Bank report (2019), about 16% of girls between the ages of 15 and 19 have had children or are pregnant².

One of the key avenues for addressing the issue of discrimination against girls is to economically empower them, particularly those who have never attended school or have dropped out. In light of this, World Education Inc., is implementing a project dubbed 'Strategic Approaches to Girls' Education (STAGE)'. The project focuses on highly marginalized girls located in seven regions in Ghana (Upper East, Upper West, Northern, North East, Savannah, Central, Oti and Eastern) with high levels of extreme poverty and deeply ingrained traditional and social norms regarding gender roles (early marriage, early and/or unwanted pregnancies, and a heavy chore burden on girls). These norms have a negative impact on girls' ability to complete their education and find decent work. The project includes two program tracks for highly marginalized girls: a single cohort Formal school track for girls aged 10-14 and three cohorts of non-Formal track girls aged 15-19. The non-formal track provides 15-19-year-old girls with a six-month Accelerated Learning Program (ALP) focused on literacy and numeracy, as well as life skills and vocational training. The Vocational Skills Training (VST) is provided by master craftspeople in order to support the girls' future employment. This is accomplished through interventions such as providing business start-up assistance to girls and raising awareness about the importance of girls' education at various levels. The STAGE project targets about 17, 000 marginalized girls who have never been to school or dropped out of school before grade four. The project is implemented by a consortium led by WEI together with seven implementing local partners namely Afrikids, Regional Advisory Information and Network Systems (RAINS), Pronet, Link Community Development (LCD), Prolink, Ghana Red Cross Central (GRCS) and the International Child Development Programme (ICDP). Facilitators of the ALP and craftspeople of the VST have been trained to serve as mentors to the beneficiaries.

Following ALP and VST training, the marginalized girls were given a start-up fund to assist them in transitioning into income-generating activity (IGA). World Education aims to assess the

¹ MICS-EAGLE (2020). *Ghana Education Fact Sheets. Analysis for Learning and Equity using Multiple Indicator Cluster Survey-Education Analysis for Global Learning and Equity (MICS-EAGLE) data.*

² <https://data.worldbank.org/indicator/SP.MTR.1519.ZS?locations=GH>.

extent to which the IGA objectives were achieved, lessons learned, and next steps. As a result, a consultant has been hired to conduct this evaluation. The specific objectives of the evaluation were as follows:

- Identify the factors that help to sustain IGAs (do they vary by location, IGA type, beneficiary's skill set, marginalization categories and other identifiable community factors).
- Identify the challenges that affect the success of IGA
- Understanding the reasons for regional disparities and what facilitates transition in one region (Oti and Northern) but not in another (Upper West and Upper East) could lead to more nuanced programming approaches. This could include different VST courses more directly linked to regional and community work/ market opportunities or varied strategies for linking trained girls to market opportunities.
- Identify the types of IGA that are viable and sustainable in the project communities
- Examine the existing support systems to promote IGAs
- Identify lessons for future programming.



SECTION 2

EVALUATION METHODOLOGY

2.1 Approach

Taking into account the diverse background of the stakeholders involved in the project, both qualitative and quantitative approaches were used to gather relevant information for the study. It was based on five lines of evidence: desk review, informant interviews, questionnaire administration, Focus Group Discussions (FGDs) and observation. A multi-stage sampling processes was employed to select communities and respondents³ from the catchment areas of the project.

2.2 Sampling and data collection techniques

STAGE operated in a total of 352 (non-formal track) communities across seven (Northern, North East, Upper West and Upper East regions in the north, Central, Eastern and Oti) regions. Multi-stage sampling was used for the selection of districts, communities and respondents. Six out of the seven project regions were visited; three in the southern part of the country (Central, Eastern and Oti) and three in the northern part (Upper West, Upper East and Savannah). This is because of the assumption of heterogeneities in responses by the girls in different districts and regions. Moreover, the different IGA options may experience different factors that work for and against the success or the sustainability of the IGA may vary across districts and regions. In the second phase of the sampling process, 21 districts in the six regions were selected. Given the nature of Ghana's local economies, there is a considerable degree of homogeneity between communities in the districts. As a result, relatively few communities (5 – 10) were selected in each district with the help of the DSPs that are the downstream implementers of the project. However, the focus was more on highly marginalized communities. Finally, a total of 384 girls were interviewed across the 21 districts in seven regions. However, after data cleaning, 380 set of questionnaires were used for the analysis. Table 2.1 shows the regions and their respective districts and the number of girls sampled from each region.

Focus Group Discussions with the girls, opinion leaders and DSPs were conducted in each district. In order to complement the information collected from the FGDs, some individual beneficiaries were also interviewed in each of the project communities we visited through a semi-structured questionnaire.

³ In this report, girls, beneficiaries, participants and respondents are all used interchangeably.



Figure 2.1. Sections of the interview

Table 2.1. Sampled districts and communities

<i>Regions</i>	<i>District names</i>	<i># of districts</i>	<i># of girls sampled</i>
Upper West	Dafiama, Jirapa, Nadowli Kaleo,	3	40
Upper East	Nabdam, Bongo, Kasena-Nankana west	3	58
Northern	Kpandai, Nanumba North, Nanumba south, Wulensi	4	94
Oti	Biakoye, Jasika, Kadjebi, Nkwanta south,	4	67
Eastern	Akuapem North, Akuapem South, Nsawam Adoagyiri	3	55
Central	Gomoa West, Asikuma-Odoben Brakwa, KEEA	3	56
North East	Mamprugu Moagduri,	1	10
<i>Total</i>		<i>21</i>	<i>380</i>

In addition, information was also requested from community facilitators to help the team understand some of the constraints associated with the IGA and how they can be addressed in future projects. Finally, MCPs for the various categories of IGAs were also interviewed. This was intended to help understand the potential sustainability of the IGA selected by the beneficiaries.

2.3 Data Analysis

The data analysis approach was mixed. This ranged from descriptive statistics to quantitative statistics. Qualitative analysis was carried out using an explanation approach and a content analysis (desktop review, transcription of FGDs and KII) based on common and distinctive factors identified during the survey. The evaluator also used a four-point Likert scale to assess the effectiveness, factors that contribute to the success of the IGA as well as the challenges of the IGA. The *Kruskal-Wallis* test approach to one-way Analysis of Variance (ANOVA) was used to compare if there are significant differences in the factors contributing to the IGA success and the challenges across the project regions and among the various IGA selected by the beneficiaries.

The quantitative analysis also involved the use of a simple gross margin analysis to assess the gross margin of the different categories of IGAs. In the analysis of the gross margin, the total variable cost was subtracted from the total income earned over a given period. It is important to note that the time frames vary across IGAs depending on the frequency of production and sales. In addition, we also examined empowerment of these girls (the extent to which these beneficiaries have been empowered both psychologically and economically). The empowerment was based on indicators that examine the level of the girl's self-esteem and their contribution to household income before and after graduating from IGA training. Decision-making was used as the basis for their empowerment. The four-point Likert scale ranging from strongly disagree (1) to strongly agree (4) was used in response to each indicator measuring self-esteem. Finally, the sustainability (economic, social and environmental) was also assessed through the use of qualitative and quantitative responses from the girls and the consultant's value judgment.

SECTION 3

EFFECTIVENESS AND SATISFACTION OF THE IGA TRAINING

3.1 Introduction

The section analyzes the results of the ALP and VST training in terms of effectiveness and satisfaction. The ultimate question for training effectiveness is whether or not the program supported learning and transfer of knowledge to generate the expected outcome, according to the recipients. The satisfaction of the training has to do with how satisfied the girls were with the VST/IGA program. The evaluation team adopted a content analysis approach, where information obtained from the major stakeholders (beneficiaries, project facilitators, opinion leaders, etc.) through FGDs, KII and questionnaire administration were subjected to critical analysis. The beneficiaries were also asked to evaluate the effectiveness and their level of satisfaction regarding the technical and managerial training they received by the four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

3.2 Effectiveness of the Training

Figure 3.1 is a bar chart showing IGA beneficiaries' levels of agreement about the effectiveness of the training offered to them. As clearly shown, the majority of the respondents agree that the ALP and the VST training were effectively executed.

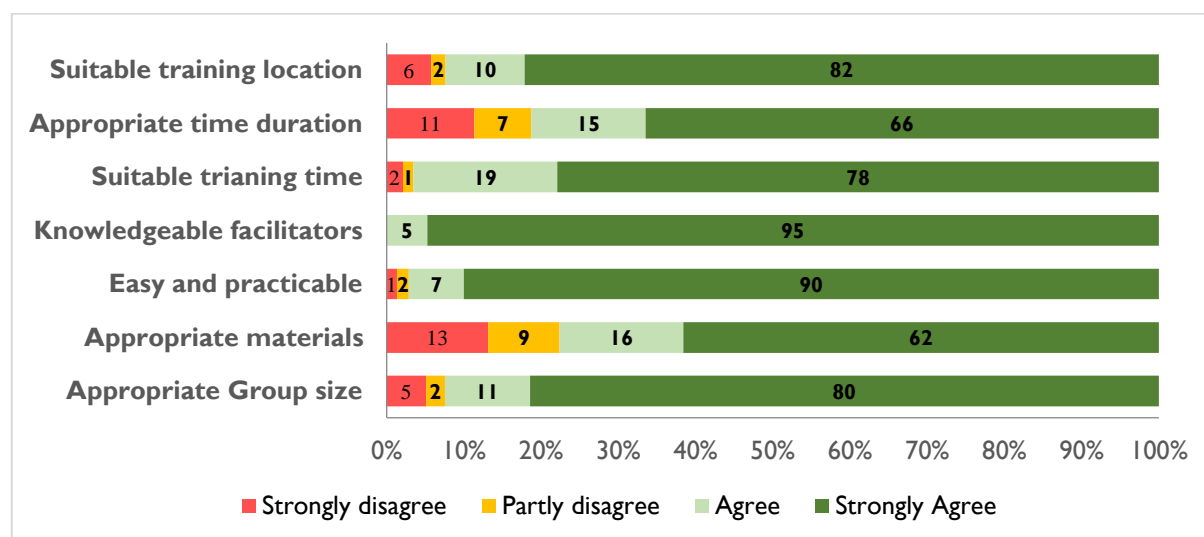


Figure 3.1. Respondents' perception about the effectiveness of the IGA training

The group size and the training materials were appropriate with each of these respectively recording 90.53% and 77.63% of the respondents either agreeing or strongly agreeing.

Also, about 90% and 94.75% strongly agreed that the training executions were practical and that the master craft persons selected were effective. In fact, none of the respondents disagreed that the project selected master craft persons were experts in their area of vocation. According to the information gathered from the FGDs, the master craft persons were well-known and respected individuals in the communities and many of the girls consider them as their mentors. However, there were few instances where MCP found it difficult to express her/himself fully in the local language. Whilst about 97.0% and 92% of the respondents generally agreed that the time and location of the training were suitable, respectively, about 19% representing the minority had a counter opinion about the duration of the training. Their counter opinion is that the duration for the training for some of the IGA options (kente weaving and smock-making) was too short for the learner to grasp all the practical concepts. For the time and location, all the beneficiaries and crafts persons usually agreed on the specific time and location of the training, particularly the ALP.

3.3 Application of the ALP/VST

The significance of the training offered to the beneficiaries is to help manage their IGA in a sustainable manner as they apply the knowledge gained. Therefore, the frequency of applications of what was learned was assessed and the results are presented in Figure 3.2.

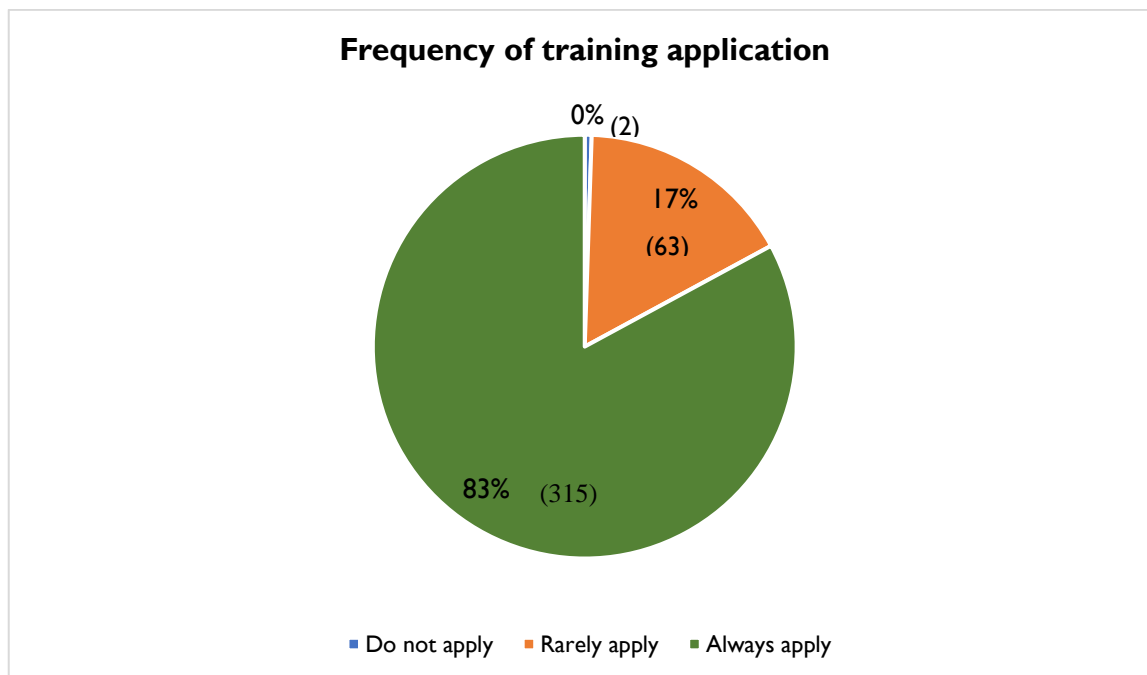


Figure 3.2. Frequency of application of training skills

It was revealed that 315 (out of 380) of the girls interviewed representing 83% always apply the training knowledge and skills gained from the training received. A total of 63 (17%) girls rarely applies the skills obtained in their primary VST and only 2 girls never apply their VST skills. This implies that the vast majority of respondents are constantly applying the skills learned and hence there promoting the sustainability of the project. This finding is a clear indication that the project objectives are being achieved since the technical and business development and management skills that beneficiaries were trained on are being applied by over 80% of beneficiaries in their daily operations and activities. Content analysis from the FGDs and KII interviews indicated that those that rarely or never applied the training skills were those that are continuing the VST (e.g., kente weaving) as an apprentice to their MCPs and few that have switch to other vocations.

3.4 Beneficiaries' level of satisfaction

Although the participants have rated the project's effectiveness and relevance, the evaluator considered the participants level of satisfaction as a key validator of the quality of the STAGE-IGA project. Table 3.1 presents the mean ratings for each of the items used to assess the beneficiaries' level of satisfaction for the IGA component of the STAGE project. Figure 3.4 also displays the proportion of the beneficiaries that rate each of the items as strongly disagree, disagree, partly agree or strongly agree.

Table 3.1. Description of the satisfaction of the IGA

<i>Satisfaction level indicators</i>	<i>Mean</i>	<i>SD</i>
I have seen myself grow significantly as an individual	3.742	0.544
The numeracy and literacy before the VST were helpful	3.895	0.389
The MCPs were very helpful	3.889	0.457
Working in a group during the training was very helpful	3.667	0.678
Working in a group as business partners after the IGA was good	2.548	1.328
I am pleased with the start-up capital	3.005	1.093
I now earn regular income from my IGA	3.104	1.039
I can now support my family financially	3.375	1.23
My family and friends respect me	3.465	0.812

Note: SD denotes standard deviations

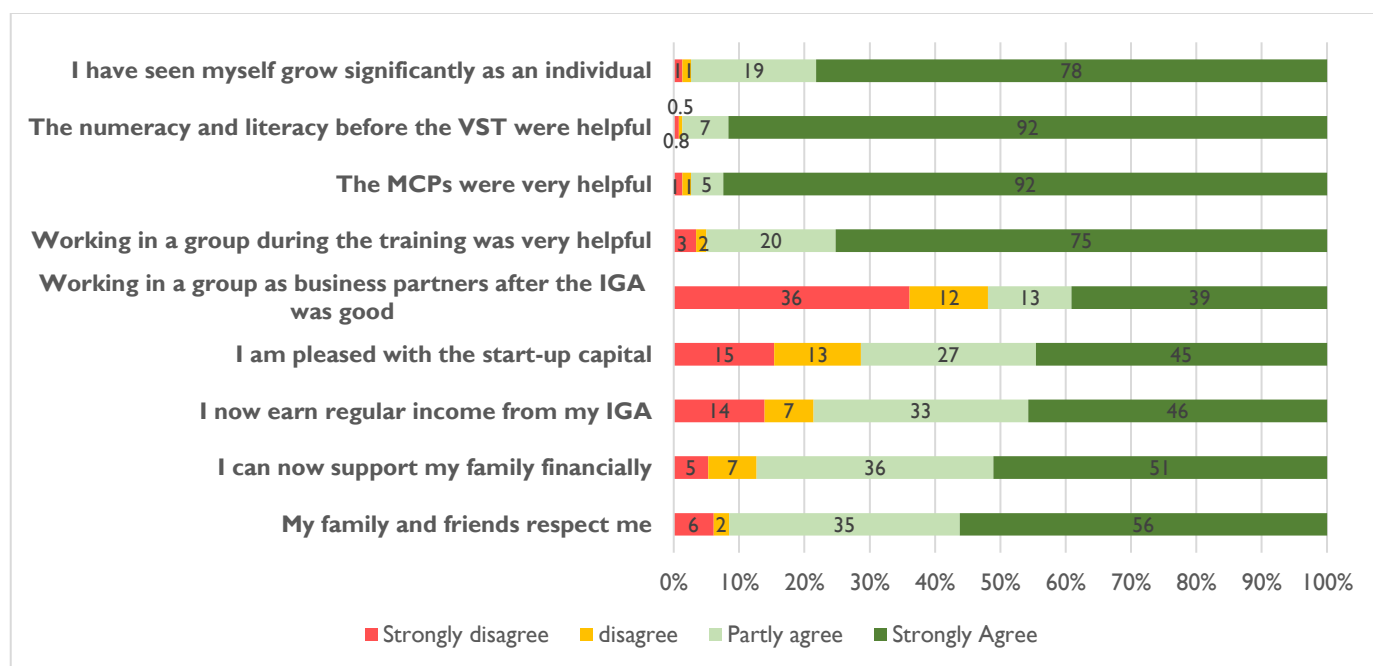


Figure 3.4. The extent of satisfaction of the IGA program

Overall, the girls expressed high levels of satisfaction, ranging from mean value of 2.55 to the value of 3.94. Figure 3.4 also reveals a highly skewed pattern of satisfaction with the majority of the girls reporting 'partly agree or strongly agree'. For example, over 90% of the girls reported that numeracy and literacy that were taught before the IGA was very helpful in enhancing their understanding of the IGA business. Moreover, while 75% of the girls were very happy with the group work during the VST, only about 39% of the girls strongly agree that working in groups in the IGA was helpful. This suggests that although the motive behind IGA groupings was to instill into the girls the attitudes of working as a team, learning to co-exist as business partners and promote social cohesion, this did not go well with some of the girls. The results further revealed that although the start-up capital of around GH¢250 was perceived as a small amount, about 71% of the sampled girls were pleased with it. In an interview with one of the MCPs, she stated;

“Compared with the materials the girls are expected to have in order to start the Kente weaving, you will say the amount is small. However, the girls are grateful since this is free money; they did not work for it”.

Thus, generally, the girls are satisfied with the STAGE project and they considered the start-up capital as a bonus for them.

SECTION 4

IGA SUCCESSES AND CHALLENGES

4.1 Introduction

In this chapter, we aim to discuss the factors that may contribute to the success of the IGA business, as well as the challenges that may be against the success of the IGA after the project. In all, nine factors were identified to have contributed to the success or otherwise of the IGA options. These factors were assessed using a four-point likert scale ranging from strongly disagree (1) to strongly agree (4), implying that the larger the mean value, the stronger the level of agreement to the factor. Moreover, *Kruskal-Wallis* test of one-way ANOVA was used to compare each factor across the seven regions and across the IGA options, to help us understand whether or not there are regional and IGA disparities in the factors contributing to the sustenance of the business activities.

4.2 Factors contributing to the success of the IGA by regions

The non-formal track of the STAGE project was designed to focus on vocational skill training and decent employment. As a result, the project trained many girls on various IGA to help the girls earn a decent income to improve their livelihood. However, the success of the IGA may depend significantly on some district and/or regional based economic and social factors. Figure 4.1 shows the distribution of the factors that were perceived by the beneficiaries to contribute to the success of the IGA.

In all, nine factors (statements) were identified. In each of the statements the beneficiaries were asked to state their level of agreement. For example, *“the demand for my IGA products in my community and the neighboring communities is high”*. The responses range from strongly disagree (1) to strongly agree (4). A critical observation from the figure reveals that, aside from ‘sell products outside my district’ and ‘only one offering the IGA products’, majority (at least 68%) of the respondents agree and strongly agree that the remaining seven factors contribute substantially to how successful they have been in their IGA business. It can be observed from the figure that a combined percentage of 81.84% of the respondents strongly agree and agree to the fact that they receive fair prices for their IGA products. During the FGDs, the girls reiterated that the price at which they sell their products is competitive and that due to the low-income levels of the people in the communities in which they reside, their products cannot be sold at higher prices. *“The price of the products must meet the income levels of the people here”*, a statement by a participant during the FGDs.

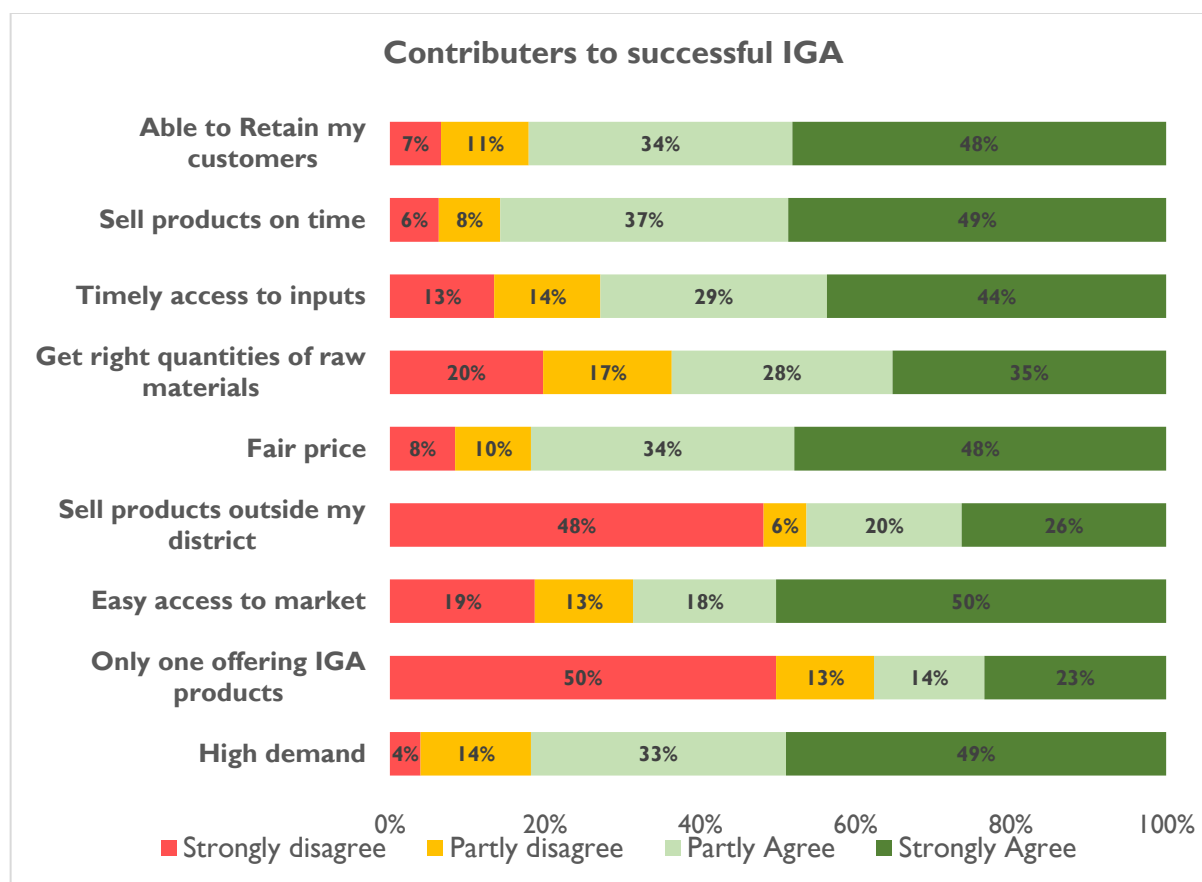


Figure 4.1. Factors that contribute to success of the IGA

Additionally, approximately 50.26% and 43.68% of the girls strongly agreed that STAGE helped them to establish links with the suppliers of the inputs and products off-takers thereby making it possible for them to get access to inputs and output on time and easily, respectively.

The evaluator also examined how these factors that contribute to the success or otherwise of the IGA business vary across regions and IGA options. For example, what is the level of agreement of the statement about “*the sale of product on time*”, where responses of the girls in Northern or Upper west region were compared with responses from the girls from Oti or Central regions. Moreover, does the demand for soap vary significantly from the demand for doughnuts/pastries? This is to understand whether or not these factors are regional-specific. Thus, whether there are significant disparities in the factors that might contribute to the success and challenges of the IGA as we move from one region to another. In addition, understanding the dynamics of the contributing factors across the IGA is critical to be able to link factors to specific IGAs. This might consequently influence the design and implementation of future project or even lead to the modification of the upscale of the same project. Table 4.1 presents the mean values of the extent to which the girls agree to the statement regarding the factors that may contribute to the success of the IGA component of the STAGE project.

Table 4.I. Levels of agreement to contributors to successful IGA across regions

	<i>Regions mean values</i>								<i>K-W test</i>
	<i>Eastern</i>	<i>Central</i>	<i>Oti</i>	<i>UE</i>	<i>UW</i>	<i>Nort</i>	<i>NE</i>	<i>Total</i>	
High demand	2.86	3.04	3.69	3.35	3.35	3.35	3.60	3.28	23.172 ^a (0.000)
Only one offering IGA products	1.84	2.14	2.80	1.93	2.00	2.07	1.50	2.08	13.821 ^b (0.032)
Sell products outside my district	2.26	2.09	2.74	2.03	2.15	2.32	2.20	2.24	6.859 (0.334)
Fair price	2.92	2.93	3.43	2.78	3.40	3.47	3.60	3.16	29.650 ^a (0.000)
Get right quantities of raw materials	2.39	2.89	2.97	2.59	2.98	2.96	3.60	2.83	13.633 ^b (0.034)
Timely access to inputs	2.58	2.82	3.09	3.03	3.10	3.07	3.30	2.97	6.870 (0.333)
Sell products on time	2.84	3.20	3.63	3.21	3.95	3.28	3.80	3.34	25.175 ^a (0.000)
Able to Retain my customers	3.03	2.96	3.66	3.14	3.23	3.15	3.60	3.18	17.080 ^a (0.009)

Note: a, b and c denote significant levels at 1, 5 and 10%, respectively. Values in the brackets are probability levels.

The results from Table 4.I indicate that, generally, the girls across the seven regions agreed (total average mean value of 3.28) that the demand for their IGA products is quite high. However, there was a significant difference among the girls in different locations regarding the intensity of agreement to some of the factors that contribute to the success of the IGA. For example, in the Oti region, the average mean value of agreement for high demand was 3.69 (close to the strongly agreed value of 4), while the mean value of high demand in the Eastern region was about 2.86 (close to the agreed value of 3). From the analysis of the data, the significant difference between Oti and Eastern could be attributed to two key factors: “only one offering IGA products and sell products outside my district”. From the table, while the girls in Eastern partly disagreed (mean value of 1.84 close to 2), the girls in Oti partly agreed (mean value of 2.86) that they were the only one selling their IGA products in their communities. Moreover, while the girls in Oti are able to sell their products outside their district, those in Eastern region said they are not able to do so. Urbanization of the communities may also play significant roles. The selected communities in Oti may be closer to the district capital compared with the selected communities in Eastern region. Moreover, almost all the beneficiaries in all the seven regions, except for Oti, on average, disagree with the statement “sell products outside my district”, with an average value of 2.24 (disagree) and there is no significant difference among

responses from the various regions. For timely access to inputs, the girls partly agree they had access to inputs and there was no significant difference in the responses of the girls from different regions. Critical observation from the table indicates that none of the regions reported an average mean closer to strongly agree (mean of 4), and this suggests that there might be some level of difficulties in accessing inputs. It was observed from the FGDs and the KII interviews that girls whose communities are far from the district capitals have to travel long distances to purchase inputs for their IGA. Thus, while girls whose communities are closer to district capitals do not see this as a challenge, those in remote communities considered it as a challenge.

Similarly, the parameters that contribute to the success of the IGA were evaluated across all IGA alternatives. This is seen in Table 4.2. The findings demonstrated that the girls generally agreed that there is a great demand for their varied items. Their extent of agreement, however, varies amongst IGAs. For example, while the girls engaged in smock-making strongly agreed that there is a large need for smock-making, the girls engaged in sandals and kente-weaving partially agreed. It was observed that the demand for designed sandals and other leather works (women handbags) and kente was extremely seasonal due to the fact that these two goods are quite elegant. During festive seasons such as Christmas, Ramadan, naming ceremonies, and so on, demand for these two goods is often strong. However, on usual days, the demand is quite low.

Table 4.2. Levels of agreement to contributors to successful IGA across the various IGAs

<i>Contributing factors</i>	<i>Mean values of IGA Options</i>											<i>K-W test</i>
	<i>HB</i>	<i>PS</i>	<i>SM</i>	<i>BM</i>	<i>BSM</i>	<i>DC</i>	<i>SMM</i>	<i>S&L</i>	<i>KW</i>	<i>DM</i>	<i>Total</i>	
High demand	3.31	3.14	3.53	3.46	3.32	3.10	2.82	2.5	2.50	3.71	3.27	32.76 (0.000) ^a
Only one offering IGA products	2.07	2.27	2.09	1.7	2.12	1.50	1.67	2.63	1.81	3.42	2.09	18.61 (0.068) ^c
Sell products outside my district	2.38	2	2.24	2.04	2.25	3.01	2.61	2.75	1.82	3.57	2.26	18.43 (0.072) ^c
Fair price	3.15	3.42	3.31	2.52	3.41	3.98	2.97	3.38	3.10	3.85	3.22	31.38 (0.001) ^a
Get right quantities of raw materials	2.75	3.14	2.68	2.26	2.89	3.10	2.64	3.01	3.00	3.86	2.79	15.26 (0.171)
Timely access to inputs	3.03	3.38	2.9	2.88	2.91	3.53	2.89	3.13	3.80	3.57	3.04	15.25 (0.172)
Sell products on time	3.93	3.32	3.38	3.11	3.27	3.50	2.82	3.5	3.50	3.85	3.37	23.62 (0.014) ^b

Able to Retain my customers	3.31	3.15	3.41	3.31	3.21	3.00	2.97	3.37	3.50	3.85	3.25	21.39 (0.029) ^b
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Note: HB, PS, SM, BM and BSM represent hair-braiding, pastries, soap-making, bread-making, and beads-making, respectively. DC, SMM, S&L, KW and DM represent décor, smock-making, sandals and leather works, Kente-weaving and dress-making, respectively. a, b and c denote significant levels at 1, 5 and 10%, respectively. K-W represents the Krus-Wallis test of ANOVA.

Moreover, according to the Krus-Wallis (K-W) test, there was no statistically significant difference between the different IGA choices for easy access to the market and timely access to inputs. The sentence "only one selling the IGA product" produced another startling result. With the exception of dressmaking, those involved in nearly any IGA business disagree with this statement. However, there was a noticeable difference in how strongly they disagreed. This implies that the girls participating in the IGA will compete fairly in their local markets.

4.3 Constraints to the success and sustainability of the IGA

The expansion and continuation of the IGA may have been hampered by various circumstances, just as there are ones that help the IGA enterprises succeed. The study attempted to investigate some of the potential detriments to the IGA's sustainability using a method similar to that in section 4.2. In all, the study identified seven factors that may work against the success and the sustainability of the IGA component of the STAGE project. The girls were asked to respond to the level of agreement to the identified factors, which were in the form of a statement. Each statement ranges from strongly disagree (1) to strongly agree (4) and the results are presented in Figure 4.2.

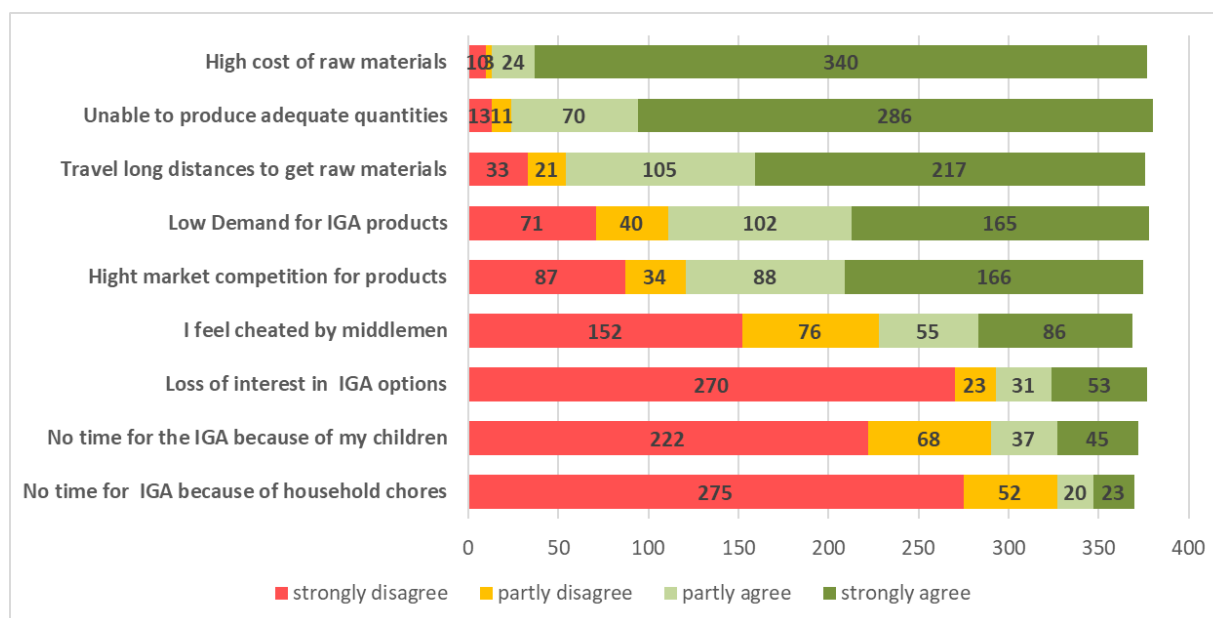


Figure 4.2. is showing the distribution of factors that may work against the success and sustainability of the IGA.

From the results, about 86% (217) of the girls generally agreed that travelling long distances to access raw materials for their IGA product is one of the key constraints to the success of the IGA. Thus, although the inputs are accessible, the girls had to travel long distances (mostly out of their communities) to purchase the inputs. During the FGDs and KII interviews, the problem of long-distance travel to purchase inputs also surfaced prominently. The majority of raw materials, including flour for pastries, thread for weaving, beads, and leather for creating sandals, among others, are not supplied from the villages where the girls live, according to observations made on the ground. Given that the majority of project communities, particularly those in Northern Ghana, are rural areas, this is pretty clear. As a result, the girls must rely on MCPs or other project employees to buy these inputs. This could be a blow to the sustainability of the IGA business. This also serves as a disincentive for some of the girls as a significant proportion

of their working capital could be used as transportation for the purchase of already expensive raw materials.

The current economic downturn, which also hit major business, had an impact on local micro-business, including the IGA. About 90% (340) of the girls (as indicated in Figure 4.2) expressed dissatisfaction over the fact that the cost of raw materials had tripled over the previous 12 months. The high prices of raw materials have actually pushed some of the girls out of business. The high cost of living also made some of the girls drop out of the vocation (e.g., kente weaving) to search for greener pastures in other parts of the country. Although, about 42% of the girls (165) agreed that low demand and high market competition, respectively may lead to unsustainable IGA businesses, observations revealed these factors can also be attributed to high prices of inputs. In addition, the majority of the girls strongly disagree with the perception that social barriers such as being a mother and marketing barriers such as being cheated by aggregators or middlemen from the urban centers have the potential to adversely affect the success and sustainability of the IGA.

Table 4.3. Factors militating against the sustainability of the IGA across regions

	<i>Regions mean values</i>								<i>K-W test</i>
	<i>Eastern</i>	<i>Central</i>	<i>Oti</i>	<i>UE</i>	<i>UW</i>	<i>North</i>	<i>NE</i>	<i>Total</i>	
Travel long distances to get raw materials	3.46	3.46	2.95	3.33	3.43	3.45	3.33	3.34	12.84 ^b (0.025)
High cost of raw materials	3.46	3.46	2.95	3.33	3.43	3.30	3.11	3.34	3.21 (0.668)
Low demand for the IGA products	3.74	3.87	3.72	3.44	3.64	4.00	3.71	3.70	9.57 ^c (0.089)
I feel cheated by the middlemen	2.62	3.19	2.86	3.21	3.15	3.10	2.89	3.03	9.84 ^c (0.080)
No time for the IGA because of my children	1.86	2.12	1.90	2.64	2.34	2.20	1.95	2.18	7.77 (0.169)
High market competition for the products	1.50	1.33	1.34	1.74	1.60	1.30	1.88	1.49	15.46 ^a (0.008)
Lost of interest in the IGA option	2.61	3.18	2.51	2.76	3.13	2.90	2.84	2.89	12.05 ^b (0.034)

Note: a, b and c denote significant levels at 1, 5 and 10%, respectively. The values in the bracket represent probability levels.

Furthermore, the study assesses how the identified factors that may work against the sustainability of the IGA may vary across regions and across IGA options. Table 4.3 and 4.4 respectively present how the constraints of sustainable IGA may vary across regions and IGA

options. For example, although the beneficiaries in all the regions agreed that long-distance travel is a key barrier, their level of agreement varies from one region to another. Similarly, there was a significant difference across regions in the level disagreement to the statement that their IGA faces high market competition.

Table 4.4. Factors militating against the sustainability of the IGA across regions

	<i>Mean values of IGA Options</i>											<i>K-W test</i>
	<i>HB</i>	<i>PS</i>	<i>SM</i>	<i>BM</i>	<i>BSM</i>	<i>DC</i>	<i>SMM</i>	<i>S&L</i>	<i>KW</i>	<i>DM</i>	<i>Total</i>	
Travel long distances to get raw materials	3.82	3.3	3.19	3.22	3.30	4.00	3.095	3.75	3.30	3.86	3.29	11.71 (0.386)
High cost of raw materials	3.429	3.3	3.19	3.22	3.31	4.00	3.095	3.75	3.30	3.86	3.82	2.28 (0.997)
Low demand for the IGA products	3.66	3.62	3.6	3.67	3.81	3.50	3.81	3.97	3.31	3.86	3.67	14.32 (0.216)
I feel cheated by the middlemen	2.82	3	2.96	2.28	3.11	3.50	3.19	2.02	2.51	3.29	2.29	9.31 (0.593)
No time for the IGA because of my children	2.184	2.59	2.24	1.68	2.10	2.00	2.25	1.71	2.30	2.14	2.22	1.76 (0.999)
High market competition for the products	1.553	1.55	1.38	1.26	1.46	1.00	1.409	1.38	1.51	1.14	1.44	6.03 (0.871)
Lost of interest in the IGA option	2.714	2.84	2.73	2.74	3.00	3.00	3.136	3.13	2.82	3.29	2.82	9.31 (0.593)

Note: HB, PS, SM, BM and BSM represent hair-braiding, pastries, soap-making, bread-making, and beads-making, respectively. DC, SMM, S&L, KW and DM represent décor, smock-making, sandals and leather works, Kente-weaving and dress-making, respectively.

The challenge of long-distance travel to get raw materials is also highly pronounced across the various IGA. However, there was no statistically significant difference across the different IGA. The girls engaged in all the IGA concluded that this is a challenge. For the market competition, there was a general disagreement that there is high market competition for the IGA products in their communities. Low market competition for the IGA suggests that there is a lower likelihood of the girls being pushed out of business due to competition. This is because, there are few people who are into those IGA business. In some cases, the girls are the only one selling that product (e.g., doughnut and cake soap). Generally, the girls also debunked the notion that they have no time for the IGA business due to the fact that they are married and have children. This is irrespective of the kind of IGA they are engaged in.

SECTION 5

FINANCIAL AND SUSTAINABILITY ANALYSIS OF THE IGAs

5.1 Introduction

This section contains the financial evaluation of some selected IGAs mostly engaged by the girls, as well as the assessment of the socioeconomic and environmental sustainability of the IGAs. Specifically, we evaluated the gross margins of the selected IGAs. The study also discusses the sustainability of the IGAs. The sustainability of any economic activity may be described concurrently with three domains: economic, social, and environmental, which are referred to together as the triple-bottom line (Gebre et al. 2020)⁴. An economic unit is deemed sustainable in terms of the economic component if the needed production activities are financially feasible⁵. In terms of the social dimension, sustainability is achieving socially acceptable results in terms of the distribution of the benefits and costs⁶. On the environmental front, the capacity of an economic activity to demonstrate that its operations have little or no harmful influence on the natural environment is crucial to sustainability. Thus, in the concept of the triple-bottom line, economic activities such as the IGAs should be mindful of their social and environmental impact in addition to profitability. The three pillars of sustainability can also be referred to as the profit (economic), people (social) and planet (environmental).

The primary goal of the STAGE IGA is to create decent and sustainable employment for the vulnerable girls. This employment can be part-time or full-time. However, without profits, the girls will no longer be able to conduct their business on daily bases. Thus, for the IGA to be sustainable, one of the key pillars is that it must generate consistent income. Other indicators such as access to inputs for the IGAs, getting market for the IGAs, having more than one option to market their products (market diversification) and access to credit, together support the commercial viability of the IGAs. Sustainability of the IGAs intervention should not also neglect its social impact. For example, are the girls able to transfer the knowledge acquired to other girls who are not part of the project to also create jobs for them? Other social indicators include the girls' ability to produce quality IGAs due to the training, the existence of social cohesion through group formation and building a strong relationship between the girls and other project stakeholders. As the climate change continue to take the centre stage of social discourse, taking care of the planet earth, has never been more crucial. Thus, how the production of the IGAs are impacting the environment is critical to their sustainability. The

⁴ Gebre, G.G., Rike, E. & Kijne, A. (2020). *Analysis of banana value chain in Ethiopia: approaches to sustainable value chain development*. *Cogent Food and Agriculture*, 6: 1742516.

⁵ Gebre, G. G., & Rik, E. (2016). *Sustainability assessment of a banana value chain: The case of Arba Minch, Ethiopia*. *Journal of Agribusiness*, 34(2).

⁶ Neven, D. (2014). *Developing sustainable food value chains: Guiding principles*. Food and Agriculture Organization of the United Nations. Retrieved from www.fao.org/3/a-3953e.pdf

IGAs are not using lots of firewood (where it may involve cutting down of small trees), nor are they generating waste without any proper management. None of the IGAs involves the use harmful chemicals. As such, the IGAs can drive positive environmental change while making profits.

5.2 Assessment techniques

In analyzing the profitability of selected IGAs, a gross margin was used. This is the standard profitability indicator, where there is insufficient data on fixed cost such as discount rate and life-span of the fixed items are not available. The gross margin is the difference between the total revenue or cash inflows and the total variable cost or cash outflows of the IGA at a particular time.

For the assessment of the IGA sustainability, even though the three dimensions of sustainability are treated separately, in practice, they overlap⁷. Thus, to measure sustainability across the three dimensions, it is necessary to map out the core production processes and associated indicators with each production activity. The selection of the indicators for each domain was adapted to the context of the IGA product or services. The selected indicators for each domain (economic, social, and environmental) are presented in Table 5.9. Each indicator is judged on a scale from unacceptable to best (1 to 4) and converted into a percentage. Thus, each scale represents 25%. This was based on the use of a four-point Likert scale (Strongly disagree, disagree, agree and strongly agree) coupled with the consultants' value judgment.

5.3 Gross margin analysis of the IGAs

The profitability of each IGA was calculated on the basis of the difference between the total variable cost of production and the total revenue from the sale of the product or service. Information on the costs of inputs and output sales for a particular period was also taken from master craftsmen and the girls who are already engaged in the IGA after graduation. The preceding sections report the profit and loss analysis of each of the five main IGAs mostly selected by the beneficiaries.

⁷ USAID (2012). *A note on indicators of sustainability for value chain project.*

5.3.1 Gross margin analysis of soap-making: liquid and cake

In Tables 5.1 and 5.2, the gross margin analysis of producing liquid and cake soaps, respectively, is shown. The average variable cost of a set of inputs for liquid soap (base, acid, color, booster thickener, and sea salt) is about GH¢ 75. When prepared, it produces approximately 38 300 ml bottles per set at a cost of GH¢3.50 per bottle. An average of two input sets of liquid soap can be prepared in a week, and that can yield an average of 76 bottles sold, generating a total income of GH¢266. A margin of almost GH¢60.60 per week can be achieved with a variable cost of about GH¢205.40. This results in a monthly profit margin of around GH¢ 242. The price of fixed items that include the cost of mixing bowl and spatula is about GH¢100 (depending on the size).



Similar to this, the girls can sell solid/cake soap for a weekly profit of about GH¢560 based on a variable cost of about GH¢1,120 and total sales of GH¢1,680. Nonetheless, the girls typically form groups of roughly eight people because of the high variable cost of the cake soap. As a result, each member receives an average of GH¢67 per week, or GH¢ 268 per month. For the cake soap, the cost of the fixed inputs, which include a wooden cutter and a wooden mold, is about GH¢1,100. The results from the focus group discussions show that cake soap has a higher demand and can fairly compete with its alternatives in the communities where those goods are available.

Table 5.1. Gross margin analysis of liquid soap

Items	Unit	Qty	Cost/Unit	Total
Set of liquid soap items (Base + acid + colour + booster + thickner)	set	2	75	150
300 mills Bottles	Qty	76	0.4	30.4
Transportation	-	-	-	25
<i>Total variable cost</i>				205.40
<i>Income from 76 bottles @ GH¢3.50 /bottle</i>				266
<i>Gross margin</i>				<u>60.60</u>

Table 5.2. Gross margin analysis of cake/bar soap

<i>Items</i>	<i>Unit</i>	<i>Qty</i>	<i>Cost/Unit</i>	<i>Total</i>
Chemical I	500 mils	1	30	30
Chemical II	500 mils	1	30	30
Hardener/silicate	500 mils	1	50	50
Soda ash	kg	1	10	10
Palm Oil	Litres	10	60	600
Perfume	Qty	1	50	50
Colour	Qty	1	50	50
Transportation	-	-	-	25
Caustic Soda	Litres	1	300	300
<i>Total Variable cost</i>				<i>1,145</i>
Wooden cutter		1	800	800
Wooden mould		1	300	300
<i>Total income</i>	pieces	280	6	<i>1,680</i>
				<u><i>535</i></u>

5.3.2 Gross margin analysis of catering services: pastries and bread-making per week

Table 5.3 shows the cost and revenue accrued from bread baking per week. The table shows that, although bread baking is profitable, it requires a high initial cost. The total variable cost of producing 100 loaves (medium-sized) of bread using about 50kg of flour is about GH¢1,017. With an average price of GH¢15 each loaf sold; the business generates GH¢1,500 in weekly income with a margin of GH¢483. This will be shared among an average of eight girls, each receiving about GH¢60.00 per week. This translates to about GH¢240 per month.

Table 5.3. Gross margin analysis of bread-making per week

<i>Bread making/ week</i>				
<i>Items</i>	<i>Unit</i>	<i>Qty</i>	<i>cost/unit</i>	<i>Total</i>
Flour	Kg	50	680	680
Oil	Liters	2.5	40	100
Sugar	Kg	4.5	13	58.5

Salt	Kg	1	10	10
Nutmeg	Pieces	10	1.5	15
Yeast	Kg	1	70	70
Milk powder	Tins	4	12	48
Eggs	Pieces	10	2.0	20
firewood	Bundle	1	15	15
Rubbers	Packets	3	2	6
Transportation				40
Total variable cost				1,057
100 loaves				1500
Margin				<u>443</u>

The gross margin of the pastry making (chips, pie, sweet pie and doughnut [wet and dry], buff loaf) is calculated on the basis of the difference between the total variable cost and the sales revenue of the product for each period. This is shown in Table 5.4.

Table 5.4. Gross margin analysis of pastries

<i>Items</i>	<i>Unit</i>	<i>Qty</i>	<i>Cost/unit</i>	<i>Total</i>
<i>Chips making/three days</i>				
Flour	Kg	5	15	75
Oil	Litres	2	40	80
Margarine	Kg	2	50	100
Onion + Garlic + Ginger	Kg	1	10	10
Salt + sugar	Kg	1	10	10
Eggs (Large size)	Pieces	3	2.0	6
Fuel (wood/gas/charcoal)	Bundle	1	15	15
Transportation				20
Total cost				316
Total Revenue				350
Margin				<u>34</u>

Meat pie/ three days

Flour	Kg	5	5	75
Margarine	Kg	2	50	100
Vegetables + onion +Meat	Kg	1	1	60
Fuel	Bundle	1	15	15
Transportation				20
Total Cost				270
Total Revenue				300
Margin				<u>30</u>

Doughnuts and Sweet pie/ two days

Flour	Kg	5	5	75
Sugar + salt	Kg	2	13	26
Oil	Litres	3	30	90
Fuel (charcoal, wood)		1	25	25
Total cost				218
Total Revenue				250
Margin				<u>32</u>

From the table, while a profit of GH¢68 (GH¢34 every two days) can be made from flour chips per week, a profit of GH¢60 (GH¢30 every two days) and GH¢96 (GH¢ 32 every three days) can be earned from the sale of pie and doughnuts per week, respectively. Thus, a girl engaged in flour chips, pie and doughnuts makes an average profit of GH¢272, 240 and 384 per month, respectively. The initial capital required to start this business is a maximum of about GH¢350. This includes a set of cooking utensils (wok saucepan, spatula/ladle and mixing bowl).

5.3.3 Gross margin analysis of Beading: sandals, bags, jewelries

The profitability analysis for beaded sandals/slippers and other beaded products such jewelry sets and lady's handbags are presented in Table 5.5. Each pair of bead slippers or sandals typically costs GH¢25 or GH¢35 to produce. These slippers and sandals can be sold at an average price of GH¢30 and GH ¢45 for a profit of about GH¢5 and GH¢10 per pair, respectively. Similarly, depending on the size of the ladies' purse, the girls can earn between GH¢15 and GH¢35 in profit. Although it typically varies with the seasons, the frequency of sales of these items are fairly unpredictable. An average of three beaded slippers and a beaded sandal

can be sold each week for around GH¢55 in profit, or about GH¢220 each month. A single ladies' handbag and jewelry box can also be sold each month, bringing in an additional profit of roughly GH¢60. Thus, a total profit of about GH¢280 per month can be made from the beading materials. Fixed items required cutter, round and flat pins. Other fixed items include glue gun and the glue stick.

Table 5.5. Gross margin analysis of bead-sandals and other bead-materials

<i>Cost of making bead sandals and other bead materials</i>				
<i>Items</i>	<i>Unit</i>	<i>Qty</i>	<i>Cost/unit</i>	<i>Total</i>
slippers	Pairs	10	15	150
Fishing line (Sandals)	Bundle	1	20	20
Fishing line (Jewellery set)	Bundle	1	20	20
round beads (small)	Packet	1	35	35
round beads (medium)	Packet	1	35	35
round beads (Large)	Packet	1	35	35
Crystal set (5 strands)	0.5 Set	0.5	50	25
Elastic threat	Bundle	1	1.5	1.5
Assorted beading accessories	Packet	1	15	15
Beads for bag	Packet	20	1	20
Leather	Yard	1	25	25
Total cost				
<i>Profitability analysis of different sandals and beads-materials</i>				
<i>Beads materials</i>	<i>material cost</i>	<i>Qty</i>	<i>Revenue</i>	<i>Profit</i>
bead slippers	25	1	30	5
bead sanders (simple)	35	1	45	10
bead sanders (complex)	50	1	60	10
Bead ladies hand purse (small)	35	1	50	15
Bead ladies hand purse (large)	65	1	100	35
Set of ladies Jewellery	45	1	70	25

5.3.4 Gross margin analysis of cosmetology: hair-braiding

Similarly, the revenue earned on different hair-braiding styles (rasta, twist, and corn row) less the cost of providing these services is used to calculate the gross margin analysis of hair-braiding. Hair-braiding is more profitable than the other IGAs under investigation, according to data gathered in the field and analysis. Table 5.6 shows that the variable cost of GH¢10 –15 generates a profit of about GH¢20 – 40 on weekly basis. According to the girls, they can make an average of about three hair styles per week, making a net income of about GH¢70 per week. Thus, a margin of about GH¢ 280 can be earned from hair-braiding. Table 5.6 also shows a total fixed cost of about GH¢200.

Table 5.6. Gross margin analysis of different hair-braiding styles

<i>Items</i>	<i>Unit</i>	<i>Qty</i>	<i>Cost/Unit</i>	<i>Total</i>
Shampoo	5 litres	1	60	60
Conditioner	5 Litres	1	60	60
Setting Lotion	946 Mils	1	80	80
Hair cream	650 Grams	1	70	70
<i>Total variable cost</i>				<u>270</u>
Towel	1	1	25	25
Smooth rollers	Packets	1	8	8
Brush rollers	Packets	1	10	10
Pins	Packets	1	7	7
Dummy heads	Piece	1	60	60
Combs	Set	1	15	15
Gloves	Set	1	5	5
Scissors	Piece	1	10	10
Mirror	Piece	1	60	60
<i>Total fixed cost</i>				200
<i>Cost and revenue of different hair style</i>				
<i>Braids hair style</i>	<i>Material cost</i>	<i>Qty</i>	<i>Revenue</i>	<i>Profit</i>
Rasta (simple)	10	1	35	25
Rasta (complex)	15	1	45	30

Twist (simple)	10	1	35	25
Twist (complex)	10	1	50	40
Corn row (natural)	10	1	30	20
Corn row (artificial hair)	10	1	40	30

5.3.5 Gross margin analysis of kente weaving

Table 5.8 reports the gross margin analysis of kente weaving. Although this business is profitable as indicated in the table, the amount required to start such a business is relatively high. The average price of the loop set, which is the main equipment and without which nothing can be done is about GH¢900. In order to produce bundle (12 yards) of kente, a variable cost of about GH¢438 is required. The average price of a 12-yard kente is about GH¢600. According to the MCPs, it will take four girls to produce the 12-yard kente in week for sale. Thus, a girl who is into kente weaving get an average margin of about GH¢ 40.50 per week, which translates into GH¢162 per month.

Table 5.8. Gross margin analysis of kente weaving

<i>Item</i>	<i>Unit</i>	<i>Qty</i>	<i>Cost/unit</i>	<i>Total</i>
Weaving machine set up (loop)	Set	1	900	900
Scissors	Piece	1	15	15
Tape measure	Piece	1	2	2
Office pins	Pack	1	4	4
Uniform	Yard	1	15	15
<i>Total fixed cost</i>				<i>1,089</i>
<i>Variable costs</i>				
Set of threat	box	1	1	320
Maintenance		1	10	10
Filling	box	1	88	88
Transportation	-	-	-	20
<i>Total costs</i>				<i>438</i>
<i>Sale of 12 yards</i>				<i>600</i>
<i>Margin</i>				<i><u>162</u></i>

5.3.5 Summary – comparing gross margins of the IGAs

The average profit earned from the sale of IGA products and services per month per girl or beneficiary is summarized in Figure 5.1. The comparative profitability analysis of the VST indicate that doughnuts (profit of GH¢384) appears to be the most profitable, followed by hair-braiding and beading (profit of GH¢280 each). A girl engaged in flour chips, bar/cake soap and liquid soap could make a profit of about GH¢272, 268 and 242, respectively. The analysis also reveals that kente weaving is the least profitable businesses. This could be due to the fact that the ente is considered luxuries in the local context, and people may avoid them when prices are high. Furthermore, the kente is frequently purchased for special occasions such as weddings, naming ceremonies, and funerals.

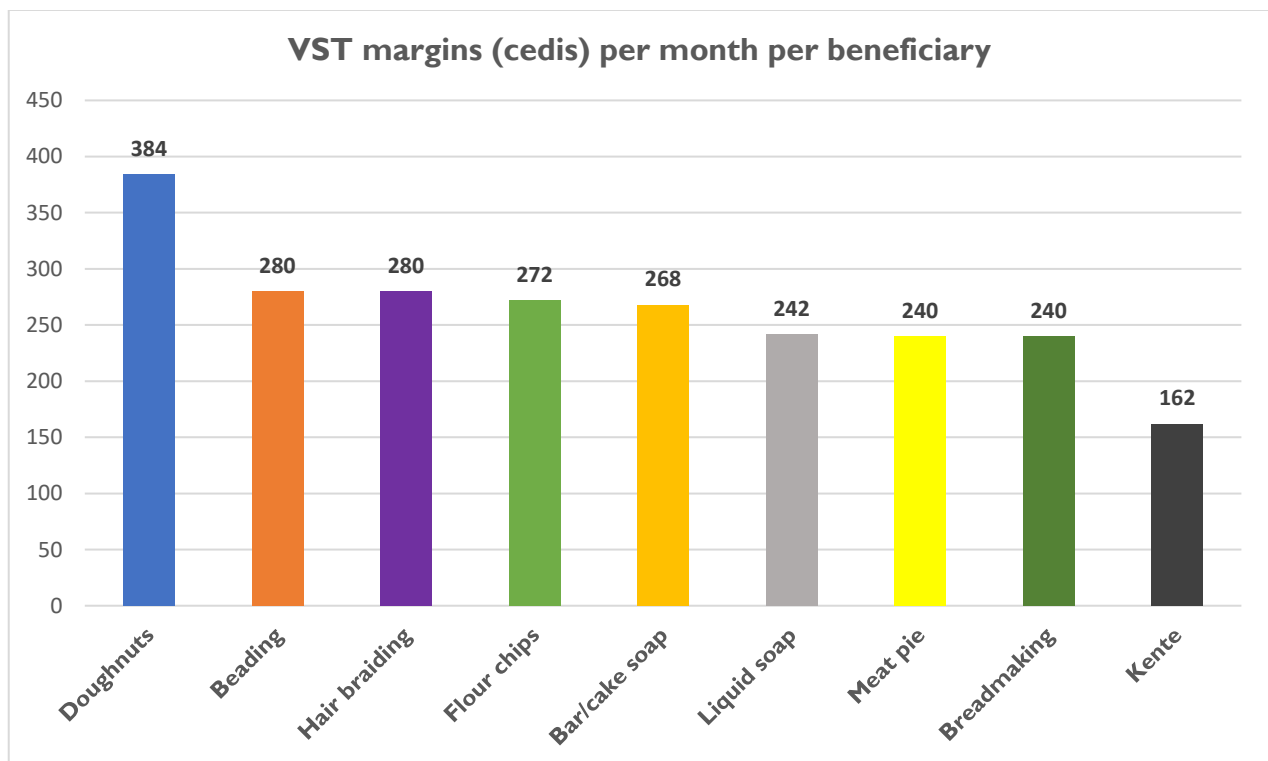


Fig 5.1 Profitability per type of vocation per beneficiary

5.4 Sustainability analysis of the IGA products

The project business sustainability and performance, which described how each indicator was assessed, the scale of rating and the converted percentages are presented in Table 5.9.

Economic dimension: The economic dimension of sustainability, as shown in Table 5.9, contains six indicators with a maximum potential score of four, which adds up to 24 (6×4) points. However, the total of the actual scores was 16, resulting in a performance score of 67% (16/24). Per the analysis, the STAGE beneficiaries engaging in the various IGA businesses earn a fairly good margin. Consequently, revenue from sales exceeds the costs of production. These indicators translate into the best rate of four and a performance score of at least 75%. For access to inputs, most of the beneficiaries accessed the right quantity of their production inputs at the right time, while few others had challenges with timely access to inputs. Furthermore, the girls agreed during the FGDs that the technical and managerial pieces of training (i.e., ALP/VST) they received from their facilitators and MCPs have helped them to improve on the management of the IGAs.

Table 5.9. Sustainability Assessment of the IGAs

Indicators	Performance description	Scale	Performance Score (%)
<i>Economic dimension</i>			
Profitability/gross margin	Revenue earned exceeds production and marketing costs.	4	75 - 100
Input access	Most beneficiaries get quantity and timely access to inputs.	3	50 - 75
Fair price	Most of the girls do not feel cheated by the middlemen who come to purchase their products (e.g., Kente, smock)	3	50 - 75
Marketing of products	Most of the girls are able to sell their IGA products on time, and retain and add more customers	3	50 – 75
Market diversification	Not much effort was made to access alternative market channels. Usually wait for buyers at the community level.	2	25 – 50
Access to funds	Difficulty in accessing funds because most of the girls are not bankable.	1	0 - 25
		16/24	0.67 (67%)
<i>Social dimension</i>			
Employment opportunities	Create more job opportunities for the girls themselves and other girls.	4	75– 100
Gender/equity	No gender equity in the selection of the beneficiaries, all beneficiaries are girls by project design.	4	75 - 100

Market information	Market information, especially price, is at the mercy of the seasonal market.	3	50 – 75
Managerial practices	Project beneficiaries usually follow MCPs recommended practices.	4	75 – 100
Group formation	The girls formed groups to learn and assist each other. However, no cooperative to gain marketing power.	2	25 – 50
Product quality	High quality of product due to better training received.	3	50 – 75
Stakeholder relationship	The relationship between beneficiaries and other supporting actors (project staff, facilitators, MCPs) are fairly good	4	75 – 100
		24/28	0.86 (86%)
<i>Environmental dimension</i>			
Pollution of land and water bodies	IGA production activities are free of pollution. No chemicals used to cause environmental pollution.	4	75 – 100
Waste management	IGA product/service do not generate waste that need special management.	4	60 – 80
Destruction of soil and other organisms	IGA activities do not involve farming or forestry that may cause destruction of soil and other organisms	4	60 – 80
		12/12	1 (100%)

However, some girls failed to explore other marketing channels such as joining cooperatives to take advantage of group-marketing, calling customers on regular basis and the use of word-of-mouth advertising. The girls can encourage some of the influential individuals (such as an assemblyman, chief, queen mother or anyone recognized as a community mentor) in their communities to use their products or services (such as flour chips, bread, cake/liquid, and hair-braiding) and express their satisfaction with the good or service. Positive word-of-mouth or recommendations from these well-known members of the community are more likely to persuade additional customers to purchase the good or service. Girls using smartphones can take advantage of the social media (e.g., Facebook, WhatsApp, TikTok, etc.) platforms in areas where internet connection is not an issue

Social dimension: There are seven elements in the social dimension, with a maximum potential score of $4 \times 7 = 28$. The actual final performance is $24/28 = 0.86$ (86%), which falls between 75% and 100% and corresponds to acceptable social performance. Although the businesses are mostly small-scale, the girls indicated that they have trained some of their peers who were not part of the STAGE. This has resulted in a plethora of job options for other girls. Furthermore, the majority of the beneficiaries adhere to all the suggested best practices given to them by their MCPs. One of the important factors that have been observed as a key sustainability factor is the formation of groups. The group formation helped these girls to share ideas and build a

strong social cohesion. However, there was no cooperative to help the girls to achieve marketing power such as bargaining power and group marketing.

Environmental dimension: The overall performance score for the environmental component of sustainability is $12/12 = 1$, or 100%. This is because all the IGA businesses do not involve the use of agrochemicals in the production process or delivery of services that are likely to contaminate the environment. The use of pesticides such as herbicides and insecticides and chemical fertilizer can contaminate the water bodies, soil and vegetation, as well as other organisms such as birds, insects and non-target plant species. Thus, economic activities that do not involve the use of chemicals or keep the use of chemicals to a minimum save the environment.

SECTION 6

IMPACT OF THE STAGE PROJECT ON THE LOCAL ECONOMY

6.1 Introduction

One of the key objectives of the STAGE project is to promote inclusive and gender sensitive education, as well as strengthen the apprenticeship vocational skill training among marginalized girls in rural areas of Ghana. In addition to this, it has attempted to effect sustainable change in social norms and gendered views around girls' education and economic empowerment in the project communities. It is expected that the beneficiary girls will be empowered both psychologically and economically. The psychological change can be observed through an increase in their self-confidence/self-esteem while the economic empowerment should be seen in their contribution to household income. The joint significance of psychological and economic empowerment can be translated to boosting the local economy. In this session, the evaluator attempts to assess to what extent do the beneficiaries perceive the STAGE project to have helped them to increase their self-confidence, enhance their contribution to household income and consequently boost their local economy.

6.2 Assessing the girls' level of empowerment

The beneficiaries' level of empowerment was evaluated using two broad indicators: self-esteem, their contribution to household income and their vocational skill transferred to their colleagues.

6.2.1 Measuring beneficiaries' self-esteem

Table 6.1 depicts the extent to which the girls perceived their self-esteem as a result of the STAGE-IGA project. The girls were asked to rate their level of confidence based on the self-esteem indicators using the four-point Likert scale, ranging from strongly disagree (1) to strongly agree (4). The mean values for each item are presented in Table 6.1. The results in Table 6.1 indicate that generally, the STAGE project has improved the confidence level of the girls as the mean values of the indicators are skewed toward the '*strongly agree*' rate.

Similarly, according to Figure 6.1, about 90% and almost all (99.48%) of the girls agreed that STAGE has empowered them to such an extent that they now place value on themselves and now know they possess great talents and qualities.

Table 6.I. Measuring beneficiaries' self-esteem

<i>Self-esteem indicators</i>	<i>Mean</i>	<i>SD</i>
STAGE has made me feel that I am a girl of value	3.722	0.686
I now feel I have talent and good qualities	3.818	0.412
I am as capable as my peers	3.425	0.809
A woman can be a leader just like a man	3.836	0.417
The ability to read and write has given me confidence	3.729	0.473
Understanding basic money management has boosted my confidence	3.837	0.376

Note: SD denotes standard deviations

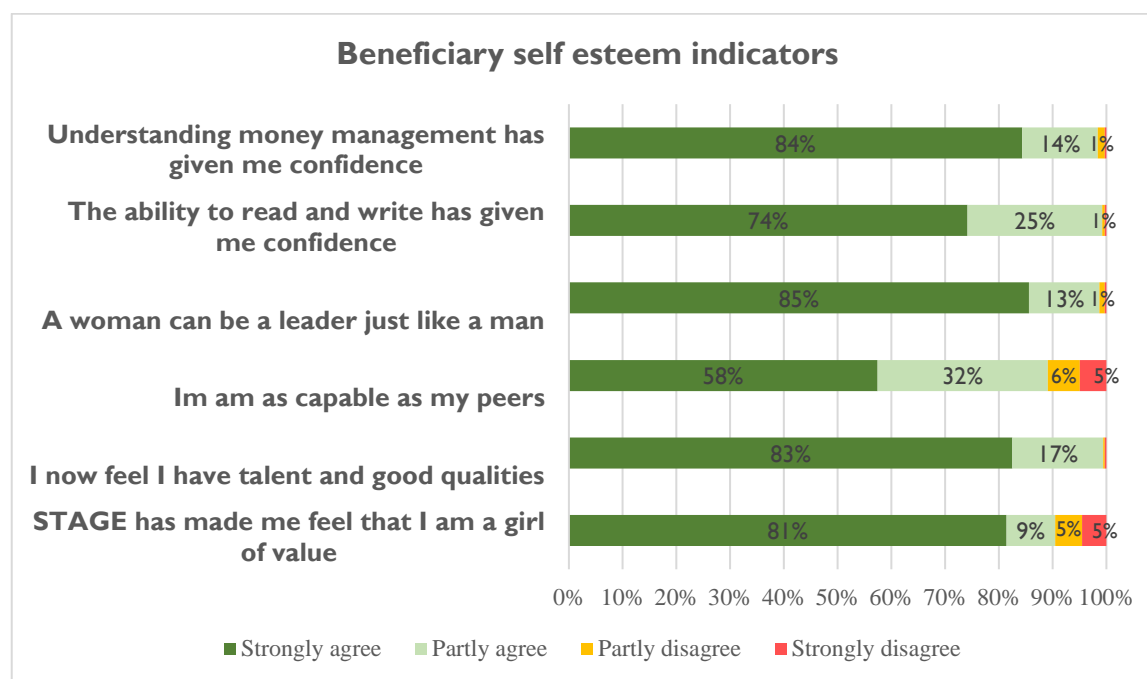


Figure 6.I. Measuring the level of self-esteem among the beneficiaries of STAGE project

Thus, generally STAGE project has significantly empowered these girls psychologically to feel more confident and positive about themselves. When these girls are socially empowered, they will be in a better position to make choices that will benefit their wellbeing as well as the welfare of their households. This empowerment could also be one of the ways to advance the girls' sexual and reproductive health and rights. Moreover, the girls were also asked to indicate the degree of their contribution to household income before and after their participation in

IGA. This was done by putting the question “Assuming there are 10 bags of beans, that represents the total resources your household needs as food and money for other things.

How many bags of the beans will represent your contribution to the household before the STAGE project?

How many bags of the beans will represent your contribution to the household now (after the STAGE project)?

The results are indicated in the bar-chart in Figure 6.2. The girls indicated that before the IGA participation they hardly contribute to the household income. They usually relied on their husbands, parents, and sometimes in-laws. However, after engaging in the IGA business, they can now contribute significantly to their household income. The results in Figure 6.2 indicate that about 86% of the girls said they were contributing between 0 and 20% to household income before the STAGE project started. In fact, about 41% were contributing 0% to household income before the start of the project. Thus, only about 14% of the girls contributed more than 20% to the household income before the start of the project.

However, after the IGA programme, where they are now engaged in income generating activities, about 36% contribute between 0 and 20% to household income, while the remaining 64% contribute more than 20% to household income. Some of the girls indicated that their entire household depends on the soap they make through the IGA project.

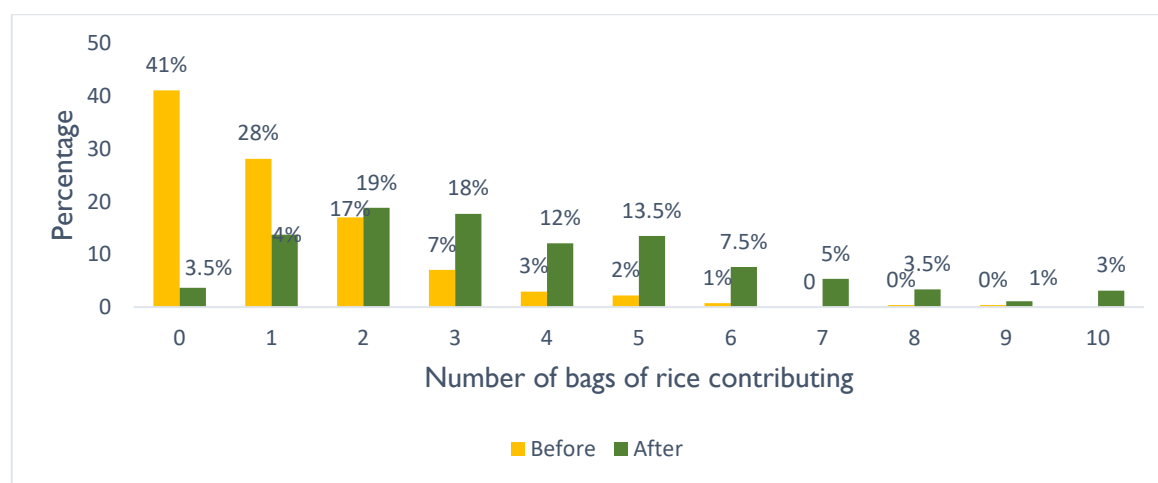


Figure 6.2. The extent of girls' contribution to household income before and after IGA

In conclusion, the STAGE intervention project has created a vocation and decent employment for the beneficiaries such that they now contribute significantly to their household income compared with their contribution before the project.

6.2.2 Knowledge transfer

One of the key avenues to boosting the local economy is through vocational skill transfer. The girls who have been trained by the STAGE project may also transfer their knowledge to their siblings or colleagues, and if these colleagues or siblings use it, then many lives are being transformed. As a result, the evaluator probed further by asking the beneficiary girls if they have transferred what they have learnt through STAGE-IGA to other girls, and if so, they should state the number of other skills they have trained.

Around 25% of the sampled girls (representing 95 girls) indicated that they have transferred the vocational skill training to others. In total, these girls indicated that they have transferred their knowledge to about 171 other girls (1.8 per person). This is a substantial contribution to the development of the local communities by the girls through the STAGE-IGA project. During the FGDs, it was observed that the majority of the girls strongly agree to the fact that the IGA has increased economic activities in many communities. This was corroborated by the key KII with some opinion leaders and MCPs. For example, some of the girls stated that the people in their communities used to travel to their neighboring communities to purchase basic needs like soap, and since her group started soap-making, the people now buy soap from them.

6.3 Perceived impact of the VST/ALP on IGA business

The application of the training skills in the beneficiaries' daily business activities was reflected in the assessment of their perception about the impact of the training skill on their IGA option. Figure 6.4 reports the beneficiaries' response to the impact of the training skills on the execution of the IGA options.

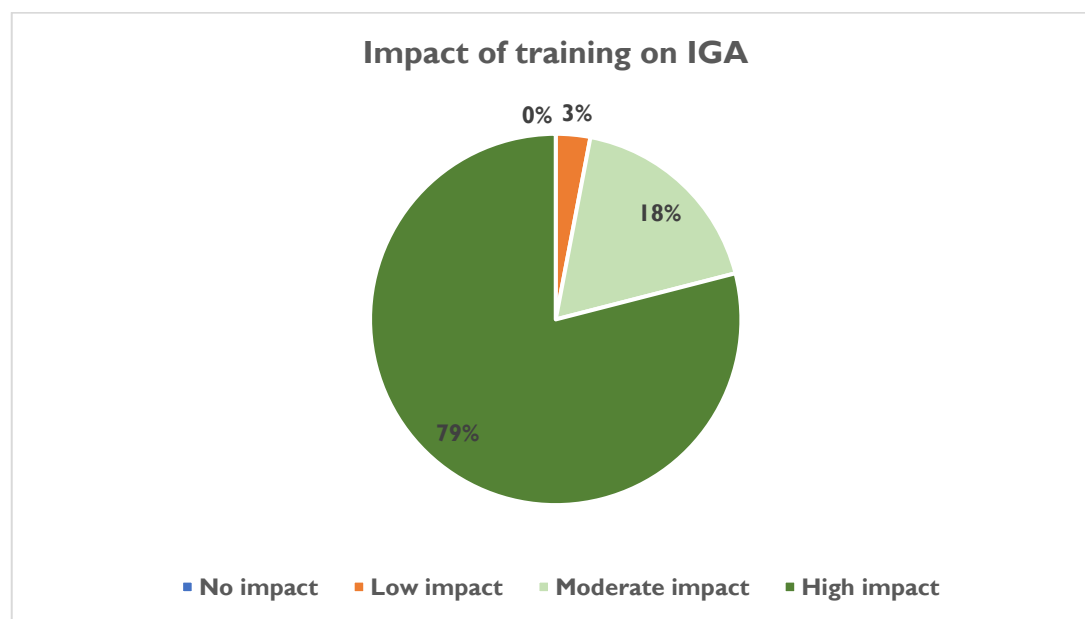
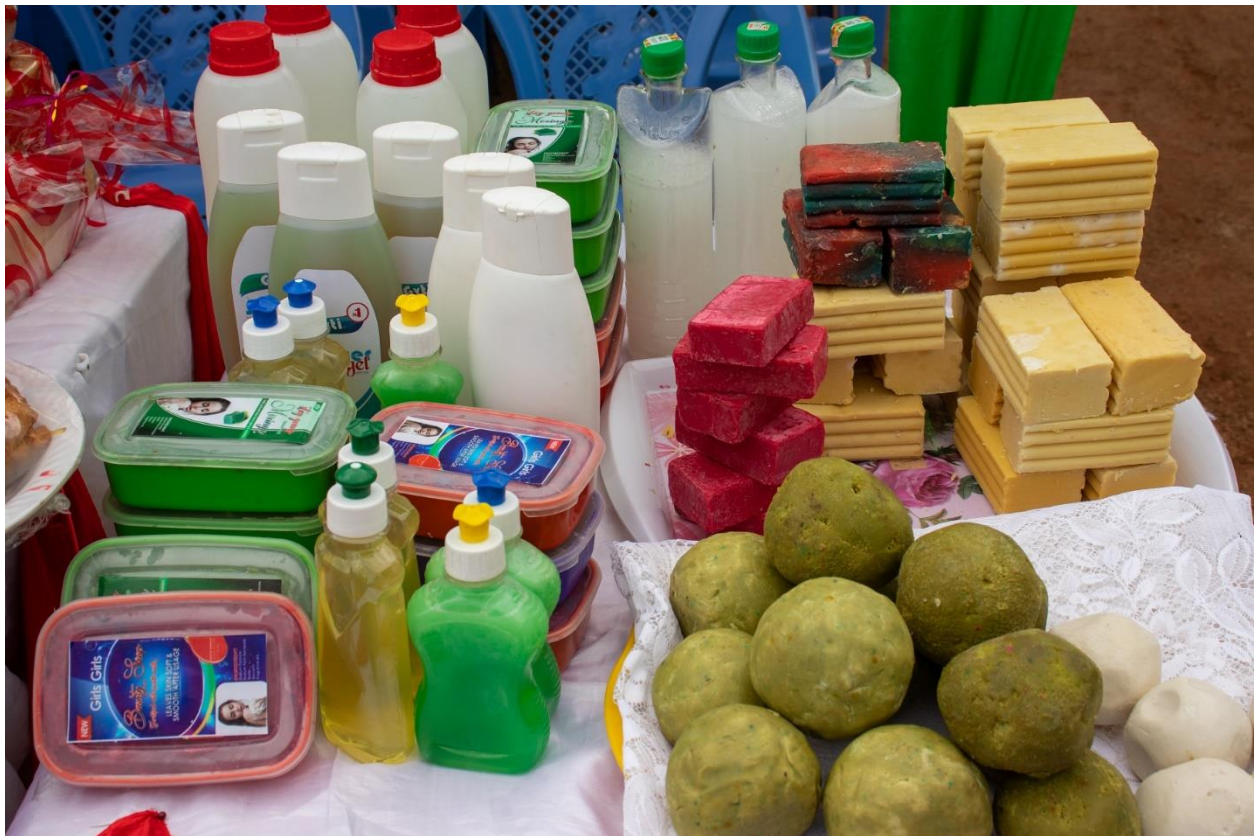


Figure 6.4. Impact of training skills on IGA

The findings according to Figure 6.4 indicate that about 79% of the girls believe that the technical and managerial skills, particularly the numeracy training has had a significant influence on their business activities. For example, during the FGDs, one of the beneficiaries said:

“In fact, I did not know how to read measurement from the measurement scale, but thank God I can now accurately take measurement on the scale and even teach my colleagues”.



SECTION 7

SUPPORT SYSTEMS, LESSONS LEARNED AND RECOMMENDATIONS

7.1 Introduction

This section examines the extent to which STAGE intervention strategies have developed systems at the individual and community levels and fostered conditions that will allow the IGA to continue after the project has ended. Additionally, the section offers recommendations based on the main results as well as the lessons learned throughout the evaluation process.

7.2 Support system to help in promoting IGA beyond STAGE life

In order to ensure the sustainability of the VST (where girls were taught on IGA), STAGE implemented certain fundamental measures to enhance the lives of the girls as a whole and develop the vocational skill training model at the community and district levels. As some of the support systems, the following significant areas were noted.

The vocational skill training (IGAs) was localized: It was noted that practically all of the IGA alternatives catered for the needs of the girls. Because the girls were previously familiar with the existence of these IGAs, they were able to handle them better. Some of the girls either have family members who participate in the IGA or have observed others in nearby villages or districts who do so as a source of income. Thus, the majority of IGA alternatives were not 'foreign' to the girls. Moreover, their local language which was the primary medium of communication also enhances their understanding of the concepts.

Community inclusiveness: the community engagement as part of the project design and implementation was very helpful. Analysis from the FGDs and KII indicates that most of the selected mentors in the communities had key knowledge, understanding and showed a high level of supportive and positive attitude towards the training of the girls in IGA. It was obvious that they were unhappy with the girls being mothers at earlier stages of their lives, and hence, want that narrative to change. They therefore wanted the girls to gain an education and secure employment, and saw vocational skill training as one of the key avenues to securing decent employment. It is believed that this kind of inclusiveness will offer support for the girls by their parents/guardians even after the project, as the foundation has been laid for them. In addition, the openness, flexibility and proximity of the programme to the community members made the STAGE programme more credible and attractive; and hence fostered that community support.

Low capital-intensive IGA and Start-up capital: one of the key features of the IGA that will serve as a support system is the fact that most of the IGA requires a small amount of money to start. This generally makes it easier for the girls to start something on their own. Although there were general complaints about the fact that the start-up capital given to the girls was very small (GH¢ 250), it was interesting to know that girls are making a living out of this. This is also because the IGA options selected across the project communities do not require much start-up

capital. In situations where the IGA requires more start-up (e.g., Kente weaving, bread-making), the girls work in groups where their resources can be pooled together.

Working together as a team: introducing teamwork to the girls through group work during the VST training and even working together as business partners after the training is one of the significant intrinsic support systems STAGE projects gave to the girls. Working in a group allows the girls to learn how to express their thoughts and feelings among their like-minded peers who trusted each other. With the group work, the girls have developed more confidence, personal awareness and better understand their working relationship with their peers as well as their social environment.

Selection of local master craftsman (MCPs): most of the MCPs recruited were residing in the communities. This approach was effective because these MCPs understand the local conditions, culture and practices, and are trusted by the girls and hence have the abilities to manage the girls through successful IGA training. This support system enables the girls to continue the VST/IGA training even after the completion of the project.

High demand for the IGA products: Observations from the field indicate that the demand for most products is high, as most communities do not have people engaged in these IGA products or services. It also revealed from the FGDs that the girls themselves selected VST products/services on the basis of unavailability of products in the community, potential demand and frequency of sales. The combined effects of the selection of the basic but highly demanded IGA products or services that meet the passion of the girls and needs of the community will consequently ensure sustainability.

Collaboration with the Ghana Technical Vocational Education Training (Ghana TVET): STAGE collaborated with the Ghana TVET in its curriculum development and its training approach to include Inclusive and Gender Sensitive Education (IGSE) in its approach to be applied by MCPs and community support systems, given that the majority of girls in apprenticeship programmes are from marginalized/rural areas. This was a very good initiative as some MCPs interviewed indicated that the curriculum was designed taking into consideration girls with disabilities. However, there was no evidence of other support systems such as special classes for the girls with disabilities to catch-up and other services that could help them be at the same level with their peers. Moreover, since many districts or communities do not have functional structures to support inclusive girls' education, the impact was not much felt with regards to the girls with disabilities.

Availability of market for the IGA product/service: The availability of the market for IGA products and services is crucial for the sustainability of the IGA business. The findings of the FGDs and the observations of the consultant indicate that most of the project communities do not have market centres. There are, however, few market centres close to the communities. In all market centres, the main route of distribution for VST products/services is from the service product to the final consumer or from the service provider to the retailer and from the retailer to the target group, such as the final consumer. However, there was limited evidence of linkage

to the output market. Only a few VST products, such as smock and kente, in some project areas are sold outside of the districts or communities.

7.3 Lessons learned

Successful STAGE project outcomes: Generally, STAGE had successful project outcomes both in ALP and VST training. So far, about 9,548 marginalized girls received the IGA support, and around 8,060 (representing about 84.42%) had transitioned to self-employment and are earning decent income.

Additional training needed: It was learned that some girls are engaged in further VST training after 6-month training in VST. Findings from the FGDs and KII revealed that some of the girls who are into kente weaving and smock sewing are willing to continue the training from the MCP but the cost of training remains their obstacle. This is because there was a general concern that the six-month duration for the training of kente weaving and smock sewing was too short for the girls to fully grasp the required skill. According to the MCPs for kente, the girls require 2 – 3 years to fully grasp the kente weaving skill.

Life skills as a key component of the ALPs: The life skill component of the STAGE project where the girls were taking through topics like personal hygiene, basic financial management (money management) and understanding their environment played significant roles in the lives of the girls. According to the girls, the life skill course boosted their confidence as women, gave them better knowledge about their own bodies and their rights as girls. The financial management has helped them to manage their business better.

Almost 100% self-employment: Field observations, FGDs and KII indicate that almost all the beneficiaries were self-employed, running their IGA business themselves or in a partnership with their peers. There was no evidence of the beneficiaries being engaged by a well-established institution or organization, or even small enterprises in the nearby districts or regional capital.

Happy with the start-up capital: it was interesting to learn that although there were some complaints that the start-up was so insufficient to do anything, the girls were generally happy with the initiative. However, the recent hikes in the prices of goods and services seems to have eroded the gains that may be associated with the start-up capital.

Socio-demographic characteristics as barriers: it was observed that girls who were mothers, pregnant and married had challenges with coping well with the ALP and VST training due to social responsibilities such as household chores. For example, when girls had to leave training class to care for their children or even sit in class with their babies, it occasionally caused them to lose focus.

7.4 Recommendations

Increased involvement of spouse: The project performed an excellent task of educating the local population, and both community leaders and individuals are conscious of the concept. Nevertheless, future projects ought to spend more time educating other family members—especially spouses and fathers—about the social role of women and the necessity of showing support when girls or women take on duties like VST/IGA. Given that some of the girls are either living with their husbands, parents, or other relatives, this will be very helpful.

Establishing a strong linkage with other value chain actors: To improve market access, future projects should take into account connecting the IGAs to other players in the value chain. For instance, people involved in beading IGAs (sandals, slippers, jewelry, and ladies' bags) may be connected to other players in the cities along the value chain. This will increase cooperation, lessen information asymmetry in the market (knowledge on input and product prices), and make it easier to find potential customer.

Widening the scope of the training content: It is proposed that future projects take into account broadening the scope of the training curriculum to cover some marketing-related topics, such as packaging, customer care, and market diversification (selling in multiple markets).

Life skills training key: Future program should strive to maintain and increased life skill component of the ALP. The girls were generally happy with the courses such as reproductive and sexual education, personal hygiene and money management.

Review of some of the IGA: Some of the IGAs should be reviewed in future projects. For instance, the evaluator suggests a reassessment of the kente weaving IGA in the future project given the extensive training time needed and the fact that the demand for kente weaving is seasonal, making it less profitable. It will also be more profitable and sustainable to focus on highly inelastic IGAs such as food product (e.g., bread-baking, pastries) and soap-making rather than more elastic IGAs like kente weaving, jewelry, and sandals. People may avoid these elastic IGAs when costs are high since they are regarded as luxuries in the local community. Also, these items are commonly bought for important events like weddings, naming ceremonies, and funerals.

Promotion of peer learning: As part of developing microbusinesses or VST initiatives, the idea of peer learning must be maintained and fostered. Peer learning facilitates cooperativeness, improves group marketing, and fosters social cohesiveness.

Conducting market survey on the inclusion of other VST: Future programs should consider conducting market research on expanding the VST to include additional VST like mushroom and snail production, beekeeping, as well as value addition to some crops like sweet potatoes, soybeans, and dawadawa. Consideration may also be given to improving the current VST through value addition. In this age of health consciousness, switching from traditional bread baking with flour as the main ingredient to potato bread or soy bread may be beneficial.

Upscaling the project to include youth entrepreneurs: In addition to this group of girls, it is proposed that future programs take into account training other young people (both male and female) who are already operating microbusinesses and require technical and managerial abilities. Targeting young people with entrepreneurial ideas but yet little skills or knowledge of how to make those ideas a reality is another option.

Research on the rippling effects of IGA: One of the study's main conclusions was that a number of the girls had passed on knowledge they have learned to their siblings and peers. Future projects should explore about undertaking additional research to find out the effectiveness and the rippling effects and how they might be used to scale up a process.

