Photo Credit: International Rescue Committee

EDUCATION COST ANALYSIS BRIEF – REAL Content Adaptation
Ethiopia, Democratic Republic of Congo, and South Sudan | 2022

Executive Summary

The International Rescue Committee (IRC) and its partners implemented the Resilience Expansion and Active Learning in Crisis (REAL) project in Ethiopia, the Democratic Republic of Congo (DRC), and South Sudan to provide Learning through Play (LtP) training and materials in settings impacted by extended COVID-19 school closures. This REAL project focused on rapidly adapting pre-existing active, play-based learning content and reached 253,079 clients, including children, parents/caregivers, teachers, and government officials.

The total costs to conduct the first round of content adaptation across the three REAL settings equaled $483,051. Dunga episodes (social-emotional learning (SEL) audio content) incurred the highest costs due to time and effort and material costs associated with translating and broadcasting episodes.

Ethiopia incurred the highest costs of all REAL-implementing contexts, spending nearly 3 times as much as DRC, and 4 times as much as South Sudan. Notably, Ethiopia's Testing phase incurred the highest cost of the four content adaptation steps and Testing across the three contexts. This is due to the added layer of Content Validation Groups for Ethiopia's adaptation process, additional translations to accommodate the complex language landscape, and testing in each language.

Researchers concluded that the REAL intervention improved holistic learning outcomes (pre-literacy, pre-numeracy, motor, and social-emotional) for pre-primary-aged children (3-6) and social-emotional outcomes for school-aged children (6-12), as well as the capabilities of local partners and government counterparts to sustain continuous co-creation and implementation of LtP.

Project Description

From October 2021 through June 2023, the International Rescue Committee (IRC) and implementing partners,[1] with support from the LEGO Foundation, adapted successful learning through play (LtP) solutions to support continued learning and development outcomes in areas severely affected by the global pandemic. The Resilience Expansion and Active Learning in Crisis (REAL) project took place in Ethiopia, the Democratic Republic of Congo (DRC), and South Sudan, where it leveraged existing LtP content to equip caregivers, educators, community leaders, and government actors with the tools and knowledge to facilitate accessible and high-impact play-based learning in homes and schools. REAL reached a total of 253,079 clients, including children, parents/caregivers, teachers, and government officials.

The locations where REAL operated required low-tech innovations paired with high-quality, contextually and linguistically adapted content. This motivated the project to employ a rapid human-centered design (HCD) approach, which centers close collaboration with end-users and stakeholders to develop solutions that reflect their experiences and perspectives. Under REAL, content feedback workshops informed the adaptation of existing play-based and social-emotional learning materials to the language, contexts, values, and needs of children in each culturally distinct location.

This adaptation process consisted of five key steps: Mapping, Localization Workshops, Adaptation, Testing, and Progressive Rollout (Figure 1). This approach resulted in a total of two rounds of content
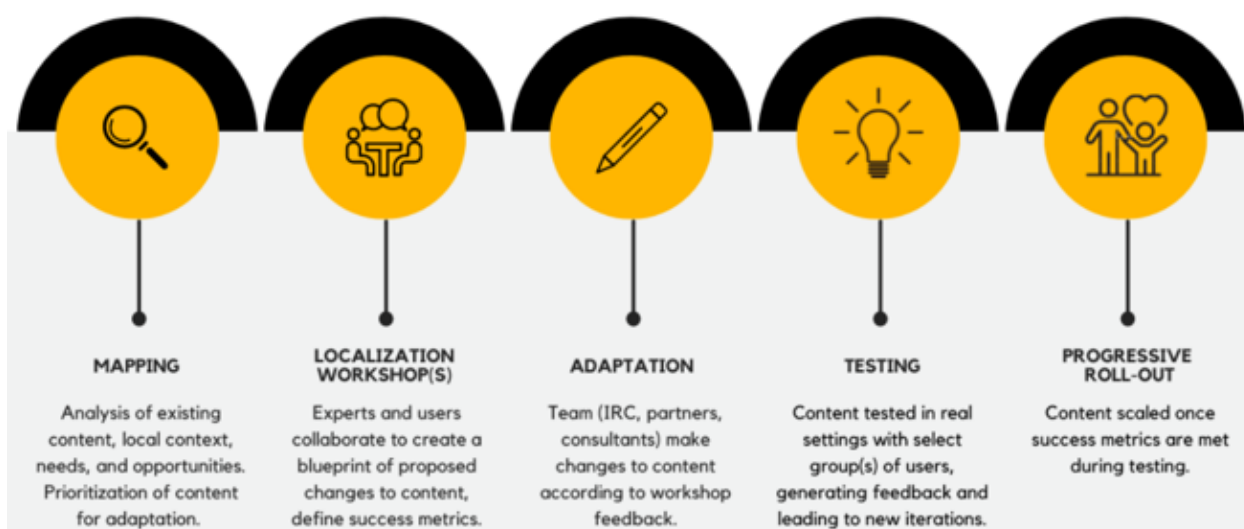
Adapted Content

- **Play Matters at Home Packets** included activities for integrating LtP at home for pre-primary and primary school-aged children. The packets were accompanied by guides for meetings with caregivers about returning to school after COVID-19 closures.
- **Preschool Healing Classrooms** included materials for training early childhood teachers to create safe, supportive classroom environments and facilitate quality lessons that encourage learning and improve well-being. This content also included activities that focused on building foundational skills and social-emotional learning (SEL) through play.
- **Dunga Episodes** included audio content that both entertained and educated, focusing on SEL skill development. REAL broadcasted up to 20 episodes, ensuring the accurate translation of all audio content for the needs of each community and its end-users.
- **SEL Kernels** included classroom-based social-emotional activities for primary grades, and the accompanying SEL Scenario Bank included 13 problem scenarios and games used to practice SEL skills linked to the lessons.

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[1] REAL implementing partners included Amalna (South Sudan), the Ministry of General Education and Instruction-MoGEI (South Sudan), the Ministry of Primary, Secondary and Technical Education-I'EPST (DRC), and Synergy Habesha Films and Communications (Ethiopia).

adaptation.

Figure 1. REAL Content Adaptation Steps

MAPPING	LOCALIZATION WORKSHOP(S)	ADAPTATION	TESTING	PROGRESSIVE ROLL-OUT
Analysis of existing content, local context, needs, and opportunities. Prioritization of content for adaptation.	Experts and users collaborate to create a blueprint of proposed changes to content, define success metrics.	Team (IRC, partners, consultants) make changes to content according to workshop feedback.	Content tested in real settings with select group(s) of users, generating feedback and leading to new iterations.	Content scaled once success metrics are met during testing.

Once adapted, the LtP solutions were deployed in REAL areas of implementation with the aim of (1) increasing the knowledge and skills of teachers, PTAs, caregivers, and communities to deliver high-quality LtP interventions that support children's holistic development, (2) improving the capabilities of the IRC, local partners, and government counterparts to actively engage and sustain continuous co-creation and implementation of adapted PlayMatters at Home and PlayWell LtP materials and (3) optimizing the capability of local education bureaus to include the deployment and use of LtP materials in emergency preparedness and response plans.

The IDELA (International Development Early Learning Assessment) measure studied children's learning outcomes by way of pre-literacy, pre-numeracy, motor, and social-emotional learning sub-domains (Pisani et. al, 2018). Additionally, the SERAIS (Social-Emotional Response and Information Scenarios) measure examined children's SEL skills (hostile attribution bias, emotional orientation/intensity of emotions, emotional dysregulation, and interpersonal negotiation strategies) through storytelling (Kim et. al, 2019).

Each context prioritized different content based on context analysis and perceived need.

In step one of the adaptation process, teams in Ethiopia, DRC, and South Sudan assessed client needs and the barriers and opportunities for LtP in their contexts. They also reviewed existing LtP content to determine which solutions were highest priority over the 18-month project. Each country adapted a selection of face-to-face training materials, and all three contexts carried out Dunga Episodes as this solution allowed for the furthest reach of playful social-emotional learning content via radio broadcasting.

Table 1. CONTENT ADAPTATION ACTIVITIES BY CONTEXT				
	SEL Kernels	**Dunga Episodes**	**PM @ Home**	**Preschool Healing Classrooms**
South Sudan	X	X	X	
DRC		X	X	X
Ethiopia	X	X		X

Grey cells indicate solutions that were not utilized in each context.

Various limitations prevented the full cost analysis of the REAL project.

All cost estimates reflect combined spending in Ethiopia, the DRC, and South Sudan, across the four activities adapted (SEL Kernels, Preschool Healing Classrooms, Dunga Episodes, and PlayMatters at Home). Primarily due to program staff time constraints, the scope of this analysis did not include the costs of inception and the second round of content adaptation. Additionally, the monitoring data did not allow for the disaggregation of the total client reach due to non-standardized outputs across activities and adaptation rounds. As a result, this analysis could not provide any cost-per-client estimates. However, the disaggregated costs by context, content adaptation steps, and activities do provide valuable insight into project cost drivers.

Project Costs

Across the REAL project content adaptation cycle, Testing incurred the highest cost, for all contexts, due to the need for multiple content iterations.

Overall, spending was spread across the four steps of the content adaptation process, with costs increasing between step 1 (Mapping) and step 2 (Localization), maintaining between step 2 and step 3 (Adaptation), and increasing between step 3 and step 4 (Testing). The aggregated costs of each stage of content adaptation indicate that Testing incurred the highest spending at approximately 50% of total costs.

Testing across the three contexts totaled $242,477. During Testing, teams used snapshots of the adapted content in real-life settings with clients, collected feedback, and made real-time adjustments to ensure the content was as

| Table 2. ADAPTATION SPENDING BY CONTEXT				
	Mapping	**Localization**	**Adaptation**	**Testing**
South Sudan	$10,677	$20,871	$14,868	$34,099
DRC	$13,785	$21,948	$35,660	$45,585
Ethiopia	$1,446	$64,888	$56,431	$162,793
TOTAL	**$25,908**	**$107,707**	**$106,959**	**$242,477**

contextually appropriate and user-friendly as possible. The main cost drivers[2] of this step were the training of caregivers, PTAs, and community leaders on Dunga Episodes and the translation and broadcasting of these episodes. In Ethiopia, the team's Testing step also included review by a unique Content Validation Group (CVG), comprising language experts and stakeholders to review content translations and help the REAL team navigate the complex and politically charged linguistic environment.

The Adaptation step cost $106,959 (22% of total project costs), followed by Localization Workshops, which cost $107,707 (22% of total project costs), and Mapping, which cost $25,908 (5% of total project costs) (Table 2). Rather than hiring contractors at a greater expense, each country project team examined existing content, local contexts, and their varying needs, and defined activities accordingly. For that reason, Mapping carried the lowest cost across the project content adaptation cycle. It is important to note that Mapping costs were not distributed across REAL activities as content had not yet been selected and implementation of activities had not yet begun.

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[2] A cost driver represents factors, forces, or events that determine the costs of activities and cause costs to be incurred by the leading organization.

Ethiopia exhibits the highest spending for REAL content adaptation (Figure 2) due to the testing of Dunga Episodes in additional contextually appropriate languages.

Content adaptation costs are higher in Ethiopia due to additional layers of localization, conflict sensitivity, and content testing with caregivers and children through CVGs. Additionally, the Ethiopian community is

**Figure 2. Costs per Adaptation Step by Country**
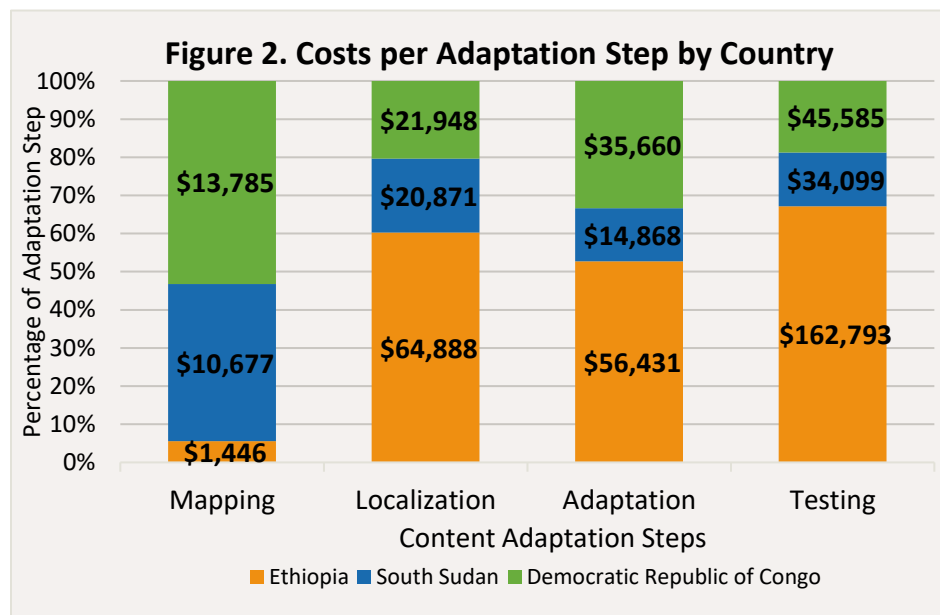
more linguistically diverse, compared to that of South Sudan and the DRC. This, therefore, required additional translating and testing of content in the selected languages spoken in Ethiopia. This significantly increased translation costs for Dunga Episodes. Before selecting languages for content

adaptation in multi-lingual contexts, the REAL Ethiopia team consulted with regional and district-level language experts. This ensured the appropriate selection of languages (Derashe, Konso, and Allewere).

The DRC incurred the second-highest costs, spending $116,978 on content adaptation. Like Ethiopia, the Testing step of content adaptation drove costs in DRC. However, unlike Ethiopia, DRC had higher costs for National Staff during Testing. Lastly, South Sudan spent $80,516 on content adaptation, exhibiting the lowest expenditure compared to DRC and Ethiopia. IRC staff carried out South Sudan's text-based adaptation and not needing to invest in contractors cut costs considerably.

National Staff and Supplies and Materials consistently are the driving cost categories of content adaptation across all three contexts (Figure 3)

Figure 3. Cost Categories by Context
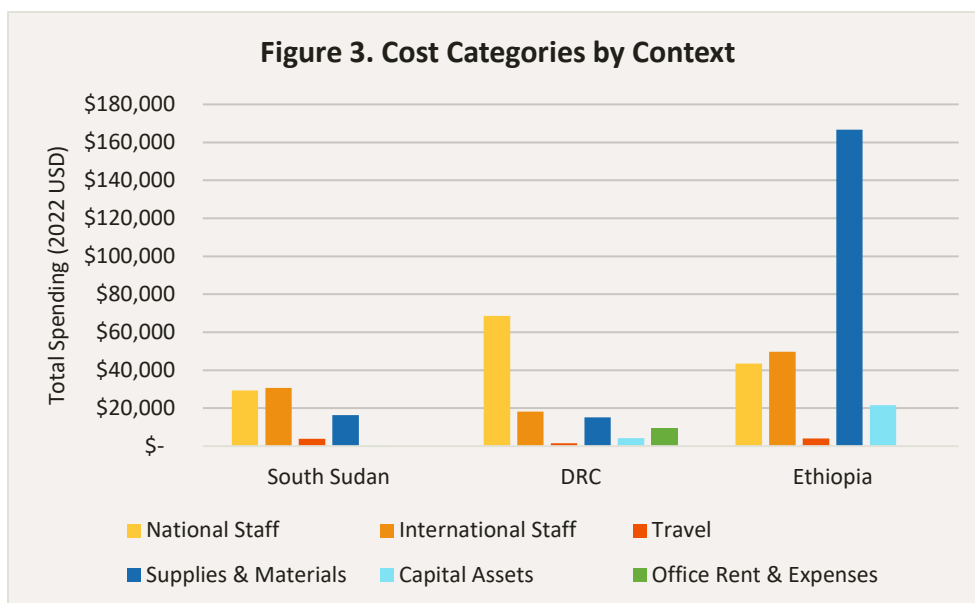
The first round of REAL content adaptation (April to November 2022) cost $483,051. The majority of content adaptation spending included Community Workers, Senior Project Mangers, Translation Services, and Radio Broadcasting, grouped in the Supplies & Materials and National Staff categories.

Content adaptation costs of the four implemented activities across each context:

For content costs, Dunga Episodes totaled 58% of overall activity spend, while SEL Kernels, Healing Classrooms, and PlayMatters at Home amounted to 16%, 15%, and 12% of activity-specific spending, respectively (Table 3). Each activity went through the Localization, Adaptation, and Testing steps of REAL's content adaptation. Please refer to the ingredients lists in the annex for a more detailed breakdown of spending for each context.

Table 3. ADAPTATION SPENDING BY ACTIVITY					
	SEL Kernels	**Dunga Episodes**	**Healing Classrooms**	**PlayMatters @ Home**	**TOTAL (2022 USD)**
South Sudan	$24,708	$18,877		$26,254	**$69,839**
DRC		$49,274	$26,274	$27,644	**$103,193**
Ethiopia	$48,405	$194,765	$40,943		**$284,112**
TOTAL	**$73,112**	**$262,916**	**$67,217**	**$53,898**	**$457,144**

Grey cells indicate activities that did not occur in each context.

Dunga Episodes proved to be the highest-cost activity to undergo content adaptation, while Play Matters at Home incurred the lowest costs of the four activities.

Of the four activities adapted across the three REAL contexts, Dunga Episodes remained the highest-cost activity, at $262,917. SEL Kernels remained the second highest-cost activity at $73,112, followed by Healing Classrooms, which cost $67,217. Play Matters at Home proved to be the lowest-cost activity at $53,898.

The Dunga Episodes extracted considerable funds in Ethiopia during the Testing step and cost $90,398 while comprising 56% of all Testing-related spending in this context. The Dunga activity consistently has a higher cost across South Sudan, Ethiopia, and the DRC. This is due to spending related to translating culturally relevant content, as well as producing and broadcasting the episodes.

Achievements of the Resilience Expansion and Active Learning in Crisis (REAL) project.

The REAL project focused on client-driven content adaptation for continued learning in crisis. Based on a pre-post analysis, IRC researchers believe the intervention improved holistic learning outcomes (pre-literacy, pre-numeracy, motor, and social-emotional) for pre-primary aged children (3-6), as measured by IDELA, and the social-emotional outcomes for school-aged children (6-12), as measured by SERIAS.[3] The intervention also supported in improving the capabilities of IRC, local partners, and government counterparts to actively engage and sustain continuous co-creation and implementation of learning through play (LtP). Furthermore, the REAL project supported local education bureaus in deploying and using LtP materials in emergency preparedness and response plans. The Client-Driven Content Adaptation Toolkit evolved from the REAL project's learnings related to content adaptation. It will support teams to balance the need for quick action in dynamic contexts where interventions must be appropriate and responsive to client needs. The toolkit includes case studies, guidance on budgeting, and tools and templates for each step of the content adaptation process. More information on the Toolkit can be found **here**.

Building the education sector's evidence on the cost of content adaptation.

This cost analysis of the content adaptation of the REAL project is the beginning of a wider effort to intentionally report on the costs of adapting an intervention to different contexts, as well as how ongoing project costs may vary by context (Moore et. al, 2021).[4] To the best of our knowledge, there is minimal published evidence on the disaggregated costs of content adaptation across contexts. As the IRC continues to promote globally informed and locally grounded services to its clients, it is committed to expanding cost evidence on contextualization.

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[3] *The International Rescue Committee's Airbel Impact Lab considers randomized controlled trials (RCTs), difference-in-difference, and regression discontinuity designs to be impact evaluations that can evaluate the causal effect of an intervention on outcomes. Since the REAL study used a pre-post evaluation design, the IRC cannot make claims about the program's causal effect on outcomes, nor its cost-effectiveness.*

[4] For example, Moore et al. 2021 propose guidance for adapting interventions to new contexts, including "Consider costs and resources needed for the adapted intervention."

Preferred Citation
Haywood, Athena. 2024. "Education Cost Analysis Brief – REAL Content Adaptation." The International Rescue Committee.

Other Citations
Kim, H.Y., & Tubbs Dolan, C. (2019). SERAIS: Social Emotional Response and Information Scenarios Evidence on Construct Validity, Measurement Invariance, and Reliability in use with Syrian Refugee Children in Lebanon. Inter-Agency Network for Education in Emergencies.

Moore, G., Campbell, M., Copeland, L., Craig, P., Movsisyan, A., Hoddinott, P., et al. (2021) Adapting interventions to new contexts—the ADAPT guidance *BMJ*; 374:n1679 doi:10.1136/bmj.n1679

Pisani, L., Borisova, I., & Dowd, A.J. (2018). Developing and validating the international development and early learning assessment (IDELA). International Journal of Educational Research, 91, 1-15. doi:10.1016/j.ijer.2018.06.007

The International Rescue Committee, Resilience Expansion and Active Learning in Crisis (REAL) Project Learning Report, (unpublished, September 2023).

Annex: Ingredients List

South Sudan | USD 2022

Program Costs	Adaptation Steps			
	Mapping	**Localization**	**Adaptation**	**Testing**
National Staff	**1,124**	**11,307**	**4,701**	**12,264**
Education Officer	875	2532	1520	2838
Senior M&E Officer	-	284	-	-
Community Workers	91	3892	-	4818
Deputy Education Manager	-	2182	2183	2000
Severance, NSSI, and Medical Allowance	158	2417	998	2608
International Staff	**8,138**	**6,690**	**8,856**	**6,961**
Program Coordinator	311	294	294	294
ECD STA	-	24	24	27
Curriculum Specialist	233	222	222	219
Education TA	43	-	-	-
Child Protection Coordinator	156	182	258	117
Senior Education Manager	3124	2757	3676	3308
US Expat Benefits, Staff Housing, Relocation, Location Differential	4271	3211	4382	2996
Program Supplies & Materials	**110**	**1,170**	**1,104**	**13,917**
Content Adaptation (LW, Prototype, Illustrator, Testing and Rollout)	110	1170	1104	318
Workshops, Training, R&R, Laptop, Motorbike, Flights and Vehicle Rental	-	-	-	13599
Capital Assets	**-**	**19**	**158**	**102**

Furniture, Laptops and Motorbike	-	19	158	102
Travel	**1,305**	**1,689**	**-**	**862**
Flight/Transportation and Per Diem	1305	1689	-	862
Total (by adaptation step)	**10,677**	**20,871**	**14,868**	**34,099**
TOTAL (South Sudan)				**80,516**

Democratic Republic of Congo (DRC) | USD 2022

	Adaptation Steps			
Program Costs	**Mapping**	**Localization**	**Adaptation**	**Testing**
National Staff	**4,182**	**9,257**	**25,865**	**29,307**
Education Officer (Goma & Kalemie)	1215	1814	5941	6209
Senior Project Manager	1177	1766	4709	4709
M&E Manager	86	1196	-	-
Distribution Senior Officer	572	1716	4756	4397
Program Assistant	-	563	1679	1286
Program Staff	312	605	822	-
Housing, Health Insurance & Recruitment costs	819	1596	7958	12706
International Staff	**7,166**	**1,049**	**3,250**	**6,784**
Program Coordinator	3414	293	1284	3449
Curriculum Specialist	2909	222	955	2251
Education TA	530	39	-	-
ECD STA	-	-	125	198
Senior Education Coordinator	313	495	886	886
Program Supplies & Materials	**-**	**8,743**	**1,595**	**4,792**
Inception & Adaptation Workshops (Goma & Kalemie)	-	8418	-	-
Translation & Adaptation Play Matters	-	325	1470	-
Radio Production & Broadcasting Play Well/Radio Flash drives	-	-	125	3980
Listening Circles (Goma & Kalemie)	-	-	-	812
Office Rent & Expenses	**-**	**941**	**3,543**	**4,700**

Office Supplies, Cell phone, Credit, and Vehicle location	-	941	3,543	4700
Capital Assets	**2438**	**375**	**1,407**	**-**
Projector, Laptops (small equipment), and Smartphone	2438	375	1407	-
Travel	**-**	**1,583**	**-**	**-**
Flight/Hotel/Transportation and Per Diem	-	1583	-	-
Total (by adaptation step)	**13,786**	**21,948**	**35,660**	**45,583**
TOTAL (Democratic Republic of Congo)				**116,977**

Airbel Impact Lab

Ethiopia | USD 2022

Program Costs	Adaptation Steps			
	Mapping	**Localization**	**Adaptation**	**Testing**
National Staff	**859**	**8,562**	**5,990**	**28,059**
Education Officer	-	4323	3052	9955
Education & CYPD Manager	238	1250	855	5514
Senior CPE Coordinator & Manager	-	53	168	552
MEAL Manager & Assistant	4	70	120	102
National Program Staff Benefits	617	2879	1774	8884
International Staff	**587**	**2,364**	**543**	**46,291**
Program Coordinator	311	1284	294	24342
Curriculum Specialist	233	954	222	15699
Education TA	43	-	-	-
ECD STA	-	126	27	2919
Program Supplies & Materials	**-**	**53,472**	**48,922**	**64,306**
Activity Localization Workshops – SEL Kernels	-	1017	-	-
SEL Kernels Training - ToT	-	-	-	2240
SEL Kernel Training - Teachers	-	-	-	4849
Activity Localization Workshops – PHC 5-day training material	-	858	-	-
Activity Localization Workshops – Dunga Episodes	-	47533	-	-
Activity Test Adapted Dunga Episodes	-	2834	708	-
Translation – Dunga Episodes	-	-	46,984	46,984
SMS Service – Broadcast Promotion	-	-	-	2760

Training for Caregivers, PTAs, and Community leaders on Dunga episodes	-	-	-	6881
Test Adapted LtP and Wellbeing Training Packages with Targeted Stakeholders	-	-	-	591
Manuals	-	1230	1230	-
Capital Assets	**-**	**190**	**18**	**21,352**
Laptop & Accessories	-	-	-	11444
Airtime (unlimited annual payment) & Dongle Wireless	-	190	-	-
Shipping & Cargo	-	-	18	2213
Vehicle Rental	-	-	-	7695
Travel		**301**	**960**	**2,785**
Flight/Hotel/Transportation and Per Diem	-	301	960	2785
Total (by adaptation step)	**1,446**	**64,889**	**56,431**	**162,793**
TOTAL (Ethiopia)				**285,558**