B | Center for Universal Education at BROOKINGS

Childhood Cost Calculator (C3): User Guide
A costing tool for education and early childhood development

Contents

1. Overview

1.1 Purpose: What is Costing?

An understanding of costs and cost-breakdowns are important for making decisions to start, continue, or scale up a specific intervention or program. While cost isn't the only factor to consider in these decisions, it is a critical one that is often overlooked due to a lack of openly available, high-quality cost data.

Cost data is critical for achieving a number of goals:

- Advocacy for investment
- Priority setting
- Budgeting and planning
- Managing program activities
- Accountability of spending

The cost calculator is intended to facilitate cost-economy exercises, often referred to simply as "costing". **Costing is the process of identifying and examining the costs of the inputs of an intervention or program, and how those costs and inputs are distributed.**

Costing (and the C3 tool) can answer the following questions:

- What resources are needed to deliver an intervention or program?
- Is the project feasible within a given budget?
- What are the cost drivers of this intervention?
- What is the cost per child of an intervention or program?
- How are costs distributed across cost categories for this intervention or program?
- How are the costs distributed across resource types for this intervention or program?
- How are the costs distributed between one-time costs and recurring costs?

And is intended to aid in answering the following questions:

- How do the costs of intervention A compare to those of intervention B?
- What are the cost implications of a programmatic change, such as in dosage?
- What would be the cost of scaling up a program or intervention?

Costing is the first half of a cost-benefit, cost-efficiency, or cost-effectiveness analysis. While the tool provides valuable data for these analyses, the tool itself *does not* consider benefits, outputs, or outcomes and is not intended for this purpose. Further data would be needed in order to produce these analyses. Thus, C3 cannot itself answer the following questions, but contributes to them with further data and analysis:

- What is the magnitude of the effect that a program will achieve (or has achieved) for a given level of resources?
- Which activities are the most effective for a given level of resources?
- What is the optimal mix of interventions?
- What are the benefits achieved for each dollar spent on a given intervention?
- How can a specified objective be achieved at the least possible cost?

A summary of different types of cost analysis, the questions it can answer, the goals for which it can be used, and the data required can be found below in table 1.1.

Table 1.1: Types of Cost Analysis

Cost Analysis Method	Questions it can answer	Goals it can help achieve	Data needed
Costing (cost-economy)	• What did/ does/ will it cost to deliver this intervention? • How much was/is being/ will be spent on different components	• Budgeting & planning • Manage activities	• Intervention details • Required ingredients, prices and quantities (e.g. expenditure reports)
Cost-efficiency	• What did/ does /will this intervention cost per *output* delivered? • How does that compare to other interventions that produce this output?	• Budgeting & planning • Priority Setting • Managing program activities	• Intervention details • Required ingredients, prices and quantities (e.g. expenditure reports) • Output counts using a common indicator
Cost-effectiveness	• What did/ does/ will this intervention cost per *outcome* delivered? • How does that compare to other interventions that produce this outcome?	• Advocacy for investment • Priority setting • Accountability of spending	• Intervention details • Required ingredients, prices and quantities (e.g. expenditure reports) • Credible outcome measurements • Credible estimates of cost/effects of comparable interventions
Cost-benefit	• How did/ does/ will the costs of this intervention compare to the monetary value of all the benefits created by this intervention?	• Advocacy for investment • Priority setting • Accountability of spending	• Required ingredients, prices and quantities (e.g. expenditure reports) • Credible estimates of intervention's impact on all outcomes • Economic valuation of the long-term benefits of the intervention

Source: Adapted from USAID (2021)

1.2 What is the Childhood Cost Calculator (C3)?

The cost calculator tool is developed in an online, user-friendly format housed on the Tangerine platform, and is based on the earlier Brookings Standardized ECD Costing Tool (SECT). It is intended for use across ECD and education interventions as well as complex, integrated programs serving children and youth.

Who should use the tool?

Though the tool itself is best utilized by a single individual, it will require knowledge/information on program accounting/finance, program management, and monitoring and evaluation. Depending on

organizational and program management structures, consultations across these functions may be required.

Why and when should one use the tool?

The tool is intended to aid in answering questions about program cost, in order to achieve certain goals (see section 1.1). The tool can be used retrospectively, for programs or activities which have completed for previously incurred costs, or prospectively, for programs or activities which have not yet begun, or are entering a new period or phase. This could be pre-program, post-program, or on an on-going basis throughout the program.

How are costs classified?

The Cost Calculator considers two dimensions of cost classification: cost categories, which outline the purpose of the expenditure, and resource types, which outline the type of expenditure. In accounting and cost economics, there are many different definitions and interpretations of various key terms. For further information on each of these, please see section 2.

Cost Categories:

Overhead Costs
- Program Design
- Indirect Program Management
- Program Evaluation
- Other Overhead Costs

Direct Costs
- Training
- Direct Delivery
- Direct Program Management
- Transfers to Individuals/ Families
- Other Direct Costs

Resource Types:
- Labor/Personnel
- Buildings/ Land/ Infrastructure
- Materials/ Supplies/ Equipment
- Travel, Accommodation, and Transportation
- Facilities Rental
- Other

Additional cost classifications in the tool include:

- Investment versus recurrent costs, and
- Imputed (donated) versus paid-for resources.

What is the output?

The cost calculator has three main categories of output, all of which can be explored in the browser or exported to your computer: summary, visualization, and disaggregated data. For more information about output, please see section 6.

- **Summary** presents the total program costs, total cost per child, and average cost per year and can be further filtered by fields such as year and intervention.

- **Visualization** presents data as a series of pie charts, which allow for exploration of cost breakdowns across all classifications.
- **Disaggregated** data is the individual cost entries in table form.

1.3 Getting Started

For a full guide on setting up your program, please see section 3 of this guide, however here we provide a brief overview of what to expect.

How do I get started?

In order to get started, you will first need to create an account in Tangerine. Then, the tool is organized in a series of forms, as shown in the screenshot. You will need to set up the program with a background form (1), enter costs on cost entry forms (2a-2i), and then use the output forms (3a-3c) to explore and download your cost data.

Process overview:

0. Create account
1. Enter program background information
2. Enter costs, one category at a time
3. Outputs/data exploring (including export as .csv)

Select Form

- 1. Program Background
- 2a. Cost entry- Overhead: Program Design
- 2b. Cost entry- Overhead: Indirect Program Management
- 2c. Cost entry- Overhead: Program Evaluation
- 2d. Cost entry- Overhead: Other Overhead Costs
- 2e. Cost entry- Direct: Training
- 2f. Cost entry- Direct: Direct Delivery
- 2g. Cost entry- Direct: Direct Program Management
- 2h. Cost entry- Direct: Transfers to Individuals/Families
- 2i. Cost Entry - Direct: Other
- 3a. Output - Summary
- 3b. Output - Visualization of Aggregated Data
- 3c. Output - Disaggregated Data

What data is needed to get started?

First, you will be asked to provide some information on the program, including:

- Program location, dates of implementation, and key stakeholders
- Information on each intervention or component of the program, including:
  - Intervention sector and type
  - Number, ages, and demographics of beneficiaries
  - Intervention duration and dosage

Please be prepared to enter all resources required to deliver a program, and details about that resource, including:

- Unit cost
- Number of units required per year
- Category of the cost (section 2.2)
- Type of resource (section 2.3)
- Whether the resource is/was donated or was purchased by the program directly
- Whether the resource is an investment or a recurrent cost, and if the former then the approximate lifetime of the resource, in years

Which forms are required? Can they be completed in any order?

- Please note, you MUST begin with the Program Background form, which is mandatory
- Cost Entry forms can be completed in any order and are not all required- please only complete those which apply to your program.

1.4 Data Use and Privacy

Will my data be made public? Will it be shared with other parties?

We are creating a public database of high-level cost summaries (total cost, cost per child, etc.) for different types of interventions and would like to include as many programs as possible. However, you may opt out of this, and no information will be made public or shared outside of the C3 tool without your consent. Disaggregated data (i.e., the cost per individual item or individual) will NEVER be made public or shared and is available only to the user who entered the costs.

How will my data be used by Brookings or others?

If you choose to share the aggregate data (total cost, cost per child, and/or distribution across cost categories), this data could be presented for example in summary reports or research analysis by Brookings or anyone accessing the database. Proper citation will be required for its publication.

How will my data be stored? Who has access to this?

All data synchronized to the Brookings server, currently hosted by RTI International, is secured on an encrypted volume and stored in a non-relational database behind user authentication mechanisms. The servers are audited and updated regularly to keep up with the latest recommendations and security standards. Only authorized developers and support staff can access this server and its data. Support is provided only upon request or to perform system updates. The other access method is through the Tangerine web app. This access method is also secured through encryption and only selected Brookings staff can access this data. Access is controlled through a username and password and an authorization barcode for reporting app access.

2. Definitions

2.1 Intervention Types

Intervention/Component

Each cost can be assigned to a specific intervention component, if applicable. For example, if a program design includes pre-school education, school feeding, and deworming, the user can specify to which of these three intervention components a given cost applies and will be able to visualize and analyze cost distribution across and within these program components.

Sector	Intervention Type
Education	Parent Support or Training (early stimulation, growth, and development); Stimulation; Childcare or Day Care; Care; Before/After-school Care; Early Childhood and Pre-Primary Programs; Primary Ed; Lower Secondary Ed, Upper Secondary Ed; Tertiary Ed; Conditional Cash Transfer Education
Health	Antenatal Visits; Immunization; Disease Prevention; Family Planning; Health Care Visits; Mental Health; Menstruation Education; Health Promotion; Mosquito Net Promotion; Health Services in Schools; Conditional Cash Transfer Health
Nutrition	Pregnancy Nutrition Education; Oral Health Promotion; Screening and Treatment; School Meals/School Feeding; Deworming; Nutrition Education; Nutrition Supplementation/Fortification; Lifestyle Education; Conditional Cash Transfer Nutrition
Water & Sanitation	Safe Water; Hygiene or Hand Washing; Sanitation
Social Protection	Birth Registration; Parental Leave; Violence Prevention; Unconditional Cash Transfers
Governance	Policy or regulations in nutrition, health, education and social protection; Governance reflecting ECD interests

2.2 Cost categories

In order to understand how costs are distributed across different categories of program or intervention components, the tool breaks down costs into the following cost categories:

Cost Category	Description
Overhead Costs: Costs of designing, administering, and/or evaluating a program which are not associated with the direct delivery of the program.	
Program Design (pre-implementation)	Any costs associated with the design and contracting of the project, prior to the official commencement of implementation activities. This includes costs for: feasibility, proposals, negotiation, and contracting.
Indirect Program Management (Administration)	Includes indirect operations/administration costs as well as organizational or departmental overhead and indirect costs (regardless of location of individual or expense). Administrative costs assigned by the department or organization. This could be calculated as a proportion of the cost of the program to the department organization (e.g., electricity, water, rental). It could also be an administrative overhead cost (e.g., human resources, legal and procurement) that is calculated as a percentage of personnel or percentage of core program costs. All administration costs specifically incurred in the program and not allocated from the department or organization (e.g., dedicated telephone lines, cell phones, direct postage costs, printing, etc.)

Program Evaluation	Formal evaluation costs of the program, whether an internal or an external evaluation, to determine overall program success. This includes all costs associated with the evaluation, including: training of enumerators, baseline and endline evaluations, any midline or annual evaluations, and preparation of evaluation reports and documents. This does not include ongoing program monitoring costs, which are considered to be a direct program management cost.
Other Overhead Costs	Any overhead cost which does not fall into the above cost categories but is necessary for the execution of the program. Please only use after every attempt is made to consider the above cost categories.
Direct Costs: Direct costs of administering an intervention, including management of intervention, training, direct delivery, and funding to individuals/or families	
Training	Costs associated with the delivery of training anyone providing services directly to beneficiaries or program participants (ex. Teachers or parents). This does not include costs of program staff training, which are included in program management (either direct or indirect).
Direct Delivery	Costs associated with the direct delivery of services or instruction. This could include: salaries for teachers, center workers, or home visitors; the cost of classroom or center materials; or the cost of medication or nutrition supplements.
Direct Program Management	Costs associated with the direct management of the program. This does not include organizational or departmental allocations, which are included in General Operations, nor does it include program administrative costs, which are included in "indirect project management".
Transfers to Individuals/ Families	Any disbursements provided to individuals or families as part of the program implementation, such as those in the form of cash transfers/ scholarships/grants or materials/food distributions directly to individuals or households.
Other Direct Costs	Any direct cost which does not fall into the above cost categories but is necessary for the execution of the program. Please only use after every attempt is made to consider the above cost categories.

Note: It is possible, in fact likely, that not all cost categories will be present in the program and/or the data available to the individual entering costs; in these cases, you can skip the category in the entry.

2.3 Resource Types

In order to understand how funds are being spent within and across these cost categories, each item is also tagged with one of the following resource types:

Resource Type	Description
Labor/Personnel	All labor costs associated with a given cost category, above. This includes program staff and their fringe/benefits allocations, as well as consultants, subcontractor staff, and volunteer laborers.
Land, Buildings, Infrastructure (built/purchased/maintained)	All costs associated with project infrastructure, including the building, purchase, and maintenance of land and buildings. These costs must be amortized, so you will also be asked for the lifetime (in years) of the resource. This does NOT include office or building rental costs, which are considered "Facilities (rental, service fees, etc.)".
Materials/Supplies/Equipment	All tangible items necessary for the execution of the program. These may be purchased or rented and may or may not be amortized. These costs include everything from paper and pens, to computers, telecommunications costs (airtime, etc.), to purchased program vehicles.
Travel, Accommodation, and Transportation	This resource type includes all costs for travel and transportation, associated with a given cost category above. This includes: vehicle rental, fuel purchase, flight/bus/train tickets, lodging costs, per diem costs, etc.
Facilities (rental, service fees, etc.)	The physical space required for an intervention or program which is NOT purchased, built, or owned by the program. This includes costs for RENTING or USING: office buildings or space, use of school or center buildings (ex. classroom, health center, etc.), space for workshops/events/ training, as well as any repair, utilities, or insurance costs associated with these rented facilities. This category does NOT include lodging space associated with travel, which are included in the above resource type.
Other	All other costs which do not fall into another resource type, for a given cost category. Please only use after every attempt is made to consider the above resource types.

2.4 Other cost classifications

Investment/Recurrent costs

In addition to the above categories and resource types, each cost is also tagged with whether it is an investment (one-time) or a recurrent cost. This is an important distinction when considering scenario-planning or scaling modeling, in order to better understand which costs will be replicated and which are fixed. For all investment (one-time) costs, the user will be asked for the lifetime of the resource in years (see appendix 1), so that the costs can be amortized or allocated appropriately for the program's use.

Recurrent costs occur at the same frequency in every year of the program being costed (ex. number of units is the same every year). Investment costs are all other costs (for example, which occur only once in the life of the program, or at a frequency less than annual).

Common recurrent costs include:

- General staff labor costs for ongoing management
- Monthly or annual rental or service costs
- Annual trainings or certifications

Common investment costs include:

- Buildings
- Trainings or certifications which are NOT annual
- Program equipment (ex. vehicles, computers, etc.)
- Education materials (ex. books)

Imputed Costs/Donated Resources

In order to ensure that the cost analysis accurately requires all resources needed to implement and sustain a program or intervention, users are encouraged to include all donated resources, also known as imputed costs. This may include: volunteer time; space for workshops, trainings or events utilized cost-free; donated resources or supplies; and more. This type of cost is often excluded from financial and other forms of cost analysis, however it is critical to accurately capture the cost of replicating a program, for future reference and external applicability. Costs for donated resources can be determined by obtaining average prices of resources in the given context and identifying the amount of the resource that is needed/used.

3. Account Setup and Program Background

3.1 Account Setup

First, you will be asked to register an account with Tangerine to log in. This is a Tangerine login specific to the costing tool, so if you have any other accounts with Tangerine they will not be used here.
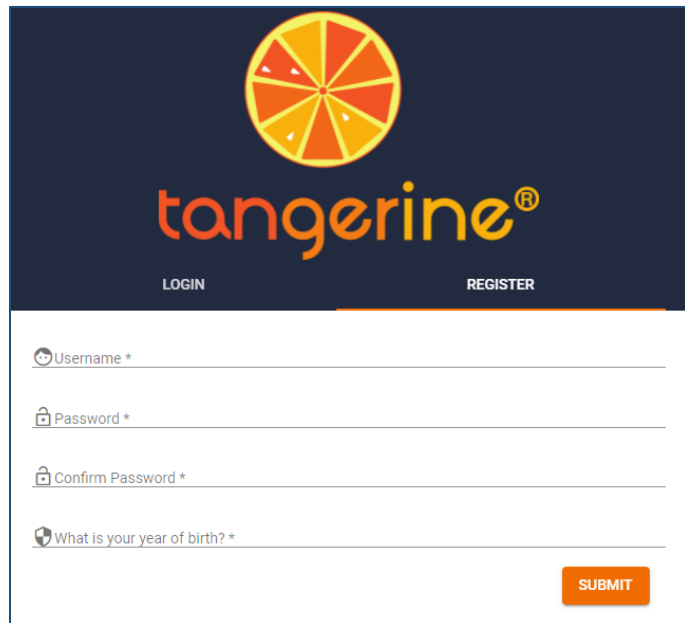
Registration asks users to:

- Create a username
- Create and confirm a password
- Enter year of birth (*which is only for account recovery purposes if you forget your password*)

User profile

In this section, users will provide basic information for their account including:
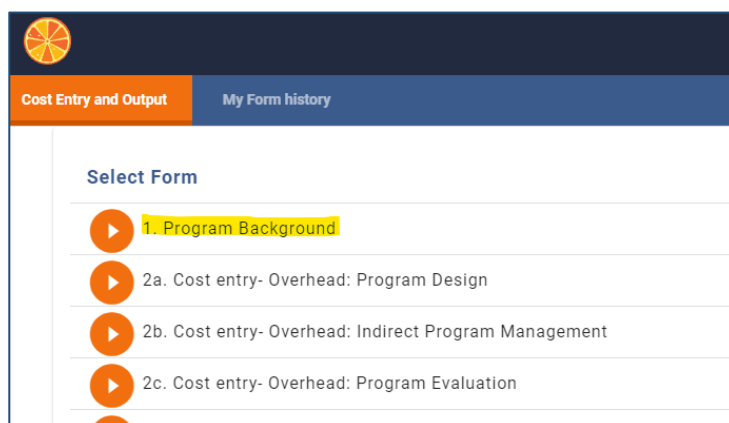
- First name
- Last name
- Email address

This information is securely stored. For further information, please see section 1.4

3.2 Program Background

Once you have created an account and logged in, you will begin by selecting the first form, program background. You MUST start with this form. Once the Program Background form is complete, cost forms can be completed (section 4) in any order.

There are three sub-sections within the Program Background form, each of which are detailed further below:

- Information on organization/individual conducting the costing exercise
- Program Information
- Intervention and Beneficiaries

3.2.1 Information on organization/individual conducting the costing exercise

This sub-section includes basic information about the organization or individual completing the costing exercise. This is for research purposes, and the data will be used to help the team understand who is conducting cost exercises with the tool, and better tailor support and resources to those audiences. This contact information may also be used to follow up with individuals regarding their progress with the tool.

3.2.2 Program Information

This sub-section asks for basic information about the program for which the cost exercise is being done. The purpose of this section is to gather important information about the program context and summary-level cost information. Further details about each set of questions is below.

Program name and description: Please provide name of the program, and a short (no more than 2-3 paragraph) description of the program in narrative form. The program name entered here will be used to identify the program as you enter data, so be sure to be specific. If you enter data for multiple programs or scenarios, that information will be included under these different program names.

Delivery location(s): Please list the program county/ies in which the program is implemented, the areas or regions within those countries (high-level is sufficient), and the characteristics of those regions (rural/urban/peri-urban).

Dates: The questions here about dates are critical, as they set the options for later cost entry forms. Please note that this is limited to a period of 5 years.

- *Costing start/end date or estimated start/end date*
  - This is the start and end date for your period of cost entry (note: this is for not for the costing process itself, but for when the costs occurred)
  - In most cases, for fixed-period programs, this will be the program start and end date, or planned program start and end date (if forthcoming)
  - However, if your program is ongoing for many years, and you are only costing a portion of those years (up to 5), please list the dates you would like to be the start and end of the costing exercise
- *First and last implementation year*:
  - These drop-down options will auto-populate based on the dates entered in the above two questions, and will be the calendar year, as well as the preceding and following calendar years.

- These questions determine exchange and inflation rates that will be used in final program cost calculations. While these may correspond to the above listed calendar years, due to the timing of different fiscal years, this may not always be the case, so this can be customized to the calendar year you wish to use for these calculations.

Stakeholders, evaluation, and other information: These questions are intended to complete the picture of the program structure, and any other key information.

3.2.3 Intervention and Beneficiaries

This sub-section is intended to collect information about specific interventions within the program, and the children which are served by these interventions. It consists of one large set of questions, which can be repeated as many times as necessary for as many interventions as are included within the program. Further information about each set of questions is below.

Intervention sector and type: This question is very important, as it will be the tag which comes up for your later expense entry. Please select the available option which best describes the intervention/component within your program under which specific costs will fall. These can be across a variety of different sectors, or may include multiple from the same sector, depending on the program design. Only one can be selected, as you can "add another" for any other program intervention components.

Number, ages, and demographics of beneficiaries: The cost calculator is most important in determining the cost per child of the intervention, and as such "beneficiaries" is defined as children. Even if the intervention is primarily teacher, caregiver, government, or provider-facing, please still answer these questions about the children which ultimately benefit from the intervention.
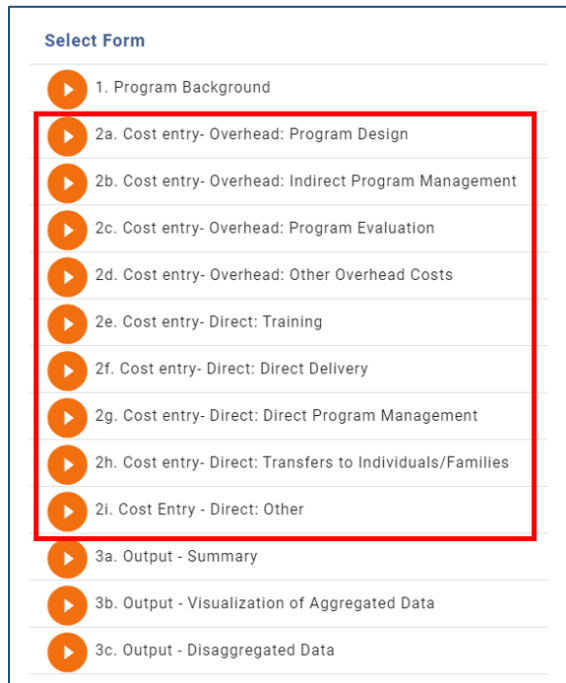
Intervention location, duration, and dosage: The intervention duration and dosage are questions which help to get a sense of the quality of the intervention, or how long it lasted- in particular how much each individual was likely to benefit from it.

- *Duration*: this is the total time of the intervention from first to last activity. For example, if children are enrolled in a summer childcare program which runs from June to August, the duration would be 3 months.
- *Dosage*: this is the volume of the intervention provided to each beneficiary, such as the amount of medication or food, or the duration of each interaction with the beneficiary. For example, if the children were in childcare services for 6 hours each day, the dosage would be 6 hours.

4. Entering your Costs

This section includes details for completing all of the cost entry forms (forms 2a-2i). There is a separate cost entry form for each cost category.

For detailed descriptions of each cost category, please see section 2.

4.1 Introductory Questions

Select Program

Each of these forms includes a repeating set of questions, which begins with **selecting the program** which you would like to enter cost data for.

If you have only created one program background form, you will only have one option to choose from in the drop-down menu. If you have created more than one program background form, please select the appropriate program.

Resource Type selection

Next, you will be asked to select the **resource types** which are present in the program, **for the specific cost category** of the form you are entering. This will determine which resource type cost entry sheets you have access to, so please consider your response carefully.

For detailed descriptions of each resource type, please see section 2.

Resource Types

* Which resource types are present in your program for 2b. Cost entry- Overhead: Indirect Program Management?

☐ Labor/ Personnel

☐ Land, Buildings, Infrastructure(built/purchased/maintained)

☐ Materials/Supplies/Equipment

☐ Travel, Accommodation, and Transportation

☐ Facilities (rental, service fees, etc.)

☐ Other

← Back   Next →

4.2 Cost entry

4.2.1 Overview

By clicking next, you will be redirected to the form for the first resource type you selected for this cost category. On this page, **enter each resource** which falls under this resource type and cost category.

> *Hint: if you aren't sure which cost category and resource type you should be entering, scroll to the top of the page, where it is listed.*

2b. Cost entry- Overhead: Indirect Program Management (Labor/ Personnel)

ⓧ

* Name of person/position?

Enter your response to above question here

This form includes a set of repeating questions, and at the bottom of the page, after answering the questions about each resource, there is an **"add another" button** to enter the next resource for this resource type and category.

4.2.2 Cost Entry Repeating Question Guidance

"Name/describe the [resource] that was or will be used"

> Please include the specific name (if possible) of the resource which was or will be used, and if a specific name is not possible, please describe the resource.

> *Examples (For additional details on each resource type, please see section 2):*

>> *Labor/Personnel: Teachers, Trainer, Nurse, Home Visitor, Program Manager, Accountant, etc.*

>> *Land/buildings/infrastructure: School building or clinic construction, Building maintenance*

>> *Materials/supplies/equipment: Office supplies, Airtime, Office generator purchase, Vehicle purchase*

>> *Travel, accommodation, and transportation: Flight, Hotel, Per Diem, Taxis, Vehicle Fuel*

>> *Facilities (rental, service fees, etc.): Office rent, Presentation/event hall rental fees*

"Please select which intervention this resource falls under"

> The drop-down response options are pre-populated based on your completion of the program background form. If this cost applies to a specific intervention of the program, please select it here. If it is a cost shared across all interventions of the program (such as proposal or management), please select "Not Applicable"

"Was this resource donated or contributed for no charge to the program?"

> If the primary program implementing organization did not purchase this item, please select "donated". Please note that even for donated resources, you will be asked to *estimate* the cost of the item.

"Original Per Unit Price"

> The price paid for the item the first year that it was purchased. The tool will take into consideration inflation for any subsequent item purchases in later years of the program.

"Currency"

Please select currency from the drop-down menu. Please note you *can* select multiple currencies for different resources of the same type and/or category, however, please note that the summary data is only able to add figures as entered and has not yet been converted into a single currency.

"Unit"

Costs may be entered in any of the following units: per day, per month, per year, per item, lump sum/total.

Please see section 4.4 for scenario considerations on various unit entry options, and the implications this may have.

Annual occurrences

Please enter the number of times the cost occurs (number of units selected in previous question) for each year of the program. The calendar years are auto populated based on your answer to the question on the first and last years of program implementation from the Program Background form.

Please note that if there are multiples of a resource (such as a group of teachers/ accountants/ trainers or vehicles rented, etc.), you will be asked the number of total occurrences.

* How many times does the cost occur in Year 1 (2016)

Enter your response to above question here

* How many times does the cost occur in Year 2 (2017)

Enter your response to above question here

* How many times does the cost occur in Year 3 (2018)

Enter your response to above question here

Investment/recurrent

Investment costs are costs which could be considered one-time expenses, or expenses which should be spread over multiple years of the program, or beyond. Recurrent costs are costs which occur at a frequent interval and should not be considered to spread across multiple years, but instead just the years in which they occur. For more detailed definitions of Investment and Recurrent costs, please see section 2.

Because of these definitions, selecting "investment cost" will ask for the approximate lifetime of the resource, in years. For the lifetime use of common program capital resources, please see the appendix of this guide. Other expenses, such as trainings, evaluation, or startup costs, should simply be spread over the lifetime of the program.

* Is this resource an investment or it is recurrent?
  ⦿ Investment
  ○ Recurrent

* Provide lifetime approximate usage for the resource, in years
  Lifetime of resource

  Enter your response to above question here

4.3 Summaries

At the bottom of the page are summaries, which are intended to help guide you through the process, including demonstrating the resources entered and the sub-total costs. Additionally, this box tells you what form will come next, based on the resource types you selected at the beginning of this cost category.

For important information on when information entered is saved, and how to return to/edit it later, please see section 5.

⚠ Are there any other resources you'd like to add before moving to the next section. If yes, please click 'Add Another'. Clicking next will move to the next cost category/resource type?

✎ You are currently editing 2b. Cost entry- Overhead: Indirect Program Management (Labor/ Personnel)

So far you have entered the below resources.

✓ Total for :
The total for all years is 0

☐ Next, you will be entering resources for 2b. Cost entry- Overhead: Indirect Program Management (Land, Buildings, Infrastructure)

4.4 Cost entry: Scenario Considerations

Scenario Consideration: Multiple resources in a group

Please note that if there are multiples of a resource (such as a group of teachers/accountants/trainers or vehicles rented, etc.), you will be asked the number of total occurrences.

Example: If you have 5 regional offices and are entering all together, you may enter a monthly rental price (unit = per month). You should be prepared in the following set of questions to state "60" for the number of annual occurrences (5 offices x 12 months).

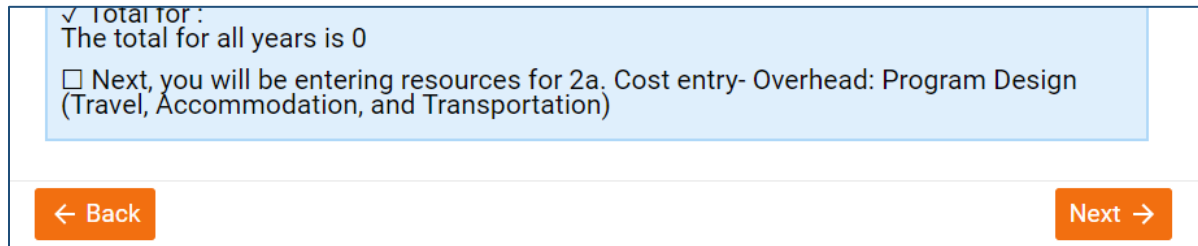**Scenario Consideration: Lump sum entry**

Please note that if you choose to enter something as a lump sum which could be entered individually, it will not be possible to manipulate this resource for various scenarios.

Example: If you list all "management labor" as one lump sum, you will not be able to alter the calculations to consider the impact of: adding or removing staff labor, adjusting the qualifications (and salary) of an individual, or consider scaling possibilities.

5. Saving, syncing, and editing your Data

5.1 What is auto saved, and how does it work?

Tangerine has auto-save functionalities which store information within your browser history when you click "back" or "next" on any form.

√ Total for :
The total for all years is 0
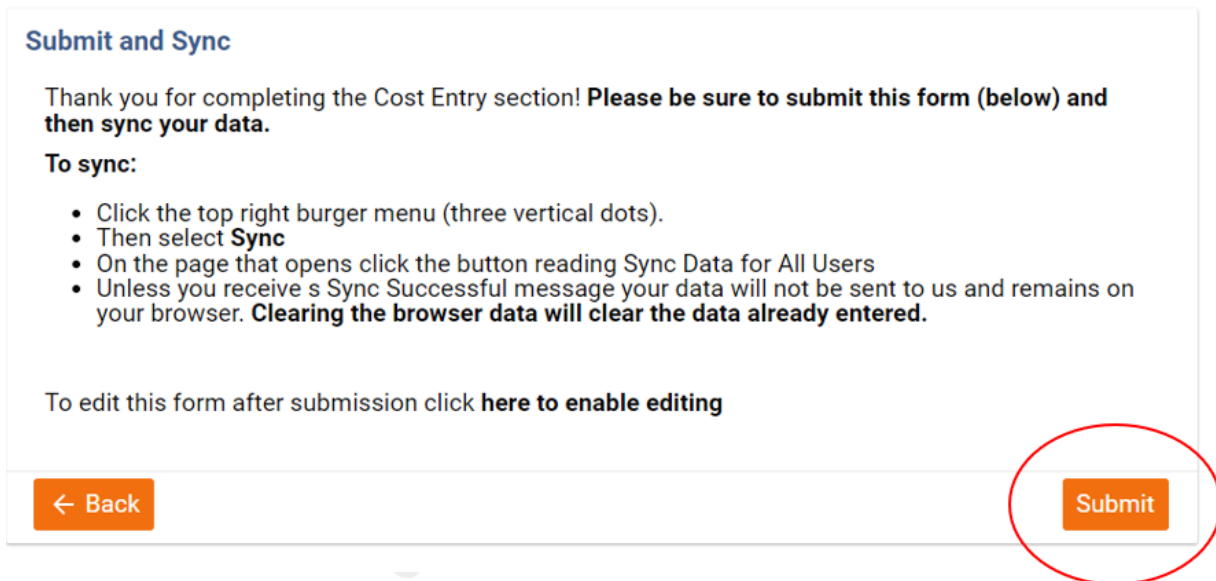
☐ Next, you will be entering resources for 2a. Cost entry- Overhead: Program Design (Travel, Accommodation, and Transportation)

← Back   Next →

Important to note is that this saved information is not automatically synced with the Tangerine servers and is saved **only locally on your browser**. Therefore, if the browser history is cleared, this information will be lost! In order to prevent this loss, it is recommended that you **sync** your data periodically, in particular when a form is complete.

5.2 How to Sync data

When a form is complete, you will be prompted with a "Submit and sync" prompt as shown below:

Submit and Sync

Thank you for completing the Cost Entry section! **Please be sure to submit this form (below) and then sync your data.**

To sync:

- Click the top right burger menu (three vertical dots).
- Then select **Sync**
- On the page that opens click the button reading Sync Data for All Users
- Unless you receive s Sync Successful message your data will not be sent to us and remains on your browser. **Clearing the browser data will clear the data already entered.**
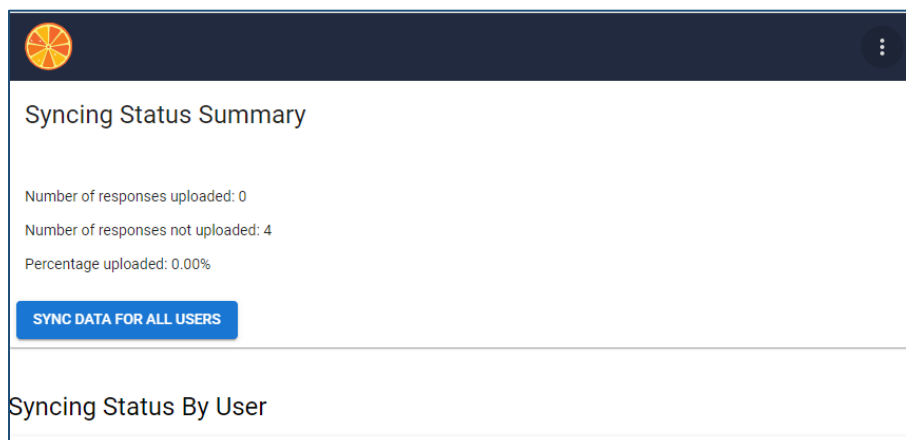
To edit this form after submission click **here to enable editing**
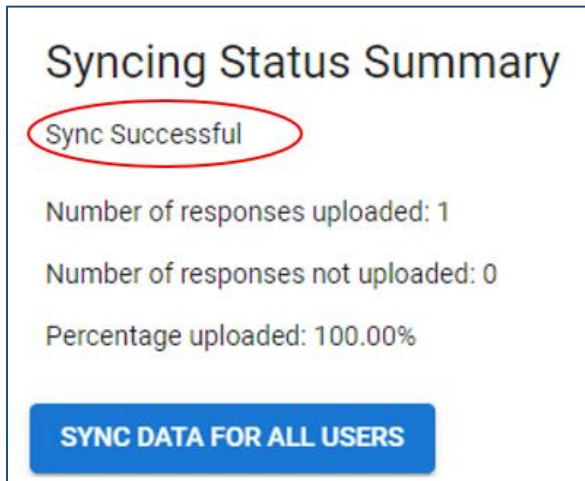
← Back   Submit

After clicking submit in the above prompt, click the three vertical dots in the top right of the menu bar, and select "Sync" from the drop-down menu.
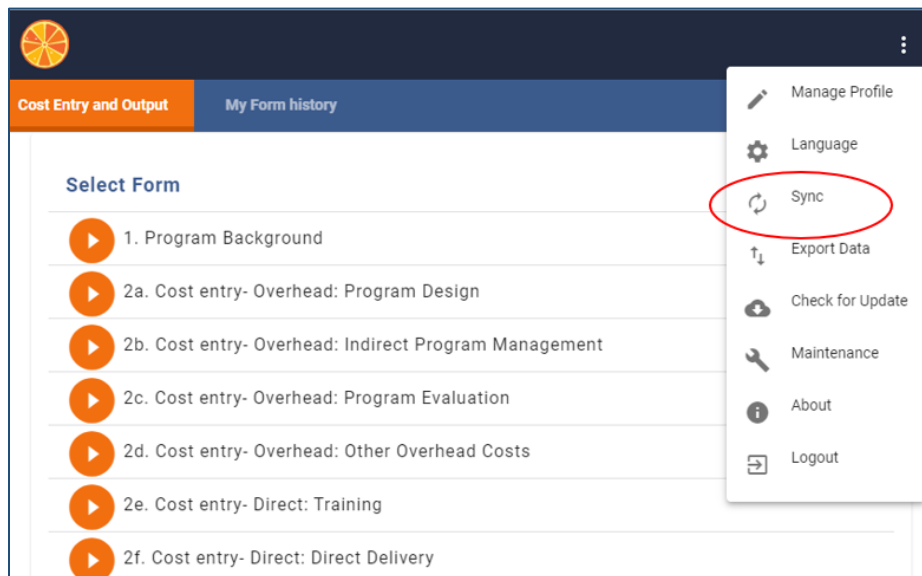
On the page that opens, click "Sync Data for All Users"

Unless you receive a "Sync Successful" message (below) your data will **not** be sent to us and remains on your browser. Clearing the browser data will clear the data already entered.
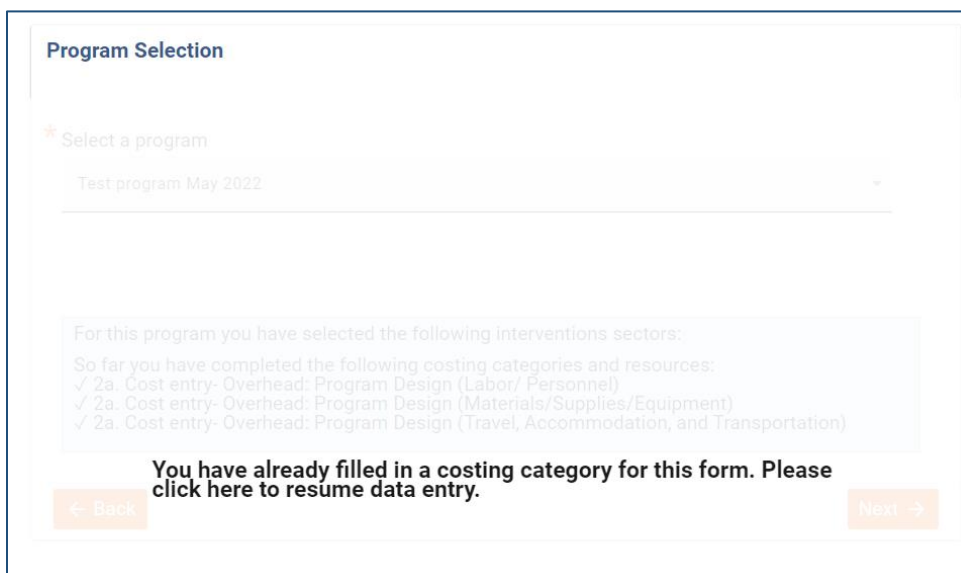
Syncing Status Summary

Sync Successful

Number of responses uploaded: 1

Number of responses not uploaded: 0

Percentage uploaded: 100.00%

SYNC DATA FOR ALL USERS

5.3 How to edit a previously submitted and synced form?

If you need to edit a previous form, for example because a resource must be added, removed, or adjusted, this can certainly be done! Please note that the process for editing the information in one of the cost entry forms is slightly different than for the program background form.

5.3.1 Editing cost entry forms

In order to ensure that you are not revising a form in error, opening a previously submitted form will result in the following message once you select the program:
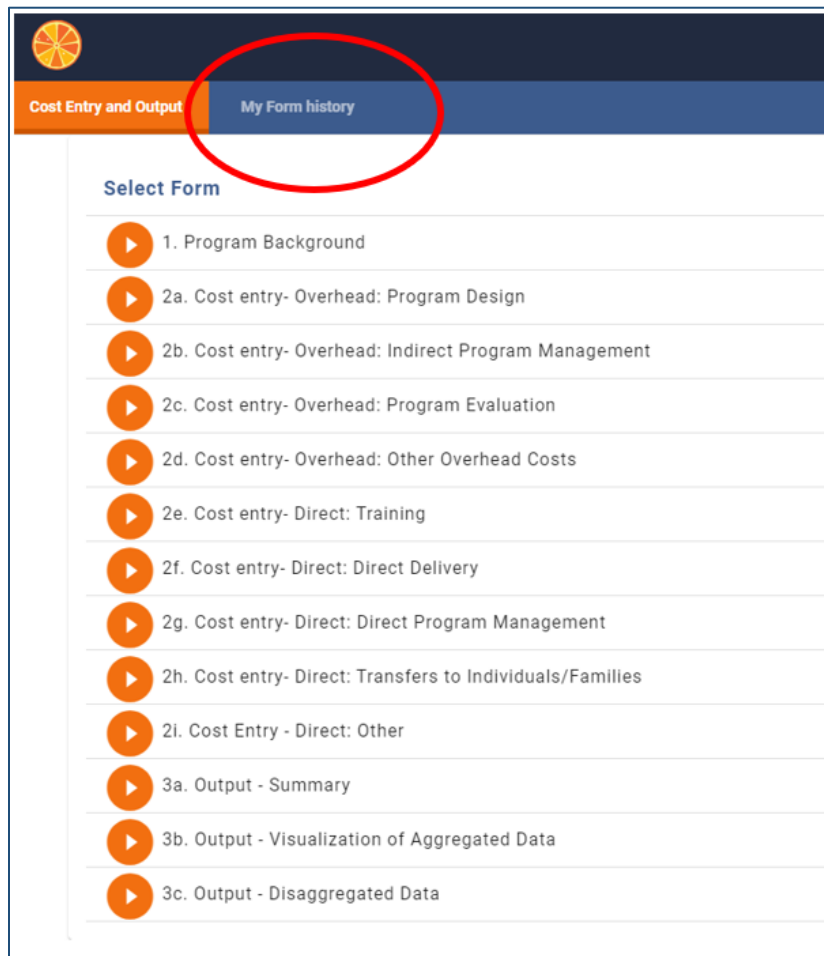
Program Selection

*Select a program

Test program May 2022

For this program you have selected the following interventions sectors:

So far you have completed the following costing categories and resources:
✓ 2a. Cost entry- Overhead: Program Design (Labor/ Personnel)
✓ 2a. Cost entry- Overhead: Program Design (Materials/Supplies/Equipment)
✓ 2a. Cost entry- Overhead: Program Design (Travel, Accommodation, and Transportation)

You have already filled in a costing category for this form. Please click here to resume data entry.

← Back   Next →

To proceed, follow the prompt and "click here to resume data entry". You may then edit and enter new data freely, including selecting new resource types if any were omitted, altering the units, etc.

However, don't forget to resubmit and sync (section 5.1) your data once done!

5.2.2 Editing Program Background form

In order to access or edit the program background form, click "My Form History" at the top of the page:

Then click "current program"

Then "Program Background"

You can then open and review or edit the content of the submitted form. Don't forget to submit and sync your data after editing, as described in the previous section!

Please note, editing the responses to certain fields in the Program Background may cause issues if you have already proceeded with the cost entry, due to the dynamic nature of the costing tool. This could impact:

- Years of implementation/ units per year
- Intervention to which that cost applies

6. Output: Exploring and exporting your Data

The cost calculator has three different output forms (3a-3c): Summary, Visualization of Aggregated Data, and Disaggregated Data.

Summary presents the total program costs and total cost per child and can be further filtered by fields such as year and intervention. This information can be presented in either USD or another currency.

Visualization presents data as a series of pie charts, which allow for exploration of cost breakdowns/distribution across a series of filters (year, cost category, resource type, intervention, investment/recurrent, etc.). This section is dynamic, in that your selections of specific filters build on one another, and you can constantly change your selections as you explore your data.
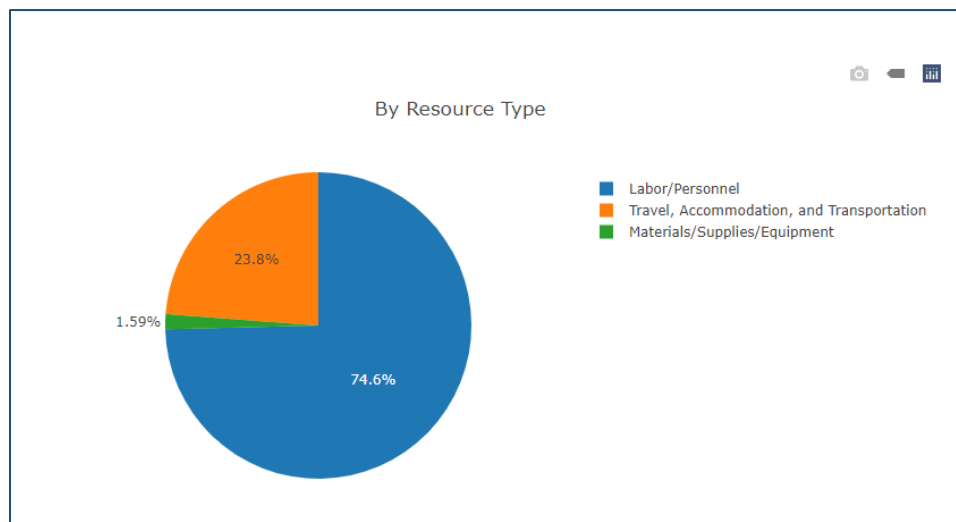
All graphs are downloadable from Tangerine as image files, so they may be used in reporting, visualizations, etc. by clicking the camera icon above the graph.

Disaggregated data is all of the individual cost entries from the cost entry forms, displayed in table form. This can be filtered by specific categories including (examples). This information is presented in both USD or local currency, and in nominal (as entered) or real (adjusted for inflation) terms and can include amortization of investment costs or not.

☁Export

Intervention Sector	Intervention Type	Cost Classification	Costing Category	Resource Type	Ingredient	Inv/Rec	Per Unit Price	Times year 1	Times year 2	Times year 3	Times year 4	Times year 5
Education	Early Childhood and Pre-Primary Programs	Direct	Program Design	Labor/Personnel	test	Recurrent	100.00	10.00	12.00	12.00	12.00	1.00
Not Applicable	Not Applicable	Direct	Program Design	Materials/Supplies/Equipment	test	Investment	100.00	1.00	0.00	0.00	0.00	0.00
Education	Early Childhood and Pre-Primary Programs	Direct	Program Design	Travel, Accommodation, and Transportation	test	Recurrent	500.00	0.00	1.00	1.00	1.00	0.00

This can be exported as a .csv file (which can be opened with Microsoft Excel), by clicking the "export" button with the orange cloud.

☁Export

Intervention Sector	Intervention Type	Cost Classification	Costing Category

7. Checking for and Applying Updates to the Application

Both the Tangerine platform and the C3 undergo occasional updating. If you are accessing the C3 through the Childhood Cost website, it should automatically update as needed. However, if you are accessing the C3 outside of the Childhood Cost website, it is possible that you may need to check for updates manually.
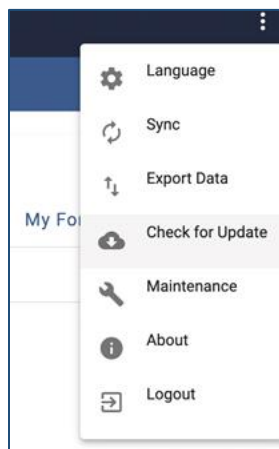
To check for an update, or if you are unsure if you need to update your application, open the drop-down menu and choose 'Check for Update'. It is best practice to sync your data before beginning the update process.
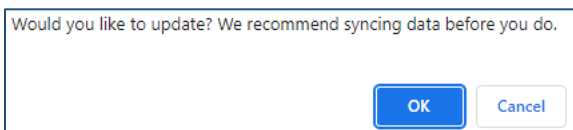
A pop-up will ask you to confirm that you want to update and remind you to sync your data. Click 'ok' to check for and apply any necessary updates.
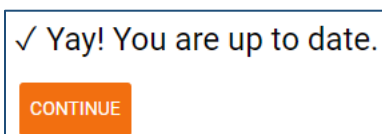
Once the update is complete you will see a screen informing you that you are up to date.

Log back into the app as usual and use as normal.

Appendix

Proposed amortization periods (years)					
Education/ECD-specific		Capital Assets			
		Source: South African Revenue Service, INTERPRETATION NOTE: NO. 47 (Issue 3) (2 November 2012)			
Asset/Item	Proposed period	Asset/Item	Proposed period	Asset/Item (cont.)	Proposed period
Program development and design costs		*Air conditioners:*		Mobile caravans	5
Conceptualization and design	5	Window type	6	Mobile cranes	4
Developing training manuals	3	Mobile	5	Mobile refrigeration units	4
Developing training materials	3	Room unit	10	Motors	4
Piloting costs	5	*Chillers:*		Motorcycles	4
Evaluation / research costs	5	Absorption type	25	Musical instruments	5
Production and printing of materials		Centrifugal	20	Neon signs and advertising boards	10
Train the trainer manuals	3	Battery chargers	5	Office equipment – electronic	3
Training materials for beneficiaries	1	Bicycles	4	Office equipment – mechanical	5
All materials given to beneficiaries	1	Carports	5	Ovens and heating devices	6
Training costs		Cash registers	5	Ovens for heating food	6
Initial training of trainers	3	Cell phone antennae	6	Packaging and related equipment	4
Refresher training of trainers	1	Cell phone masts	10	Pallets	4
Training of beneficiaries	1	Cellular telephones	2	Passenger cars	5
Mentoring costs		Cold drink dispensers	6	Photocopying equipment	5
Salaries of mentors	3	Communication systems	5	Photographic equipment	6
Operating costs of mentoring program	3	Compressors	4	Portable safes	25
Buildings and other fixed structures		*Computers:*		Power tools (hand-operated)	5
Brick and mortar buildings	40	Main frame / servers	5	Power supply	5
Wooden / prefab buildings	25	Personal	3	Public address systems	5
		Computer software (main frames):		Pumps	4
		Purchased	3	Radio communication equipment	5

		Self-developed	1	Refrigeration equipment	6
		Computer software (personal computers)	2	Refrigerators	6
		Curtains	5	Scales	5
		Demountable partitions	6	Security systems (removable)	5
		Dental and doctors equipment	5	Seed separators	6
		Dictaphones	3	Sewing machines	6
		Drills	6	Shop fittings	6
		Electric saws	6	Solar energy units	5
		Electrostatic copiers	6	Staff training equipment	5
		Fire extinguishers (loose units)	5	Surge bins	4
		Fire detection systems	3	Tape-recorders	5
		Fitted carpets	6	Telephone equipment	5
		Food bins	4	Television and advertising films	4
		Food-conveying systems	4	Television sets, video machines and decoders	6
		Furniture and fittings	6	Textbooks	3
		Gas heaters and cookers	6	Trolleys	3
		Generators (portable)	5	Trucks (heavy duty)	3
		Generators (standby)	15	Trucks (other)	4
		Guillotines	6	Vending machines	6
		Heating equipment	6	Warehouse racking	10
		Hot water systems	5	Washing machines	5
		Ironing and pressing equipment	6	Water distillation and purification plant	12
		Kitchen equipment	6	Water tankers	4
		Laboratory research equipment	5	Water tanks	6
		Milling machines	6	Workshop equipment	5