

YIC OPEN YOUTH HOUSE

The document provides the cost-benefit analysis of the YIC Open Youth House – a center established in 2018 in the framework of “Open Youth Work: Empowering Young People in Gyumri” project co-implemented by the YIC and CRRC-Armenia

*Cost-Benefit
Analysis*

YEREVAN, 2018

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1. Cost-Benefit Analysis for Youth Programs

Benefit-cost analysis (BCA) and related economic evaluation methods (cost analysis and cost-effectiveness analysis) have increasingly been applied to prevention and intervention programs for youth and young adults to assess their costs as well as the gains that may be anticipated from investing in these programs (Kuklinski, 2015).

Table 1 adapts a table summarizing the cost elements of youth programs from the most-comprehensive review of the literature on youth program costs (Beckett, 2008).

Table 1: Various Elements of Youth Programs

Cost Elements	Description	What's know About Cost Element
Start-up costs	Initial costs associated with planning and readying a program for operations	Little
Operating costs	Costs associated with running a program on an ongoing basis: - Staff compensation, benefits - Facilities-related costs (rent, utilities, maintenance) - Other costs (food, supplies, insurance, transportation)	The largest cost Generally, the second-largest cost Vary by program, but may range up to 20% of total costs
Capital costs	Costs related to building, expansion, renovation, and improvement of facility	Little
Infrastructure or capacity building costs	Costs for system planning and evaluation; developing and operating system for training and licensing providers; coordinating resources, such as transportation services and referral information; providing technical assistance to programs to sustain or upgrade operations; providing financing or other support for capital improvements	Little

SOURCE: Adapted from Lind, C. et al. (2006). The Costs of Out-of-School-Time Programs: A Review of the Available Evidence. Washington, DC: The Finance Project.

2. Why Cost-Benefit and Not Cost-Effectiveness Analysis?

A cost-benefit analysis helps understand if a new project or campaign makes financial sense in the long run for the company. In contrast, cost-effectiveness analysis compares two outcomes based on relative costs to see which of the two provides the best opportunities for success (Leonard, 2018). First, YIC and CRRC-Armenia aimed at conducting a cost-effectiveness analysis. For this, other similar (in respect to operations and functions) youth centers should be investigated and associated costs of running such centers had to be investigated. To identify the centers YIC and CRRC-Armenia approached several experts in social policy and youth programs in Armenia. Two non-formal interviews were conducted with knowledgeable persons, and their advice was that we should not look for a similar center and there in none.

“YIC open youth work center is unique and follows the logic of operations [open youth work] which has never been a case in Armenia. There are youth centers, but these are very different in their operations and logic of functionality – mostly addressed to youth with disabilities, orphans etc.”

Personal communication with expert, 20.09.2018

“After the change in government, change in approaches towards social work and youth work is expected I would not advise you to approach existing services and strongly advise you to realize cost-benefit analysis of your own initiative. Given the current situation in social policy sphere at the moment, I even doubt that youth centers will open their documentation”

Personal communication with expert, 15.09.2018

Cost-benefit analysis is one of several ways to evaluate program costs. It involves monetizing all benefits and costs and then comparing the cost-benefit ratio of alternatives (Karoly et al., 2001). Benefits that cannot be monetized (such as change in self-esteem) cannot be compared and are, thus, excluded from the calculation. Done well, cost-benefit analysis provides useful information for choosing among programs (Beckett, 2008). Given that YIC open youth work center is new and that the YIC and CRRC-Armenia team could place a value on all components of the results, a decision was made to realize a cost-benefit analysis. Cost-effective analysis provides some insights into potential success when there is hardship or inability to monetize project results.

3. Steps for the Cost-Benefit Analysis in Case of Gyumri Open Youth Work Center

Scheme 1 below identifies basic steps from cost-benefit analysis (Holquist, 2013).

The cost-benefit analysis utilized ingredients method which assumed exhaustively identifying all ingredients, assigning values to ingredients and adjusting costs.

The cost-benefit analysis focused on operating costs only.

The steps 1 to 4 were realized on ongoing bases throughout the implementation of the project.



Table 2: Cost Benefit Analysis

Category (ingredients)	Item / unit	Quantity	Price in EUR	Type of costs* (direct, indirect, tangible, intangible, real)	Total
Human resource Compensation	Project Manager /month	12	521.5	Indirect	6258
	Accountants /month	12	299.8	Indirect	3598
	Project/research coordinator /month	12	291.6	Indirect	3499
	Centre Coordinator /month	10	386.5	Direct	3865
	Youth workers /month	24	204.1	Direct	4898
	Project Assistant /month	2	301	Indirect	602
Facilities-related costs	Youth centre renovation	1	10242	One time, sank cost	10242
	Set up of youth centre security systems	1	2382	One time, sank cost	2382
	Furniture for the youth centre	1	5202	One time, sank cost	5202
	Digital equipment for the youth centre	1	4524	One time, sank cost	4524
	Technical equipment for the youth centre	1	588	One time, sank cost	588
	Maintenance (utilities, communication) of the youth centre	5	79.4	Direct	397
	Contribution to office costs of project partners	12	117.5	Indirect	1410
Activity-related costs	Development equipment and supplies for the youth centre	1	773	One time, sank cost	773
	Consumable materials and supplies for the youth centre	1	1030	Direct	1030
Other costs	Local travel	12	40.6	Direct	487
	Administrative overhead (4%)	1	1990.2	Indirect	1990.2
TOTAL COSTS:					51745.2

BENEFITS					
Human resource Compensation	Centre receptionist /month	5	150	Direct	750
	Project Assistant /person-month	10	300	Indirect	3,000
	Workshop leaders / hour	180	6	Direct	1,080
	Project consulting / month	12	300	Indirect	3,600
	PR / month	5	150	Indirect	750
Facilities-related costs	Centre area rent / month	12	200	Direct	2,400
	Digital equipment for the youth centre	1	700	One time, sank cost	700
	Office supplies and equipment	12	100	Indirect	1,200
	Centre cleaning / month	6	60	Direct	360
Activity-related costs	Development equipment and supplies for the youth centre	13	8	One time, sank cost	104
	Bicycles and accessories	14	230	One time, sank cost	3,220
	Books	550	2	One time, sank cost	1,100
Other costs	Local travel / month	12	10	Indirect	120
	Staff training abroad / day	10	60	Indirect	600
TOTAL BENEFIT:					18,984
Total cost – benefit – discounts (2-7%)					

*= (i) Direct costs are often associated with production of a cost object (product, service, customer, project, or activity); (ii) indirect costs are usually fixed in nature, and may come from overhead of a department or cost center – here the salary of project assistant is regarded as such as the assistant did not work at the youth house, mainly assisted the project accountant and manager with admin tasks; (iii) tangible costs are easy to measure and quantify, and are usually related to an identifiable source or asset, like payroll, rent, and purchasing tools; (iv) Intangible costs are difficult to identify and measure, like shifts in customer satisfaction, and productivity levels; (v) real costs are expenses associated with producing an offering, such as labor costs and raw materials.

**= discount rates are associated with (i) social discount rates – used to determine the value to funds spent on government projects (education, transportation, etc.), (ii) hurdle rates – the minimum return on investment required by investors or stakeholders (iii) annual effective discount rates – based on a percentage of the end-of-year balance, the amount of interest paid or earned.

4. Sensitivity Analysis

Performing a sensitivity analysis (also known as a “what-if”) aims at predicting outcomes and check accuracy in the face of a collection of key variables, e.g. cost per a youngster per day/month/year. Sensitivity analysis is carried out to test the robustness of the CBA result to changes in some of the key numbers.

Table 3: Sensitivity Analysis of Key Variables (Year 1)

Sensitivity Analysis of Key Variables					
Key Variables	Unit	Type	5 months	Per month	Cost per Child per year
Centre Coordinator /month	Euro		1932.5	386.5	0.6
Youth workers /month	Euro		3061.5	306.15	1.0
Youth centre renovation	Euro	Lamp sum	10242		3.4
Set up of youth centre security systems	Euro	Lamp sum	2382		0.8
Furniture for the youth centre	Euro	Lamp sum	5202		1.7
Digital equipment for the youth centre	Euro	Lamp sum	4524		1.5
Technical equipment for the youth centre	Euro	Lamp sum	588		0.2
Maintenance (utilities, communication) of the youth centre	Euro		397	79.4	0.1
Development equipment and supplies for the youth centre	Euro	Lamp sum	877	175.4	0.3
Consumable materials and supplies for the youth centre	Euro		1030	206	0.3
Local travel	Euro		203	40.6	0.1
Centre receptionist /month	Euro		750	150	0.3
Workshop leaders / hour	Euro		1080	216	0.4

Centre area rent / month	Euro		2400	480	0.8	
Digital equipment for the youth centre	Euro	Lamp sum	700		0.2	
Centre cleaning / month	Euro		300	60	0.1	
Bicycles and accessories	Euro	Lamp sum	3220		1.1	
Books	Euro	Lamp sum	1100		0.4	
TOTAL	Euro		39,989		13.3	With benefits
TOTAL operational costs	Euro		11,154		3.7	
Total cost per child for service provision time during establishment year (5 month service provision time):					66.65	
Total operational cost per child for service provision time during establishment year (5 month service provision time):					18.59	
First year operation of the centre					32189	Without benefits

Table 4: Sensitivity Analysis of Key Variables (Year 2 and next years)

Sensitivity Analysis of Key Variables		
Key Variables	5 month	Cost per child per month
Centre Coordinator /month	1932.5	0.6
Youth workers /month	3061.5	1.0
Maintenance (utilities, communication) of the youth centre	397	0.1
Consumable materials and supplies for the youth centre	1030	0.3
Local travel	203	0.1
Centre receptionist /month	750	0.3
Workshop leaders / hour	1080	0.4 benefits
Centre area rent / month	2400	0.8 benefits
Centre cleaning / month	300	0.1

Depreciation cost (10%)	1115.4	0.4	
	Total cost per month/child:	3.7	
	Total cost per year (2nd and next years):	44.62	
	Year operation of the centre	26769.6	Without benefits
	Year operation of the centre	18417.6	With benefits

Note: The operation of the center “without benefits” cost is calculated without including the two lines where there is an in-kind contribution (workshop volunteers and centre space rent).

5. Conclusions

- Human resource compensation was represented by staff costs (per month) for project manager, accountants, project/research coordinator, centre coordinator, youth workers, project assistant, facilities-related costs. The total cost for human resource compensation was 9180 EUR.
- Further, facilities related costs were calculated being: youth centre renovation costs, youth centre security systems set up costs, furniture for the youth centre costs, digital equipment for the youth centre, costs for technical equipment for the youth centre, costs of maintenance (utilities, communication) of the youth centre, contribution to office costs of project partners. Total cost for facilities related costs was 4660 EUR.
- Activity-related costs comprised of costs for development equipment and supplies for the youth centre, as well as consumable materials and supplies for the youth centre. Total cost for activity-related costs was 1803 EUR.
- Other costs comprised of local travel costs and administrative overhead equaling to 2477 EUR.
- Total costs for the centre operation was then estimated to be 51745 EUR.
- The project had 9180 EUR benefit from human resource compensation related costs. The centre receptionist, a project assistant, workshop leaders, project consultants had had contributions to the project implementation and some project PR activities were as well due to in kind input of human resources.
- An in kind input of 4660 EUR was made for facility-related costs which is again an important benefit for the project.
- Important contributions of 4424 EUR was made to center's activity-related costs through development equipment and supplies for the youth centre, purchase of bicycles and accessories, as well as books.
- In total, the project had had benefits of 18,984 EUR which is an impressive figure that could be achieved due to YIC overall social and cultural capital. This amount would surely differ from one implementing organization to another.
- For YIC, the total cost for operation of the center (accounting for the key variables which are absolutely crucial for the operation of the center) for the year of its establishment (Year 1) without benefits would be 39989 EUR. If considering the benefits from in-kind and other contributions, then this total costs would be reduced to 32189 EUR for this year. The cost per child for the 5 month service provision was then estimated to be 66.65 and for operational costs it was 18.59 for again 5 months of the project implementation.
- For YIC, the total cost for operation of the center for the second and next years of its operation, the yearly operation cost of the center was calculated to be 26770 EUR (without benefits) and 18418 EUR (with benefits). The cost per child per year for the second and upcoming years for service provision was then estimated to be 44.62 EUR.
- Note, that all of the calculations produced in this analysis are unique for YIC given the implementation of the 5 month project "Open Youth Work: Empowering Young People in Gyumri", as well as its non-monetary and monetary capital.

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