

Developing NGO Capacity: Operations Research to Improve Financial Sustainability

Family Health International

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Contents

- I. Background 1
- II. Objectives 1
- III. Methods..... 2
- IV. Results..... 3
 - 1. Workshop Participation 3
 - 2. Completed Projects 3
 - Latin America Region 4
 - Africa Region 6
 - Asia Region..... 8
- V. Conclusion 10
 - Appendix 1: Information Gathered by NGO Prior to Workshop 11
 - Appendix 2: Illustrative Agenda for Training Workshops 12

I. Background

In many developing countries, donors have funded non-governmental organizations (NGOs) that provide family planning and reproductive health (FP/RH) services. In the past, donors typically funded up to 100 percent of the operating costs of these NGOs. However, as donor funding declines for FP/RH services in general, and for NGOs in particular, NGO survival increasingly depends on their capacity to define and pursue new financial strategies. Basic skills in costing and marketing are needed to evaluate cost recovery and assess income generation activities. Yet few NGOs possess the skills and experience required to explore options for improving financial sustainability in a systematic manner.

This observed lack of skills and experience led FRONTIERS to develop and implement an interregional capacity-building project to train NGO staff in techniques for conducting operations research (OR) that would enable them to develop sustainable mechanisms for delivering FP/RH services. A common criticism of many training projects, however, is that no mechanism is developed to ensure that the skills built are used and retained within the organization. Consequently, this project used a training approach that included didactic instruction, but then immediately supported those trained to apply these new skills through undertaking an OR project that the participants had designed themselves, and that addressed a current organizational problem related to the financial sustainability of the NGO. There was also an expectation that one or two NGOs in each region would distinguish themselves as potential long-term collaborators with FRONTIERS or other organizations supporting service delivery strengthening. Successful long-term relationships could position an NGO as a center of excellence in financial sustainability in the country/region, and would provide FRONTIERS with a partner for supporting a broader program of sustainability-related OR within the country or region.

II. Objectives

1. To train staff from participating NGOs in basic economic research tools for financial sustainability so that they can independently undertake assessments, strategic planning, and interventions.
2. To assist participating NGOs in the development and implementation of operations research (OR) projects on the topic of improving financial sustainability.
3. To establish long-term relationships with selected NGOs to conduct sustainability research and capacity building activities.

III. Methods

FRONTIERS staff in each of the three regions (Latin America and the Caribbean, Africa and Asia) were asked to nominate NGOs that they felt would benefit from developing skills on sustainability-related OR through attending a training workshop. FRONTIERS strategy emphasized learning about the existing financial skills and information needs of participants before the event to ensure that each received appropriate technical assistance while developing proposals at the workshop. Candidate NGOs received a questionnaire that asked them to describe their programs and capabilities of their information systems. Specific information was requested on the number of clients served, the products or services provided, the cost of the program activities, the revenues earned from program activities and a description of plans or activities, if any, that the organization had undertaken to address future financial sustainability (see Appendix 1).

Based on the questionnaire responses, 3–5 NGOs in each region were selected and invited to attend a one-week training and proposal development workshop. The first of these workshops took place in Bolivia in May 2003, followed by another in Ghana in March 2004, and a third in India in November 2004. Participating NGOs were asked to send 2-3 individuals from their organization to ensure representation of persons familiar with the financial, operational, and data/monitoring aspects of the program.

The agenda for all workshops included two main components (see Appendix 2 for an example of the workshop agenda). First, the FRONTIERS training team provided approximately 2.5 days of classroom instruction, including presentations and exercises covering topics such as cost analysis, market segmentation, ability and willingness to pay, analysis of service statistics, break-even analysis and systematic screening. The remainder of the week was spent in small-group work with each NGO team, identifying a specific sustainability problem and then producing an outline of an OR proposal to address the problem. Subject to review and approval, FRONTIERS then provided funding (~ \$ 10,000 per project) and technical assistance to carry out these OR studies. Funding was used to support the time of the principal investigators within the organization and any additional costs associated with data collection.

During implementation of the OR projects, FRONTIERS staff provided technical assistance and also helped with financial monitoring. FRONTIERS staff assisted in training data collectors, interpreting results, writing reports and organizing dissemination seminars. It was also envisioned that FRONTIERS program staff would assist in the development of future financial sustainability plans of the organization.

IV. Results

1. Workshop Participation

Three Regional Workshops were held between May 2003 and September 2004. The first round of subsequent OR projects were mostly completed within one year of each workshop. The table below describes each workshop.

Location and Date of Workshop	Number of NGOS	Number of Trainees	Proposals Funded	Countries Represented
La Paz, Bolivia May 19-23, 2003	4	11	5	Bolivia, Honduras
Accra, Ghana March 1-5, 2004	4	12	5	Ghana, Kenya, Uganda
Jaipur, India September 20-24, 2004	4	12	3	India, Nepal, Bangladesh
Total	12	35	13	8

The Bolivian NGOs Prosalud, Centro de Investigación, Educación y Servicios (CIES), and Asociación de Programas de Salud del area Rural (APSAR), and the Honduran IPPF-affiliate, ASHONPLAFA, attended the workshop held in La Paz, Bolivia. FRONTIERS funded all four proposals developed in the initial round, and one second-round proposal from Prosalud.

The Accra workshop was attended by the Ghana Health Service's Community-based Health Planning and Services (CHPS) program and the Ghana Social Marketing Foundation Enterprises Limited (GSMFEL), Chogoria Hospital of the Presbyterian Churches of East Africa (PCEA) in Kenya, and The AIDS Support Organization (TASO) of Uganda. With the exception of CHPS, three of the organizations developed and implemented fundable proposals. Subsequently, two proposals from the Christian Health Association of Ghana (CHAG) were funded; although CHAG did not attend the Accra workshop, staff from their hospitals were trained in workshops using similar materials and techniques as those of the regional workshop.

The final workshop was held in Jaipur, India and was attended by the Baroda Citizens Council (BCC) and the Child in Need Institute (CINI) from India, the Population Training and Services Centre (PTSC) from Bangladesh, and the Chhetrapati Family Welfare Centre (CFWC) from Nepal. FRONTIERS funded proposals from CINI, PTSC and NFCC.

2. Completed Projects

Full details are available in all final reports, which are posted on the FRONTIERS website at <http://www.popcouncil.org/frontiers/index.html>. Below are summaries of the key points in each OR project.

Latin America Region

A full report of the three first-round projects supported in Prosalud, CIES and APSAR is available in: Mérida, Martha, Javier Arce, Douglas Moscoso, Carlo Ramirez, Patricia Riveros, and John Bratt. "Operations research to improve financial sustainability in three Bolivian NGOs".

a. Prosalud (Bolivia)

i. First OR project

Objective: To obtain information on the feasibility of alternative strategies for improving financial sustainability including: (1) competing for public sector clients, (2) increasing fees, (3) improving clinic amenities.

Results: None of the three strategies appeared feasible. Two new potential avenues for increasing financial sustainability were identified for Prosalud: (1) investing in new services that could be sold at a profit and would attract new clients, and (2) investing in new approaches that would result in selling more revenue generating services to existing clients.

Utilization: A second round of OR studies to test the two strategies was planned; only one of which was implemented (see below) to financially analyze Prosalud's social marketing program.

Capacity improvement: Prosalud staff built skills in estimating unit costs of services, conducting willingness to pay (WTP) surveys, and performing competition analysis.

ii. Second OR project

Objectives: To measure current profitability of the Prosalud Social Marketing (SM) program and to predict how SM profitability would change when USAID terminates commodity support in 2009.

Results: USAID commodity donations helped Prosalud's SM project to be highly profitable, with a return on sales of almost 50% in 2006. USAID-donated products accounted for nearly 85% of SM program revenues, and produced most of the highest unit contribution margins. Without USAID commodity support, however, the SM program would have incurred a large financial loss.

Utilization: Prosalud now has the information needed to decide which products the SM program should continue to sell after USAID terminates commodity support. Results also will help the agency decide whether the SM program should be primarily a profit center or a subsidized component that pursues a social mission.

Capacity improvement: Prosalud staff learned to use break-even analysis to measure current profitability of social marketing.

Results from this project are available in: Bratt, John, Patricia Riveros and Haydee Cabrera. "Financial analysis of Prosalud's social marketing program".

b. CIES (Bolivia)

Objective: To determine the feasibility of improving cost recovery by raising prices.

Results: A willingness to pay (WTP) survey estimated that raising prices would not increase total revenues because higher prices would result in large reductions in demand. CIES had very high unit costs (especially fixed costs) suggesting that cost reduction would be the most effective short-term strategy for improving financial sustainability.

Utilization: Cost reduction activities were included in CIES workplan, and the organization subsequently underwent major restructuring.

Capacity improvement: CIES staff built skills in estimating unit costs of services and conducting willingness to pay (WTP) surveys.

c. APSAR (Bolivia)

Objective: To estimate per-unit costs of RH and other priority services

Results: APSAR fees were so low that even variable costs of services were not recovered, which meant that every additional client served added to the total financial loss. Unless it would be possible to increase prices or identify additional donor support, the organization would be unable to increase its financial sustainability.

Utilization: Information on losses incurred from sales of services was presented to APSAR's management and used to assist in strategic planning, particularly focusing on identification of new donors and sales of services that could be used to cross-subsidize RH services.

Capacity improvement: APSAR staff learned to estimate unit costs of services.

d. ASHONPLAFA (Honduras)

Objective: To determine if systematic screening would increase the number of services and revenue per visit at the Honduran Family Planning Association (ASHONPLAFA).

Results: The intervention was not adequately implemented. Only 11 percent of all clients were screened, resulting in no differences in services or revenue per visit. Data from exit interviews showed that before and after the intervention, clients received about 1.1 services. In contrast, data from a second source, the screening forms, showed that screened clients received a mean of 1.35 services. Thus, it is possible that screened clients may have received more services than clients who were not screened.

Utilization: Relying on evidence derived from the screening forms rather than exit interviews, ASHONPLAFA decided to scale-up the intervention to all agency clinics.

Capacity improvement: ASHONPLAFA learned to evaluate systematic screening activities.

Results from this project are available in: Vernon, Ricardo, James R. Foreit, Fiorella Mancini, Suyapa Pavón, and Jheisy Torres. "Systematic screening as a strategy to increase services integration and revenues in Honduras".

Africa Region

a. TASO (Uganda)

Objective: To determine the break-even points for training courses offered by The AIDS Support Organization (TASO) and to estimate prices and numbers of participants necessary to ensure the profitable operation of the center.

Results: A break-even analysis enabled TASO to identify three threats to the financial sustainability of their training programs: insufficient fees, excessive costs, and inefficient course size. The willingness to pay results allowed TASO to systematically update their charges for specific training modules. Recommended changes in courses would increase cost recovery in the short term from the current level of approximately 50 percent to approximately 60 percent.

Utilization: TASO staff used the results to increase the fees charged for training courses.

Capacity Improvement: TASO staff learned to undertake analysis of costs of individual programs, and to use management tools such as break-even analysis and willingness to pay surveys to identify programmatic changes that enhance their financial sustainability.

Results from this project are available in: Mugumya, Nicholas, Juliana Nyombi, Michael Matsiko, Rick Homan, Harriet Birungi, and Nzoya Munguti. "Cost of training programs and willingness to pay for training: an application of break-even analysis in Uganda".

b. Chogoria Hospital (Kenya)

Objective: to determine the cost of providing a selected number of RH services and to evaluate their cost recovery levels.

Results: Fees charged for RH services did not cover the costs of providing the services. The overall cost recovery level across nine RH services was 80%, while cost recovery for family planning was 7-8%. Cost recovery was 95% for inpatient services and 37% for outpatient services. In order to continue providing family planning, VCT and PMTCT services, the hospital needed to reduce costs or increase fees.

Utilization: Results were used by management to discuss options to improve sustainability including increasing fees, cost containment, cross subsidization from other services, and negotiation of reimbursement from the national health insurance fund.

Capacity Improvement: Chogoria and FRONTIERS staff learned to undertake analysis of costs of individual services, and to evaluate cost recovery for different services.

Results from this project are available in: Munguti, Nzoya, Moses Mokua, Rick Homan, and Harriet Birungi. "Cost analysis of reproductive health services in PCEA Chogoria Hospital, Kenya".

c. GSMFEL (Ghana)

Objectives: To increase sales of for-profit products by complementary selling – asking customers if they would like to purchase a second product to go along with the original purchase (the recommended product is always a logical and useful addition to the index product).

Results: Sale of complementary products did not increase sales revenue significantly over sales in a control group. Three of five complementary products were nutritional supplements that were paired with products used to treat acute illness (e.g. diarrhea, malaria). It appears that the complementary products were not successful because they did not contribute to immediate symptomatic relief, as did somewhat more successful combinations (e.g. analgesics with antimalarials).

Utilization: Despite negative results, instruction in complementary selling was added to the regular training course for new franchisees.

Capacity improvement: GSMFEL gained experience in evaluating a marketing intervention.

Results from this project are available in: Bruce, Egbert, Daniel Mensah, John Idun, Francis Ashabley, James Foreit, and Philomena Nyarko. "Face-to-face complementary selling of health products in Ghana".

d. CHAG (Ghana)

i. First OR project

Objectives: to build capacity within the CHAG secretariat to calculate the economic cost and cost recovery levels of selected reproductive health services in four CHAG-affiliated hospitals.

Results: Average costs of outpatient consultations across the four hospitals ranged from \$5 to \$12. The main sources of variation were costs of personnel, and medical and laboratory supplies. First visits were more costly than revisits because providers spent more time with clients and used more materials and supplies than on subsequent visits. Of the three consultation types, voluntary counseling and testing (VCT) had the highest unit costs and family planning had the lowest. Policies governing use of laboratory tests also influenced cost recovery, since laboratory fees were by far the largest component of consultation revenue.

Utilization: Results helped to form the basis for negotiating reimbursement for services provided under the Ghana National Health Insurance Scheme (NHIS), and for setting cost recovery and cost containment policies.

Capacity improvement: CHAG staff learned to carry out analysis of costs of individual services, and to evaluate cost recovery for different services.

Results from this project are available in: Boateng, James, Henry Surnye, Alex Mensah, Bismark Boateng, Philomena Nyarko, Nzoya Munguti, and John Bratt. "Cost of reproductive health services provided by four CHAG hospitals".

ii. Second OR project

Objectives: To measure variable and fixed costs of selected services, and then to use break-even analysis to determine whether tariff revenue from national health insurance would cover these costs.

Results: For all services except one, tariff revenue was enough to cover variable costs. None of the hospitals would have covered their fixed costs, however, resulting in annual deficits ranging from US\$26,000 to US\$412,000, depending on the size of the hospital. Without changes in the tariff schedules and/or reductions in variable and fixed costs, sole reliance on NHIS financing is likely to create serious financial problems for CHAG.

Utilization: CHAG executives used the study results in discussions with the National Health Insurance Council to advocate for higher tariffs.

Capacity improvement: CHAG staff gained additional experience with costing, and also learned to use break-even analysis to evaluate financial sustainability of hospitals.

Results from this project are available in: Boateng, James, Henry Surnye, Philomena Nyarko, and John Bratt. "Sustainability Impact of National Health Insurance on CHAG Hospitals".

Asia Region

a. CFWC (Nepal)

Objective: to examine whether introducing an afternoon clinic at the CFWC with a substantially higher registration fee could improve cost recovery by adding more to program revenues than to program costs.

Results: Few clients used services in the afternoon clinic (2-3 clients per afternoon as compared to 120 per day in the morning clinic). Clients believed that family planning specialists were not the best choice for general check-up or other curative services. The provision of afternoon services generated additional revenues of Rs.23,090 (~\$344) for the period June 2005 to April 2006. This included laboratory revenue as well as consultation fees. The cost recovery for the first six months of the study was 6.4 percent and by the end of next six months this decreased to 5.7 percent.

Utilization: CFWC used the results to generate options for improving cost recovery, which would focus on reducing fees in the afternoon clinic to stimulate demand, and increasing fees in the morning clinic to align with what clients report paying for similar services from other clinics.

Capacity improvement: CFWC gained experience in evaluating the costs and predicted revenues from a marketing intervention, and learned how to establish a monitoring system to capture utilization, cost and revenue data.

Results from this project are available in: Shrestha, Mahendra Pd., Rajesh Swar, Pradeep Panda, M.E. Khan, and Rick Homan. "Effect of introducing an 'afternoon pay clinic' on service utilization and cost recovery (CFWC/Nepal)".

b. CINI (India)

Objective: To examine whether integration of RH and HIV services would yield an increase in clients served and move the program closer to financial sustainability.

Results: Provision of RH services increased from 12 services per clinic day in the 9 months prior to integration to 25 services per clinic day in the first 9 months post-integration. The corresponding figures for voluntary confidential counseling and testing (VCCT) service provision were 4 services per day prior to integration and 22 services per day subsequent to integration. In addition, on average, 14 of the 37 daily clients (38 percent) received both RH and VCCT services in the post integration period. When registration fees were compared to the variable cost of service provision, there was a small positive contribution margin earned (US\$0.07) indicating that the provision of integrated services added more to program revenues than to program costs.

Utilization: The study provided CINI with the information that variable costs were fully covered, which meant that offering integrated services was not detrimental to the financial well-being of the institution.

Capacity improvement: CINI staff successfully used the basic skills learned in OR and economics workshops to address a programmatic question.

Results from this project are available in: Das, Rumeli, Kaushik Biswas, Pradeep Panda, M.E. Khan, and Rick Homan. "Strengthening financial sustainability through integration of voluntary counseling and testing services with other reproductive health services (India)".

c. PSTC (Bangladesh)

Objective: To determine if increasing the prices of frequently-demanded services yields a positive contribution margin.

Results: The study was not fully implemented. Sufficient WTP data had not been collected prior to increasing prices to be used in setting new prices. Price increases were accompanied by increased exonerations, and revenues did not increase.

Utilization: Study data were not used in making a program decision.

Capacity improvement: PSTC learned to conduct a WTP survey and calculate variable costs per service.

Results from this project will be available in: Anwarul Islam, Anwar Hossain, Nikhil Datta, M.E. Khan, Rick Homan, James Foreit, “The Financial Sustainability of the Rampura and Bashaboo Clinics (PSTC Bangladesh)”.

V. Conclusion

The training strategy employed in this project combined traditional workshop-based instruction with proposal development, funding, and ongoing technical assistance to support implementation of an OR study using the skills learned concerning testing ways to improve NGO financial sustainability. The success of this approach is reflected in the substantial body of sustainability-related operations research that emerged. A total of 12 NGOs from eight countries sent 35 staff to three regional workshops. Of the 12 proposals submitted to FRONTIERS for consideration through this project framework, ten were funded, and a further three were funded separately; all of these projects were completed and final reports were written. The research studies covered a broad spectrum of topics, including costing, pricing, marketing and break-even analysis. Also, each final report addressed the capacity building and research utilization that occurred through the process of conducting the OR study.

The third objective, “to establish long-term relationships with selected NGOs to conduct sustainability research and capacity building activities,” sought to provide a platform for testing many of the interventions for improving financial sustainability. Although two of participating institutions (Prosalud and CHAG) did carry out more than one OR study, it was not possible to establish long-term collaborative relationships as envisioned. In the case of Prosalud, changes in management, funding and internal priorities, combined with the relatively small amounts of funding for OR, limited FRONTIERS influence within the organization. CHAG’s management was very collaborative, but the relationship began relatively late in the FRONTIERS project; it would be worthwhile to continue this relationship if funds permit, as well as explore the possibility of working with Christian Health Associations in other African countries.

Although the interregional project succeeded in creating NGO capacity to carry out sustainability-related OR, whether this capacity will be sustained over time is a concern. First, FRONTIERS provided the participating NGOs with support for one round of training, proposal development and project implementation; is one exposure to these resources enough to build enduring capacity? Second, FRONTIERS trained program staff (mostly non-researchers) to plan and implement OR projects, but there is an associated opportunity cost, as their responsibilities within the program may not allow time for OR during their routine work. Third, FRONTIERS provided financial support for the workshops, covered implementation costs, and provided free technical assistance; will programs be willing to foot the bill for OR, or will other donors be willing to help with funding and TA? Finally, it should be noted that the training was provided to individuals, and individuals often leave organizations in search of better opportunities. Therefore, it would be useful to visit all or some of these NGOs after a period of time (2–3 years) to determine whether the capacities built through these workshops are still in use.

Appendix 1: Information Gathered by NGO Prior to Workshop

I. Description of Your Organization

1. When was your organization founded?
2. What geographic area(s) does your organization serve?
3. What type of service delivery points does your organization operate?
4. How many service delivery points does your organization operate by type of service delivery point?

II. Description of Your Services:

1. Provide a list of family planning / reproductive health services / products provided by your organization.
2. Provide a list of other services / products provided by your organization.
3. Compile a listing of monthly or quarterly volume of services / products provided by service delivery point and type of service for the last three years.

Description of Your Clients

4. Provide a table describing what you know about the clients served by your organization in the last three years (age, # living children, education, etc.).
5. What client characteristics do you regularly report to donors / umbrella organizations?
6. Have there been any special studies of client characteristics such as economic status, satisfaction with quality, etc. done by or for your organization in the last three years? If so, please bring a copy of the report to the workshop.

Information on Costs of Your Organization

7. Please bring copies of organization budgets for last three years. Do you have program or activity budgets? If so, please bring these to the workshop.
8. What are the annual costs by service delivery point?
9. What are the annual costs by service / product?
10. What are the annual costs by component: Labor, materials, rent, etc.?
11. What are the annual costs by component by service?
12. Please bring copies of the financial reports to donors / umbrella organizations for the last three years.
13. Have there been any special cost analyses done by or for your organization in the last three years? If so, please bring a copy of the report to the workshop.

Information of Revenues and Prices

14. List the total income to your organization by source for last three years (donors, user fees, product sales).
15. List the total income by service delivery point for last three years
16. List the total income by service / product for last three years
17. What user fees are used by service delivery point and service / product?

Sustainability

18. What are the current sustainability goals for your organization?
19. What data can you provide on sustainability achievements / trends?
20. What sustainability plans are in place for your organization?

Appendix 2: Illustrative Agenda for Training Workshops

FINANCIAL SUSTAINABILITY INITIATIVE FOR SOUTH ASIAN REPRODUCTIVE HEALTH NGOs

September 20-24, 2004

Jaipur, India

	Monday, September 20	Tuesday, September 21	Wednesday, September 22	Thursday, September 23	Friday, September 24
9^{am}	Welcome and Introduction (Khan)	Cost Analysis Exercise Continued (All)	Presentation and Discussion of Sustainability Profiles (All)	Outline of Research Proposal (Khan)	Revise Draft Research Proposal (All)
	Sustainability And The Role Of Research (Janowitz)	Discussion of Cost Analysis Results (All)		Requirements for Sub- Contracts (Khan)	
10^{am}				Work on Draft Research Proposal (All)	
	Break	Break	Break	Break	Break
11^{am}	Knowing Your Services (Homan)	Looking At Revenues: Cross-subsidization & Break-Even Analysis (Homan)	Definition of Sustainability Research Problem (Panda)	Continued Work on Draft Research Proposal (All)	Presentation of Research Proposals (All)
	Service Statistics Trend Exercise (All)		Development of Ideas For Research Projects (All)		
12^{pm}		Changing Program Fees: Ability & Willingness to Pay Analyses (Khan)			Wrap-up and Next Steps (All)
1^{pm}	Lunch	Lunch	Lunch	Lunch	Lunch
2^{pm}	Knowing Your Costs (Janowitz)	Developing A Sustainability Profile (Panda)	Development of Ideas For Research Projects (All)	Continued Work on Draft Research Proposal (All)	
3^{pm}	Cost Analysis Exercise (All)	Development of Participating Program Sustainability Profiles (All)	Break	Break	
	Break	Break	Presentation and Discussion of Ideas for Research Project (All)	Presentation and Discussion of Draft Research Proposal (All)	
4^{pm}	Cost Analysis Exercise Continued (All)	Development of Participating Program Sustainability Profiles (All)		(scheduled finish 6:00 pm)	