

PROJECT DATA SHEET

1. TRANSACTION CODE

PD-APC-583

DOCUMENT CODE

A = Add  
 C = Change  
 D = Delete

Amendment Number

3

2. COUNTRY/ENTITY

WORLDWIDE

4. BUREAU/OFFICE

S&T/HEALTH

3. PROJECT NUMBER

936-5966

5. PROJECT TITLE (maximum 40 characters)

Breastfeeding, Maternal & Neonatal Health

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY  
09 30 98

7. ESTIMATED DATE OF OBLIGATION  
(Under "B." below, enter 2, 3, or 4)

A. Initial FY 88 B. Quarter 4 C. Final FY 98

8. COSTS (\$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY 88			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	1,522		1,522	61,800		61,800
(Grant) S&T	(1,522)	( )	(1,522)	(61,800)	( )	(61,800)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S.				24,200		24,200
1. Buy-Ins						
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	1,522		1,522	86,000		86,000

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)CS	539	510		6,515		36,800		46,800	
(2)HE	539	510		582		2,000		2,000	
(3)ARDN	539	510				3,000		3,000	
4. POP	539	510				2,000		2,000	
5. DFA	539	510				5,000		5,000	
6. DG	539	510				2,000		2,000	
7. PSEE	539	510				1,000		1,000	
<b>TOTALS</b>						51,800		61,800	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To promote breastfeeding and demonstrate the feasibility of providing a package of effective, appropriate maternal and neonatal health and nutrition services and education to women and their infants in selected developing countries.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY  
11 91 04 94 06 98

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment)

The PACD is changed from 12/31/93 to 9/30/98; the final obligation year is changed from FY 1993 to FY 1998; the authorized LOP funding is increased from \$17.5 million to \$86 million; the authorized central LOP is increased from \$10 million to \$61.8 million (\$49 million core & \$12 million from OYB transfers); the estimated amount for contributions from other sources is \$24.2 million; the authorized accounts are Sections 103, 104, 104(b), 104(c)(2), 104(c)(1), 106, and DFA; and the amendment also adds a dedicated breastfeeding component and provisions for continuing maternal and neonatal health and nutrition activities through the new PACD.

17. APPROVED BY

Signature

Title Ann Van Dusen, Ph.D.  
Acting Office Director, ST/H

Date Signed

MM DD YY

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

Agency for International Development  
Washington, D.C. 20523

MEMORANDUM

April 10, 1991

TO: AA/S&T, Richard Bissell

FROM: S&T/PO, Douglas L. Sheldon 

SUBJECT: Financial Implications of the Proposed Breast Feeding Initiative and the Extension of the S&T/H Breastfeeding, Maternal and Neonatal Health Project (936-5966)

REF: a) Memorandum DSheldon-AA/S&T of 01-22-91 (attached)  
b) Memorandum ABaker PPC/PB-DSheldon of 04-08-91 (attached)

I have reviewed and approved, with reservations, the attached PP Amendment to the Breastfeeding, Maternal and Neonatal Health project proposed by S&T/H.

This project increases the bureau core funding to breastfeeding by \$3.0 to \$4.0 million p/a for the next 5 years. The PP assumes that, at least in the aggregate, more money will be forthcoming to fund the project. The International Affairs Budget is fixed through FY 1993, and perhaps through FY 1995. Thus, except to the extent that our share of Agency resources is adjusted, we will be in a straight-line scenario. Funding of the new initiative will probably be at the expense of other activities. In this context, we should make clear to S&T/H the expectation that, if new money is not forthcoming, the Health Office will have to find the necessary funds to continue to finance the project within its OYB.

There appears to be a continued high reliance on participation with OYB transfers and buy-ins to achieve the project purpose, though the activity has had a poor record to date in attracting buy-ins. We are assuming, I guess, that the breastfeeding emphasis will generate this new demand. While the PP could have been designed with less reliance on buy-ins, this potential concern can be ameliorated by keeping close track of implementation with the view that the office should be prepared to redesign the activity in a couple of years time.

As a practical matter, I do not expect that additional funds will be found. Certainly PPC does not sound very encouraging at this point (see ref. b). Of course, I could be wrong.

BMNHmemo

a

Clearances:

S&T/H/HSD:RClay	<i>RCC</i>	Date	<i>4/2/91</i>
S&T/H:GPettigrew	<i>GP</i>	Date	<i>4/2/91</i>
S&T/H:NPielemeier	<i>NP for</i>	Date	<i>4/2/91</i>
S&T/PO:DSheldon	<i>DS</i>	Date	<i>4/2/91</i>
GC/S&T:GWinter	<i>DRAFT UP</i>	Date	<i>4/1/91</i>

S&T/H/HSD:AHamilton/MAnderson:3/25/91:1888r/p4

DOCNO: 42104 DOCTYPE: PAF

Agency for International Development  
Washington, D.C. 20523

APR 2 1991

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR,  
BUREAU FOR SCIENCE AND TECHNOLOGY

FROM: S&T/H, Ann Van Dusen *Ann Van Dusen*

SUBJECT: Project authorization amendment for the Maternal and Neonatal Health and Nutrition Project (936-5966)

REF: Van Dusen to Bissell Issues Memorandum Dated 3/25/91

PROBLEM: The centrally-funded Maternal and Neonatal Health and Nutrition (936-5966) project was authorized on March 31, 1988. Your authorization is requested to amend the project as specified below:

- a. change the name of the project from "Maternal and Neonatal Health and Nutrition (MNHN)" to "Breastfeeding, Maternal and Neonatal Health";
- b. add a dedicated breastfeeding component;
- c. change the PACD from 12/31/93 to 9/30/98;
- d. increase the authorized LOP from \$17,500,000 to \$86,000,000;
- e. increase the S&T centrally-funded authorized funding amount from \$10,000,000 to \$61,800,000 (including \$12 million in OYB transfers); and,
- f. authorize funding from Sections 103, 104, 104(b), 104(c)(1), and 104(c)(2), 106 and DFA appropriation categories.

In addition to the amount authorized above, your approval is also requested to approve a ceiling and establish a new estimated amount of \$24,200,000 for contributions to the project from other sources through buy-ins/add-ons or other participatory financing arrangements. Such funding may also be provided from the Economic Support Fund (ESF) or the Development Fund for Africa (DFA), as well as from the accounts authorized for S&T funding under this project.

DISCUSSION: This project paper amendment is the result of a reassessment of S&T's field support capability for breastfeeding. The S&T Breastfeeding Cluster analyzed current S&T-funded breastfeeding activities and concluded that they are essential and complementary but insufficient.

The Cluster recommended that increased breastfeeding field support could best be achieved by amending the Maternal and Neonatal Health and Nutrition Project. In response, the attached amended project paper proposes a new breastfeeding cooperative agreement for field support in assessment and strategy formulation, policy dialogue, training, communication and social marketing, outreach to women, information dissemination and monitoring and evaluation. Up to 10 long-term comprehensive national breastfeeding programs will be supported plus short-term technical assistance and applied research. A standardized database across countries will measure impact on breastfeeding practices due to A.I.D.'s support.

The amendment also provides for continuing A.I.D.'s work in maternal and neonatal health and nutrition, commenced under the existing MotherCare contract, for another five years (FY 93-98). This second phase is important to expand successful interventions to the national level and to more countries in order to address maternal and neonatal mortality which have often been neglected in A.I.D.'s child survival initiative.

Justification to the Congress: An Advice of Program Change is being prepared.

Recommendation: That you sign the attached Project Authorization Amendment.

Attachments:

Project Authorization Amendment  
Project Data Sheet  
Amended Project Paper

Clearances:

S&T/H/HSD:RClay	<i>R. Clay</i>	Date	<i>4/2/91</i>
S&T/H:GPettigrew	<i>GP</i>	Date	<i>4/2/91</i>
S&T/H:NPielemeier	<i>NP for</i>	Date	<i>4/2/91</i>
S&T/PO:DSheldon	<i>DS</i>	Date	<i>4/2/91</i>

S&T/H/HSD:AHamilton/MAnderson:3/25/91:1888r/p2

PROJECT AUTHORIZATION AMENDMENT NUMBER 1

Name of Project: Breastfeeding, Maternal and Neonatal Health  
Number of Project: 936-5966  
Country: Worldwide

1. Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, the Maternal and Neonatal Health and Nutrition Project was authorized on March 31, 1988. That authorization is hereby amended as follows:

- a. the name of the project is changed from "Maternal and Neonatal Health and Nutrition" to "Breastfeeding, Maternal and Neonatal Health";
- b. a dedicated breastfeeding component is added;
- c. the PACD is changed from 12/31/93 to 9/30/98;
- d. the authorized LOP is increased from \$17,500,000 to \$86,000,000;
- e. the S&T centrally-funded authorized funding amount is increased from \$10,000,000 to \$61,800,000 (including \$12 million in OYB transfers); and,
- f. funding is authorized from Sections 103, 104, 104(b), 104(c)(1), and 104(c)(2) 106 and DFA appropriation categories.
- g. Funds authorized under Sections 103, 104, 104(b), 104(c)(1), 104(c)(2) 106, and DFA appropriation categories may be used without regard to dollar limits for each appropriation so long as the total authorization of \$61,800,000 for the project is not exceeded.
- h. In addition to the amount authorized above, an estimated \$24,200,000 may be contributed to the project by Missions, Regional Bureaus and other offices of A.I.D. Funding may be provided from the Economic Support Fund (ESF) or the Development Fund for Africa (DFA), as well as the accounts authorized for S&T funding under this project.

2. The authorization cited above remains in force except as hereby amended.

Signature: \_\_\_\_\_

*Richard E. Bissell*  
Richard E. Bissell  
Assistant Administrator,  
Bureau for Science and  
Technology

Date: \_\_\_\_\_

*Apr 11, 1991*

Agency for International Development  
Washington, D.C. 20523

MAR 28 1991

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR SCIENCE  
AND TECHNOLOGY

FROM: S&T/H, Ann Van Dusen 

SUBJECT: Breastfeeding, Maternal and Neonatal Health Project  
Amendment (936-5966) -- Issues

**PROBLEM:** Your assistance is requested for: (1) securing additional S&T core funding for the amended Breastfeeding, Maternal and Neonatal Health Project, and (2) assigning one additional FTE to S&T/H for management of the breastfeeding initiative.

**BACKGROUND:** Based on your decision following the recommendations of the S&T Breastfeeding Cluster, a project committee was constituted to design a new dedicated breastfeeding activity to be managed in S&T/H. The project committee, comprised of representatives of S&T/H, S&T/N, S&T/POP, S&T/PO and LAC, met to review the project paper supplement for the Breastfeeding, Maternal and Neonatal Health Project on March 6. The bureaus which were unable to attend conveyed their comments in advance to S&T/H. Ten issues were raised and discussion of how they have been addressed is attached. However, the last two issues (9 and 10) concerning funding and management of the initiative remain unresolved and require your attention.

**RECOMMENDATION:** (1) That we schedule a meeting with you to discuss ways to resolve the remaining issues concerning funding and staff at your earliest convenience. (2) Because of procurement deadlines, however, we recommend proceeding with authorization of the project amendment and have prepared these documents for your signature. Please indicate your approval of the project amendment and this approach by signing the attached authorization.

Attachment: a/s

## ISSUES

1. Issue: How was the budget for the new breastfeeding component constructed, e.g. what is the basis for the estimated annual cost of long-term country programs?

Discussion: A fully costed out budget has been included in the project paper supplement as Table 5. The headquarters costs as well as the costs of fielding long-term advisors are based on actual expenditures in similar major field support projects managed by S&T/H, namely PRITECH, REACH, HEALTHCOM, and MotherCare. Annex D--Financial Analysis--describes the costs of actual successful national, comprehensive breastfeeding programs based on which the annual cost of long-term country breastfeeding interventions for this project have been projected.

2. Issue: What is the basis for buy-in/add-on assumptions given the poor track record of the MotherCare contract and what mechanism is envisioned for accepting such funds?

Discussion: Table 5 in the project paper supplement describes the assumed proportion of the breastfeeding cooperative agreement budget expected from S&T core (including expected OYB transfers) and from add-ons. A realistic funding split for the various activities is expected to be similar to, and therefore is patterned after, the actual experience to date in the MotherCare contract. Cumulative obligations achieved by MotherCare through FY 91 (after 2.5 years of implementation) are comprised of 69% core S&T funds and 31% buy-ins; similarly the bottom-line for the breastfeeding component's budget has been estimated at 67% core and 33% add-on.

The mechanism for adding-onto a cooperative agreement is straight forward and will be explained to interested regional bureaus, missions, etc. Since the LAC bureau expressed interest in being able to add funds annually in one action for their entire region, a provision for doing this has been added to the project paper supplement.

3. Issue: How will this project insure and improve cooperation, collaboration and complementarity with other S&T projects which include breastfeeding, and serve as the focal point for a cohesive Agency breastfeeding initiative?

Discussion: The revised project paper supplement describes methods for coordination and collaboration which will rely heavily on sharing information on respective projects through the Breastfeeding Cluster. Table 1 shows major S&T- managed projects which will complement and be coordinated with the new breastfeeding component. Furthermore, reference is made to coordinating with related S&T breastfeeding projects under the discussion of each of the specific breastfeeding interventions proposed.

4. Issue: Is the balance between proposed resources for breastfeeding versus maternal and neonatal health adequate so as not to underfund the important maternal health component?

Discussion: The balance allotted seems appropriate given that the proposed budget for Phase II of the maternal and neonatal health and nutrition component is 41% higher than that for Phase I based on the expectation of greater mission interest (ergo buy-ins) in Phase II as a result of successful approaches demonstrated in Phase I.

5. Issue: What outcome indicators will be used to define success? What are the essential elements of long-term country programs for achieving significant improvements in breastfeeding practices?

Discussion: The minimal elements of a successful national breastfeeding program and the measurable indicators of such a program at the purpose level and at the output level are detailed in the expected achievements section of the paper and in the Annex A logframe. These minimal elements derive from international consensus as stated in the 1990 Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding -- the product of an international policymakers meeting on breastfeeding co-sponsored by A.I.D., WHO, UNICEF and SIDA.

6. Issue: How will countries be selected for long-term programs and what will the policy be toward working in advanced developing countries?

Discussion: A step-wise procedure for identifying countries for long-term programs is included in the revised project paper supplement. To facilitate the process and to assure coordination and complementarity with ongoing A.I.D.-funded breastfeeding activities, S&T/H has begun compiling a list of breastfeeding activities underway in FY 90 by country using the CIHI/ISTI database and cable responses from USAIDs. This will be completed by interviews with concerned S&T project officers and reviewed by the Breastfeeding Cluster.

A goal proposed for the Agency's breastfeeding initiative is to have comprehensive, national breastfeeding programs launched in 20 countries by the end of the 90s of which half would be in child survival emphasis countries. The breastfeeding component proposed here would launch up to 10 of those programs, with the S&T/N Women and Infant's Nutrition Project assisting another 4 countries, and the balance supported under Mission bilateral assistance or other S&T projects. There should definitely be a place in the list for a few advanced developing countries since it is in these that suboptimal breastfeeding practices are most prevalent and yet where small investments by AID could mobilize

excellent existing local infrastructure and resources to address the problems. However, central resources will be invested in advanced developing countries only where no A.I.D. bilateral or regional funds are available, and only on a limited scale with the aim being to mobilize local resources as quickly as possible.

7. Issue: Is a cooperative agreement the appropriate instrument for the breastfeeding component?

Discussion: Early on in the design process, S&T/Health met with Steve Dean, MS/OP/W/HP to discuss plans for the breastfeeding activity and he confirmed that a cooperative agreement could be used. The advice of MS/OP/W/HP will continue to be followed as S&T/H designs the RFA.

8. Issue: What are the plans for peer review of applied research?

Discussion: A peer review plan is now included as Annex E of the project paper supplement following the S&T September 19, 1990 guidelines.

9. Issue: Where will the money come from to meet the annual S&T core costs estimated at \$3 million for breastfeeding and \$2 - 2.4 million for maternal health?

Discussion: Unresolved. Immediate needs above and beyond current allocations are \$2.4 million in FY 91 and \$2.5 million in FY 92. The S&T/H reclama on the FY 92 OMB pass back sought an additional \$2.5 million of child survival funds for the breastfeeding initiative. These funds were not obtained at that time, however a separate draft memorandum to the Administrator has been prepared for your signature seeking funding for three Summit follow-up initiatives: Measles, Children's Vaccine, and Breastfeeding. A total of \$2.4 million in FY 91 fallout or reserve funds is requested for breastfeeding for this project.

10. Issue: How will S&T/H manage the new breastfeeding agreement and serve as the focal point for a coordinated, comprehensive, consolidated Agency initiative, given that S&T/H is currently able to dedicate a total of only 0.5 FTE to breastfeeding split between four different staff members? (S&T/POP spends 0.6 FTE on breastfeeding split between 4 staff and S&T/N spends 0.8 FTE split between 2 staff)..

Discussion: Unresolved. S&T/H needs one additional FTE in order to recruit a full-time officer to lead and adequately manage the breastfeeding initiative.

Clearances:

S&T/H/HSD:RClay	<u>draft</u>	Date	<u>3/28/91</u>
S&T/H:GPettigrew	<u>VP</u>	Date	<u>3/28/91</u>
S&T/H:NPielemeier	<u>NP</u>	Date	<u>3/28/91</u>

Drafted by:S&T/H/HSD:MAAnderson:3/25/91:1903r

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**PROPRIETARY INFORMATION INCLUDED**  
Please restrict distribution to within A.I.D.

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**BREASTFEEDING, MATERNAL AND NEONATAL HEALTH (936-5966)**  
**PROJECT PAPER SUPPLEMENT**

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## I. BACKGROUND AND SUMMARY

The Maternal and Neonatal Health and Nutrition (MNHN) Project, 936-5966, was developed by the Bureau for Science and Technology (S&T) in FY 1988 to help strengthen the impact of its child survival initiatives by improving health and nutrition services available to women and their infants. Preventing maternal and young infant deaths through adequate care during and following pregnancy is the project's main focus.

As originally designed, the MNHN project was intended to be comprehensive, with adequate resources to serve field needs in strengthening women's and young infants' health and nutrition services. Two occurrences have made it necessary to re-evaluate the project's design and to amend it. Firstly, the target groups selected for emphasis in the project were women and neonates (newborns up to the age of 28 days). Older infants were not specifically targeted nor was breastfeeding given a high priority because it was assumed that other AID projects dealt adequately with infant nutrition and health. Yet, an internal Agency-wide gap analysis conducted in 1989 revealed that not enough programmatic focus was being given to breastfeeding promotion and support, resulting in numerous, small-scale, scattered activities that fail to realize potential impacts on infant mortality. Recent studies have estimated that optimal breastfeeding is currently averting 7 million infant deaths per year through the prevention of diarrhea and acute respiratory infection. Furthermore, an additional 1.3 million infants' lives could be saved with significant shifts to optimal breastfeeding. Secondly, Congressional directives and field interest in the area of breastfeeding have created the need for an expanded S&T response capability for breastfeeding promotion. Moreover, new technical knowledge and worldwide interest by leading public health authorities compels AID to assign a higher priority to breastfeeding.

As the MNHN Project is AID's primary central vehicle for improving the health of women and their young infants--the groups to whom breastfeeding interventions must be directed--the response capability will be most effective if built into the MNHN Project. In light of these factors, the original MNHN project purpose is being expanded to include breastfeeding. The original goal of the MNHN Project remains valid, that is to improve the health, nutritional status and survival of women of reproductive age and their children in developing countries. To reflect the expanded project purpose, it is suggested that the project title be modified to Breastfeeding, Maternal and Neonatal Health (BMNH).

The breastfeeding component of the project will select up to ten emphasis countries to receive long-term assistance and support. Between seven to ten applied research studies on breastfeeding will be undertaken. Project resources will also support activities of a worldwide policy nature that will further breastfeeding efforts, possibly including reactivation of the Interagency Group for Action on Breastfeeding (IGAB) and support for WHO and other multilateral entities. Coordination and integration will be stressed both in Washington and at the country level, the lead for the former being taken by the AID/Washington Breastfeeding Cluster comprised of representatives from S&T/Health, S&T/Nutrition, S&T/Population and regional bureaus, and the latter by national breastfeeding steering committees.

The addition of an explicit breastfeeding component necessitates a five-year extension of the Project Assistance Completion Date (PACD) from FY 1993 to FY 1998. This project paper

supplement is a justification for an increase in project funding from \$17.5 million to \$86.0 million to finance the Agency's expanded breastfeeding response capability and to continue all project activities, including a second five-year agreement for maternal and neonatal health and nutrition, for the new, extended duration of the project.

## **II. PROJECT DESCRIPTION**

The Maternal and Neonatal Health and Nutrition project was approved on March 31, 1988 with a PACD of December 31, 1993. The first obligation of funds occurred on September 30, 1988. The life of project (LOP) budget is \$17.5 million of which \$10 million is to come from S&T/Health funds and the remainder from Regional Bureau transfers, USAID missions buy-ins, and other S&T office funds.

The goal of the project is to improve the health, nutritional status and survival of women of reproductive age and their children in developing countries. The purpose is to demonstrate the feasibility of providing a package of effective, appropriate maternal and neonatal care services and education to women and their infants in selected developing country settings.

To achieve its goal and purpose the project's strategy is to strengthen the capacity of health and other sectors to deliver selective and appropriate interventions for care of reproductive age women and young infants, and to examine issues in service delivery. The priority interventions are:

- prevention of neonatal and maternal tetanus;
- prevention and treatment of maternal anemia;
- nutritional improvements for women of reproductive age and their newborns, including early initiation and establishment of exclusive breastfeeding;
- prevention and treatment of important causes of maternal morbidity and mortality;
- prevention and treatment of important causes of neonatal morbidity and mortality.

The two major implementation modes are:

- procurement of a centrally managed contractor to provide a broad range of services; and
- coordination and integration of support for other related activities outside the contract.

## A. Contractor Services

Implementation consists of country assessment visits followed by a broad range of support as needs are identified. These include the following:

**Long-Term Projects** - Five long-term country programs developed to test and demonstrate cost-effective strategies for improving maternal and neonatal health and nutrition.

**Short-Term Technical Assistance and Training** - Support for a variety of short-term activities to complement USAID mission programs.

**Applied Research** - Studies to: (1) identify and overcome barriers to better maternal and neonatal health and nutrition, and (2) improve service delivery systems (prenatal, delivery, postnatal, and integrated MCH/family planning care).

**Worldwide Activities** - Information dissemination, conferences, literature reviews, and development of tools and materials to advance the state-of-the-art of addressing maternal and neonatal health and nutrition problems.

The main contract for MNHN project activities is intended to provide assistance to host country institutions, voluntary agencies and USAID missions for:

### **Planning**

- Assessments of maternal and neonatal health and nutritional status and services;
- Assessments of the breastfeeding situation and country strategy formulation;
- Utilization and compliance studies;
- Epidemiological studies of morbidity and mortality;
- Project design.

### **Enhancing Maternal and Neonatal Services**

- Training in screening, referral, and life-saving skills;
- Enhanced referral/transport systems for emergency care;
- Improved counseling and communications skills for providers;
- Analysis of costs and cost-effectiveness of existing or proposed interventions;

- Experiments in cost-sharing and sustainability of services.

#### **Reaching Women with Information**

- Social marketing to encourage health-promotive behavior and utilization of services;
- Identification and strengthening of indigenous organizations and networks.

#### **Policy**

- Program/project evaluations;
- Workshops and seminars.

#### **B. Support for Related Activities**

A small portion of project resources have been reserved for activities of a worldwide nature outside the contract that further efforts in maternal and neonatal health and nutrition. Activities supported by resources administered by the Office of Health, Bureau for Science and Technology under this category include, but are not limited to, information dissemination, technical assistance, training and support for voluntary agencies and other organizations, and procurement of technical assistance through other U.S. government agencies.

### **III. ORIGINAL PROJECT IMPLEMENTATION ARRANGEMENTS**

#### **A. Contract Assistance**

The contract through which most of the MNHN project activities are being implemented was competitively awarded to John Snow Inc. (JSI), on 9/30/88 for a period of five years ending on 9/30/93 for a sum of \$13,522,526. The work is conducted through a consortium, popularly known as MotherCare, that includes in addition to JSI, The Population Council, The Manoff Group, Save the Children Federation, The Center for Development and Population Activities, The American College of Nurse Midwives, Women's International Public Health Network, The Frontier School of Midwifery and Family Nursing and the Western Consortium for Public Health.

Steps already underway by MotherCare in a number of countries include:

- identifying the countries for project activities;
- identifying capable collaborators, institutions, and consultants in the country;

- assessing the current situation and needs;
- obtaining necessary clearances and approvals;
- designing, funding, monitoring and evaluating projects; and
- analyzing, writing up and disseminating results.

#### B. Support for Related Activities

In addition to the contract with John Snow Inc., when appropriate, AID can support the maternal and neonatal health and nutrition work of other U.S. Government and U.N. experts and seek additional technical assistance from such sources. To date, the only such activity has been a three-year, \$500,000 grant awarded to the WHO Safe Motherhood Initiative in February of 1988 (\$400,000 from 936-5966 plus \$100,000 from 936-5927).

#### C. Technical Advisory Group

To assist in oversight of the MotherCare contract, a Technical Advisory Group (TAG) has been appointed. The TAG provides expert review of MotherCare activities and makes recommendations for improvements. In March of 1990, TAG members met for the first time to review initial MotherCare work plans for project implementation. The most important aspects of this review were endorsement of the selection of target countries and activities for long-term project involvement, the definition of the research agenda that MotherCare will address, and the development of criteria against which project achievements will be measured. The next meeting of the TAG is expected to be held in the summer of 1991, with two additional meetings during the term of the current JSI contract.

#### D. Coordination With Other AID Activities

One of the more difficult, yet also positive, aspects of maternal and neonatal health and nutrition is their multi-faceted nature. The multi-faceted, intersectoral nature of the problems to be tackled has led to different approaches to programming in this area. Thus there are health, nutrition, family planning, education, and economic programs, all of which can impact on maternal and consequently neonatal health and nutrition. These different approaches make the potential coordinating role of the MNHN project very important. Substantial resources are being invested which, with a successful coordination effort, can be expected to be mutually reinforcing. An important role of the AID Cognizant Technical Officer (CTO) for MotherCare, as well as the project contractor, is coordination to maximize the project's impact.

The project has developed a good working relationship with other projects such as, SEATS (S&T/Population), REACH (S&T/Health), HealthTech (S&T/Health), WIN (S&T/Nutrition), and on a country-by-country basis with WHO, UNICEF and World Bank activities. Examples of collaborative activities include:

- WIN - Joint breastfeeding assessment in Thailand with WELLSTART and use of the Clearinghouse on Infant Feeding and Maternal Nutrition to disseminate information.
- REACH II - Co-sponsored International Neonatal Tetanus Meeting.
- HealthTech/PATH - Simple, safe delivery kits, and technologies developed for maternal and neonatal care at first referral level.
- SEATS - Integration of maternal health care with family planning, especially postpartum.
- HEALTHCOM II - Training provided by the JSI/MotherCare group to staff in principles of safe motherhood.

The project is also collaborating with PVOs interested in maternal and neonatal health, such as Family Care International and CARE, in addition to its subcontractor Save the Children Federation. Other professional associations like the International Confederation of Midwives and the International Federation of Gynecology and Obstetrics (FIGO) have also jointly conducted activities with MotherCare.

#### **IV. PROJECT IMPLEMENTATION EXPERIENCE - Years 1 & 2**

Project activities from 9/30/88 to the present have been adequate and on track with respect to the quantity and quality of services provided, and country program initiation. However, while the MNHN Project was designed to be funded 60% from core S&T contributions and 40% from mission and regional buy-ins, actual experience through FY 91 has been 70% core S&T funding and only 30% mission and regional buy-in funding. This shift has resulted due to fewer buy-ins than originally projected, perhaps due to the newness of the subject area and the necessity to demonstrate successful interventions, prior to securing significant mission support.

Since a high priority was not assigned to breastfeeding in the original project, relatively little has been done in the area of breastfeeding promotion. To date, it has only been possible for MotherCare to provide short-term technical assistance in breastfeeding to three countries (Chile, Haiti and Thailand), and to develop a tool for country assessment of the breastfeeding situation. Based on recommendations of its TAG, MotherCare is coordinating closely with REACH on neonatal tetanus elimination activities and is devoting fewer resources to tetanus toxoid immunization because this intervention has become a focal area for REACH II. Rather, MotherCare is concentrating on the second mode of neonatal tetanus elimination, namely,

safe/clean delivery through preventive education and training of traditional birth attendants and midwives.

#### A. MotherCare Contract Activities

##### 1. Technical Assistance and Training

Short-term technical assistance has been provided to Haiti for a national assessment of maternal mortality and perinatal outcomes. In Jamaica, MotherCare designed a study of factors influencing women's choices of where to deliver in order to help find solutions for hospital overcrowding. Short-term technical assistance for breastfeeding promotion has been provided to Chile, Haiti and Thailand.

##### 2. Intensive Country Support

Long-term projects are underway in: Bolivia, Guatemala, and Indonesia. Final approval is awaited in Uganda. An assessment visit has been made to Cote d'Ivoire, which is under consideration as the fifth country.

Subcontracts have been signed with the following groups to carry out the country activities and special activities:

- Center for Child Survival, University of Indonesia;
- Institut Haitien de L'Enfance, Haiti;
- Hope Enterprises, Jamaica;
- INCAP, Guatemala;
- Isidro Ayora Maternity Hospital, Ecuador;
- Padjadjaran University, Indonesia;
- PATH, USA;
- PRISM, USA (Peru).

### 3. Applied Research

Four studies are underway or completed as follows:

- Quality and content of prenatal care in Peru (completed);
- Low birth-weight and perinatal mortality determinants in Indonesia;
- Improved delivery systems for iron/folate supplements in Indonesia;
- Efficacy of the "Kangaroo Mother Method" of caring for low birth weight babies in Ecuador.

### 4. Worldwide Activities

Expert meetings were held by MotherCare on:

- neonatal tetanus elimination;
- reaching women through service delivery channels;
- maternal anthropometry (in collaboration with PAHO and WHO under AID grant to WHO).

MotherCare publications include:

- A report on "Assessment of Technology Needs at the First Referral Level;"
- MotherCare Matters Newsletter;
- Proceedings of a meeting on Neonatal Tetanus Elimination;
- Annotated bibliography on - Neonatal Tetanus Elimination;
- Maternal Anthropometry for Prediction of Pregnancy Outcomes: Summary Statement.

Activities underway are:

- Development of a life-saving delivery skills manual for training midwives (ACNM), and a breastfeeding country assessment methodology (in collaboration with WHO/CDD).

## **B. Other Related Activities**

Under the grant to WHO for collaboration in Health Systems Research for the Safe Motherhood Initiative, a home-based maternal health record and cord care/delivery kit have been developed and evaluated. A 17-month, \$250,000 extension of the grant through June 1992, has been requested by WHO and will be granted by AID in 1991. The rationale for the extension is to complete studies on the impact of the cord care kit and to support secondary analysis of 13-15 data sets in order to develop guidelines for incorporation of maternal anthropometry for prevention of negative pregnancy outcomes onto the home-based maternal record.

## **V. RATIONALE FOR A BREASTFEEDING COMPONENT**

This project paper supplement argues for a major increase in project funding to expand S&T's breastfeeding activities while making them more comprehensive, coordinated and consolidated, and to award a second agreement under the project dedicated to breastfeeding promotion.

AID's Child Survival Strategy focuses on reducing mortality and morbidity of infants, children and women of reproductive age through a limited package of proven, cost-effective technologies delivered within the context of primary health care programs. Scientific evidence gathered during the past decade shows that appropriate breastfeeding is one of the most cost-effective means for improving child survival.

- Recent studies have estimated that optimal breastfeeding during the first year of life is currently averting 7 million infant deaths per year through the prevention of diarrhea and acute respiratory infection and further estimate that an additional 1.3 million infant deaths could be averted with a significant shift to optimal breastfeeding.
- In addition to its direct impact on infants' health, breastfeeding enhances each of the key child survival interventions--diarrheal disease control (and acute respiratory infection control), immunization, nutrition and child spacing--and benefits maternal health as well.
- Breastmilk can fulfill the infant's total nutrient requirement through 4-6 months of age, and remains an invaluable source of energy, protein, vitamins and minerals well into the second year of life, when complemented by appropriate weaning foods.
- The billions of liters of human milk that mothers produce each year augment the world's food supply while easing strains on family budgets. Because imports of breastmilk substitutes are avoided, governments have less need to use scarce foreign exchange.
- The reduced burden of illness and death brought about by breastfeeding represents a savings to families, to communities, to the formal health sector, and to governments.

There is also growing evidence that breastfeeding provides important health and nutritional benefits for mothers.

- Appropriate breastfeeding is an important means of delaying pregnancies in developing countries, and accounts for a substantial suppression of fertility.
- Establishment of exclusive breastfeeding immediately after birth reduces postpartum hemorrhage and the exacerbation of anemia through excessive blood loss, while facilitating the return to normalcy of the uterus.
- Breastfeeding lowers the risk of breast and ovarian cancer.

An important part of the impetus to develop an expanded and focused breastfeeding response capability in AID comes from Congress. The following quote from the 1990 Senate Appropriations Committee Report to AID expresses concern over the inadequacy of AID support for breastfeeding, as did the 1989 report:

"Last year in its report, the Committee directed A.I.D. to significantly strengthen its support for breastfeeding in developing countries. The Committee recognizes A.I.D.'s progress in expanding its efforts to promote breastfeeding and urges it to continue these efforts. However, only \$3,700,000 for breastfeeding activities from the "Child Survival" and "Health" accounts combined in fiscal year 1989 is woefully inadequate considering the dramatic reductions in child mortality it produces. Furthermore, breastfeeding activities within A.I.D. appear to be widely scattered between the health, child survival, women in development, and population offices with no focus of expertise and too little coordination. The Committee urges A.I.D. to increase support for breastfeeding and develop an identifiable programmatic focus for breastfeeding promotion."

The proposed breastfeeding component will provide the programmatic focus called for within S&T.

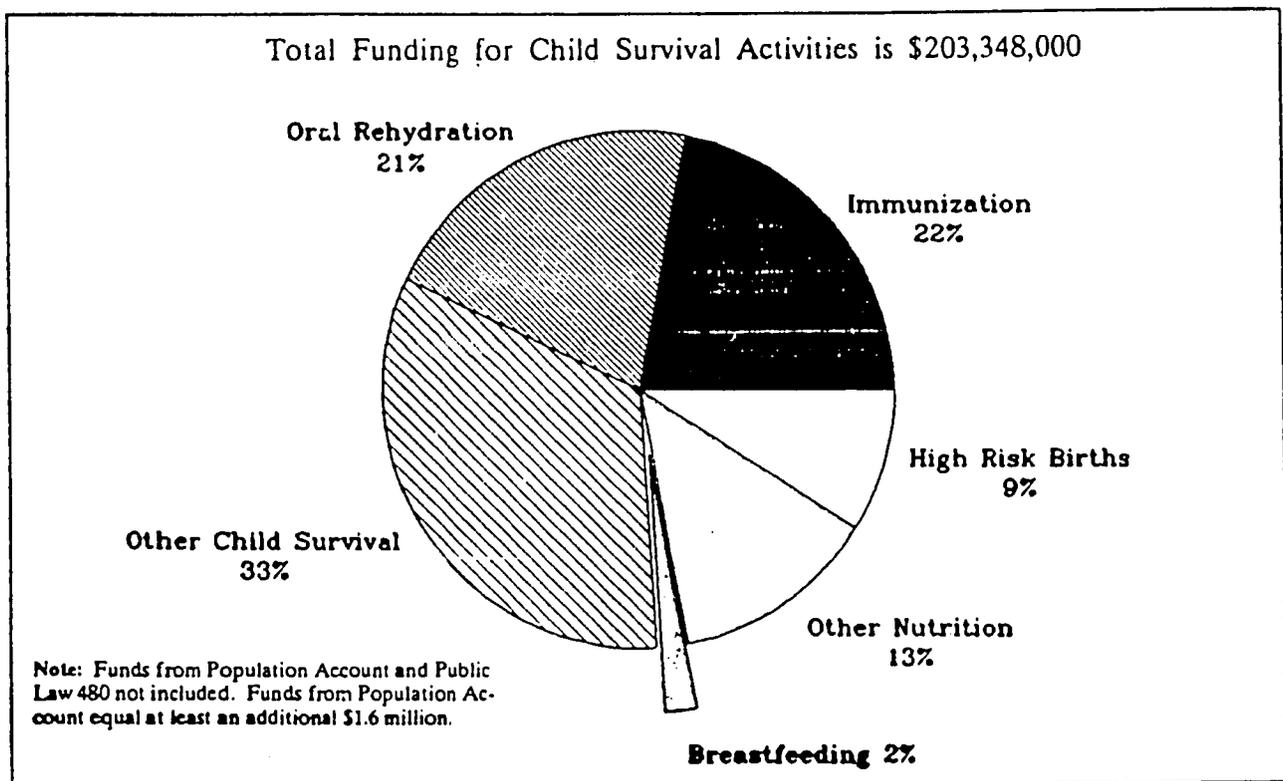
Public health authorities worldwide have called for a global initiative to place breastfeeding activities at top priority.

- Participants from 30 countries at the International Policymakers Meeting on Breastfeeding held at the Innocenti Centre in Florence, Italy in August 1990 (co-sponsored by AID, WHO, UNICEF and SIDA) called on donors to support national situation analyses and strategy development, as well as, design, implementation, monitoring and evaluation of national breastfeeding programs. The "Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding" was drafted at this meeting. The Declaration, which was later distributed to heads of state at the World Summit for Children in September 1990, is likely to spur national action and to increase demand for breastfeeding assistance.

While breastfeeding has become better understood as one of the most critical and cost-effective interventions for improving maternal and infant health, AID has been unable to launch a concerted effort in this area.

- Funding devoted to breastfeeding is far less than for other child survival interventions even though breastfeeding is a highly effective intervention for reducing infant and child mortality. For example, in FY 1989, only 2% of the estimated \$203,348,000 spent on child survival activities by AID was attributable to breastfeeding, compared with 21% for oral rehydration therapy (ORT) and 22% for immunizations (Figure 1).

**Figure 1: A.I.D. Funding for Child Survival by Intervention (Fiscal Year 1989)**



Source: A.I.D. Health Information System, CIHI, March, 1990

- An internal Agency-wide gap analysis conducted in 1989 found AID's breastfeeding promotion efforts not commensurate with the global problem of suboptimal breastfeeding practices. Not a single project or central resource could be identified in the Agency that was dedicated to providing comprehensive breastfeeding services, whereas in other child survival areas such as ORT and immunizations, large centrally funded, comprehensive field

support projects have been established to focus on these key interventions. Of the approximately \$5.6 million spent by AID worldwide in FY 89 on breastfeeding interventions, close examination reveals that breastfeeding activities were scattered between 54 projects and subprojects, and within any given project comprised, on average, only 4.5% of total fiscal obligations. In only three ongoing S&T projects did breastfeeding activities exceed more than 15% of total obligations, namely, the S&T/N Women's and Infants' Nutrition Project and Nutrition Communication Project, and the S&T/POP Natural Family Planning Project. However, even in these projects, total resources devoted to breastfeeding are still insufficient to satisfy the need. The overall conclusion of the S&T Breastfeeding Cluster is that current activities funded by S&T/N, S&T/POP and S&T/H are essential and complementary, but inadequate to address the overall issue.

- In the 1989 gap analysis of AID breastfeeding activities, funding for all breastfeeding interventions was found to be insufficient. However, the areas of support identified as being either absent or the most inadequately funded in AID's portfolio include:
  - promotion of breastfeeding within primary health care and NGO health care systems;
  - technical assistance in overall assessment, policy development, program design and evaluation;
  - work with medical and other professional associations;
  - curriculum and textbook development and support for basic training of health and nutrition providers;
  - applied research in aspects of breastfeeding in addition to its fertility regulation effects (which is the sole focus of ongoing AID-funded research);
  - community-based support activities, like mother-to-mother support groups and prenatal care;
  - experimentation on ways to make breastfeeding and women's employment more compatible;
  - country case studies/field testing of the economics of breastfeeding guidelines and cost-effectiveness studies; and
  - policy dialogue/advocacy.

Figure 2 shows projected FY 91 obligations for S&T breastfeeding projects by key interventions and depicts the persistent gaps in current funding levels.

# Total S&T Obligations for BFG by Functional Area and Funds Source

## Functional Area

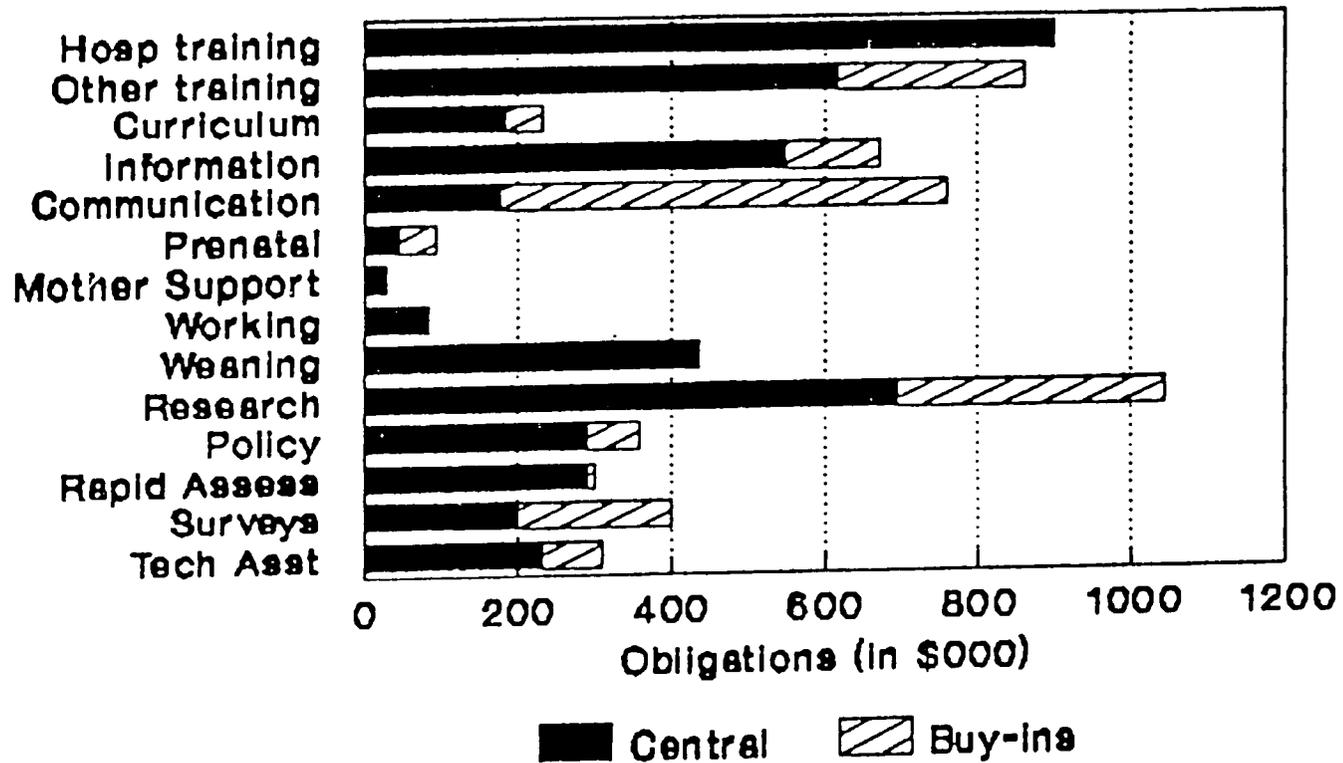


FIGURE 2

13

FY '91

The May 1990 AID Breastfeeding for Child Survival Strategy calls on USAID missions to strengthen and focus breastfeeding promotion within child survival, health, population and nutrition programs and on AID/Washington to continue and expand centrally-funded field support. The strategy defines a number of specific actions to be taken by missions and AID/Washington which cannot be carried out due to the absence of a sizable, dedicated breastfeeding resource. These include:

- sponsoring rapid assessments and surveys in as many countries as possible to understand the nature, magnitude and determinants of breastfeeding practices and to establish a solid data base;
- developing appropriate, country-specific substrategies for each mission which has a Child Survival Strategy and in other interested countries as well;
- continuing, expanding and providing an integrating focal point for ongoing centrally funded S&T/Nutrition, S&T/Population, and S&T/Health projects that provide both long- and short-term technical assistance and training for breastfeeding promotion and support;
- disseminating information widely on the magnitude of the problem of suboptimal breastfeeding practices and workable solutions;
- supporting applied and biomedical research on breastfeeding;
- designing and implementing appropriate activities within ongoing child survival, health, population and nutrition projects to assist host countries to carry out breastfeeding promotion and support with a special emphasis on countries with suboptimal breastfeeding practices;
- fostering linkages between breastfeeding and other programs, including health care financing and private sector activities and initiatives, PL 480 Title II supplementary feeding, and women in development.

The preferred option for increasing AID field support for breastfeeding, recommended by the S&T Breastfeeding Cluster (11/29/90) and approved by the Assistant Administrator for S&T (12/5/90), is to amend the MNHN Project to include a major, dedicated breastfeeding component, to extend the length of the project and increase the budget accordingly and to provide a focal point for the coordination of breastfeeding activities. This option has the following advantages:

- a dedicated breastfeeding initiative would attract attention both within and outside of AID and would attract required funding;

- a sizable S&T procurement would facilitate the establishment of a center of excellence and a critical mass of technical expertise for use by missions until their own bilateral programs get underway;
- a new agreement would provide an adequate ceiling to absorb the extra funding needed to "jump start" the major breastfeeding program envisioned; and
- better integration would increase the impact of resources and eliminate potential areas of duplication.

## **VI. REVISED PROJECT DESCRIPTION**

The objectives of amending the original MNHN Project are: (1) to add a sizable, dedicated breastfeeding component, and (2) to provide for a second phase agreement for maternal and neonatal health and nutrition.: To accomplish these objectives we anticipate making the following changes:

- adding a \$48 million breastfeeding component for infants in addition to other health and nutrition activities for mothers and neonates;
- increasing life of project funding from \$17.5 million to \$86 million (\$49.8 million from S&T core, \$12 million from OYB transfers, and \$24.2 million add-ons and/or buy-ins);
- awarding a 5-year cooperative agreement for breastfeeding in FY 91 through FY 96, with the option of extending it for another two years through FY 98;
- extending PACD from 12/31/93 to 9/30/98 for a total life of project of 10 years to provide adequate time for implementing breastfeeding component as well as second phase of maternal and neonatal health and nutrition activities;
- competitively awarding a Phase II contract or cooperative agreement to continue work on the maternal and neonatal health and nutrition component of the project for the second five years of the extended project (FY 93-FY 98);
- adding capability to absorb funds from a range of other functional accounts and appropriation categories, namely: Agriculture, Rural Development and Nutrition (Section 103); Population (Section 104-b); and the Development Fund for Africa (DFA);
- supporting other activities in the Agency.

## A. Goal and Purpose

The goal of the original project paper remains valid, that is to improve the health, nutritional status and survival of women of reproductive age and their children in developing countries. The revised purpose is to promote breastfeeding, and demonstrate the feasibility of providing a package of effective, appropriate maternal and neonatal health and nutrition services and education to women and their infants in selected developing country settings.

## B. Project Activities

The principal changes proposed are a major increase in the magnitude of outputs related to breastfeeding promotion, and a division of labor between the existing MotherCare contract with John Snow Inc. (and its Phase II successor), and a new cooperative agreement for breastfeeding. The new breastfeeding agreement will have a duration of five years which is the minimum time necessary for a significant impact to be made.

The first major contract under the MNHN Project with John Snow Inc. will continue as planned, with no change in nature, level of effort, substantive focus, geographic emphasis or implementation modes. The only modification proposed at this time is increasing the core funding from \$8.1 million to \$11.3 million to compensate for a shortfall in buy-in funds and to accommodate OYB transfers from Missions, regional bureaus, etc. This contract is expected to conclude in FY 93 when a second, five-year agreement would be competitively awarded to continue this work through the new PACD. The detailed design of this Phase II maternal and neonatal health and nutrition procurement will be based on recommendations of the mid-term evaluation scheduled for late 1991.

The remainder of this section deals with the new breastfeeding component.

It is envisioned that the new breastfeeding activity in FY 1991 will consist of a cooperative agreement for the establishment of a center of excellence to respond to all requests from USAID missions to S&T for breastfeeding field support. A critical mass of technical talent is required, which is experienced in breastfeeding promotion and support, and committed to overcoming constraints to optimal breastfeeding. The recipient institution will bring together a team with multi-disciplinary expertise essential for addressing the complexity of scientific, social, medical and policy issues involved in changing widely prevalent, suboptimal breastfeeding practices. The development of a committed, specialized, flexible institution, capable of providing long-term and short-term breastfeeding program support in all AID regions, will help assure an adequate response capacity over the next decade.

The special needs of developing countries and AID's strategy of building breastfeeding components into ongoing AID-supported and other programs in a number of sectors, require that the recipient institution work closely with AID's Breastfeeding Cluster in a coordinated and collaborative manner, to select up to 10 breastfeeding emphasis countries for long-term assistance

and support, to determine intervention priorities and allocations, and to complement and coordinate this project's activities with those of other ongoing central, bilateral and regional projects as well as those funded by outside agencies to promote breastfeeding. In addition to a new agreement for breastfeeding, the project will also have the capability to access through additions, existing central, regional and bilateral agreements for undertaking activities listed below.

The objective of the breastfeeding agreement will be to assist programs to expand services which enable women to follow optimal breastfeeding practices for their own health and for their infants' health and nutritional status, and survival. Consistent with the goal of the AID Breastfeeding for Child Survival Strategy, the breastfeeding component of the BMNH project will promote the following optimal breastfeeding practices:

- o initiation of breastfeeding within one hour after delivery;
- o establishment and maintenance of exclusive breastfeeding from birth through the first 4-6 months of life;
- o introduction and continuation of hygienic, safe and energy/nutrient dense, semi-solid foods by the end of 6 months of age to complement continued breastfeeding;
- o continuation of breastfeeding for one year or more;
- o increased food (and micronutrient) intake by mothers to meet the nutritional requirements of pregnancy and lactation.

An important project activity will be collecting data and tracking changes in breastfeeding practices using more appropriate indicators and data collection and analysis tools than have been applied to date.

The new breastfeeding component will have four major categories of activities:

1. Long-Term Country Programs
2. Short-Term Technical Assistance and Support
3. Applied Research
4. Support for Other Related Activities

Resources will be available for a number of breastfeeding interventions under the long- and short-term project activities (discussion regarding each is found on pages 28 to 31) including:

- o policy dialogue;
- o training and curriculum development;
- o communication and social marketing;

- outreach to women, e.g., mother support groups and strategies for working women; and
- information dissemination.

These interventions have been selected because research suggests that negative trends in breastfeeding can be reversed with programs containing these elements. For example, AID-funded programs in Indonesia and Honduras have achieved remarkable success in both increasing the numbers of women who breastfeed and in reducing hospital costs. (Reference Annex C: Economic Analysis, Figures C.1. & C.2.). Both of these programs contained a mixture of these critical elements. Moreover, increases in the percent of infants ever breastfed have occurred in countries with programs containing some mixture of these elements, including Colombia, Dominican Republic, Ecuador, Kenya, Mexico, Peru, Sri Lanka, Thailand and Trinidad and Tobago. (These increases were documented by comparing the results of two surveys: the World Fertility Survey conducted between 1972-84 and the Demographic and Health Survey conducted between 1986-89.) Likewise, increases in the median duration of breastfeeding have occurred in Ecuador, Kenya, Peru and Trinidad and Tobago which are attributable to support of breastfeeding interventions in those countries.

The mix of project interventions will be entirely dependent on the country situation. An essential first step in designing the long-term programs will be an assessment in each candidate country of existing breastfeeding practices, their determinants and a compilation of existing policy and programs of breastfeeding promotion in the country. The assessment tool developed by MotherCare under the original MNHN project will be used to guide this exercise. From this assessment, the policy and programmatic gaps that exist at the country level will be identified and plans will be made to address them better through the new breastfeeding agreement, or if appropriate by involving other S&T projects or donors in some of the work. The goal of this exercise is to create comprehensive national breastfeeding programs in as many countries as possible, and to eliminate unnecessary overlap or duplication of efforts. The Agency's Breastfeeding Cluster will play a role in facilitating this assessment. In order to guide the selection of emphasis countries, the Office of Health will compile a current listing of all ongoing AID-funded breastfeeding activities by country using the International Science and Technology Institute's Center for International Health Information (ISTI/CIHI) database. In addition, to supplement this information, interviews with CTOs of the major S&T breastfeeding projects will be held. (This will be a critical step, given the fact that S&T/POP does not contribute information regarding projects to the ISTI/CIHI database.)

In addition to selecting the right mix of interventions, the right mix of technical support will need to be provided in a number of specialties, such as: pediatrics, epidemiology, community medicine, public health nutrition, lactation management, survey research and information systems for tracking breastfeeding indicators, training, marketing and consumer research, economics, public health policy and planning, evaluation/monitoring, breastfeeding assessments and strategies, anthropology and other social sciences, health and nutrition education.

## 1. Long-Term Country Programs

Long-term programs will be conducted in selected countries where suboptimal breastfeeding practices and potential for change warrant it and where either the complexity and level of investment in breastfeeding activities merits such assistance, or where USAID mission staff and funding constraints are found to be an impediment to implementing an appropriate level of breastfeeding assistance. Countries selected for intensive long-term programs must have political commitment, and a potential infrastructure for a successful national program. An "ideal" infrastructure, universally acknowledged by participants at the WHO/UNICEF policymakers meeting on "Breastfeeding in the 1990s: A Global Initiative," and a goal of this project include:

- a national breastfeeding policy;
- a national breastfeeding coordinator with authority over a multisectoral national breastfeeding committee composed of representatives from relevant government departments, non-governmental organizations, professional health associations, USAID, UNICEF, WHO, other interested donors, and private voluntary organizations (PVOs);
- national targets for improving breastfeeding practices with a national system for monitoring attainment of those targets;
- adherence by all health facilities to the Ten Steps to Successful Breastfeeding, set out in the joint WHO/UNICEF statement "Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services" (See Annex F);
- trained health care staff in the skills necessary to implement national policies; and
- integration of breastfeeding policies into overall health and development policies, stressing the protection, promotion and support of breastfeeding within complementary programs such as prenatal and perinatal care, nutrition, family planning services, and prevention and treatment of common maternal and childhood diseases (child survival).

This project, along with others in S&T and USAID bilateral projects, should contribute to an Agency goal of having comprehensive national breastfeeding programs underway in 20 USAID missions by the end of the decade of the 90s, half of which should be in the child survival emphasis countries and some of which may be in advanced developing countries. Selection of the 20 countries will be undertaken in the following manner:

- an initial list of 25-30 potential breastfeeding emphasis countries will be drawn up from:
  - mission cables expressing interest
  - interviews with regional bureaus regarding priority countries

- an analysis of information supplied by the ISTI/CIHI database regarding current central, bilateral and regional projects with a breastfeeding component by country;
- the initial list will be confirmed or revised in consultation with USAID missions and regional bureaus;
- a refined list of 20 countries will be created;
- of the 20 countries, four will have been selected for long-term assistance under the S&T/N Women's and Infants' Nutrition Support (WINS) subproject by the time the breastfeeding component of the BMNH gets underway in FY 92. Therefore, the BMNH Project's breastfeeding component will select candidates for long-term assistance from the remaining 16 countries;
- of the remaining 16 countries an assessment visit will be undertaken in at least ten, but as many as necessary to select the final list of ten for long-term assistance under the BMNH project (unless a recent comprehensive assessment has already been undertaken in the country which can provide the necessary information);
- as resources permit, efforts will be made to undertake comprehensive breastfeeding activities in the remaining six countries, drawing on resources of other S&T projects, USAID bilateral programs, and a possible two-year extension to the breastfeeding component, to achieve the Agency goal of having 20 comprehensive breastfeeding programs underway by the late 90s.

Long-term programs are planned to be of two types: 1) intensive (with resident advisor) and 2) less intensive (without advisor). Resources and management allow for intensive long-term programs in approximately four (4) countries and less-intensive long-term programs in approximately six (6) countries. Resident advisor costs are expected to be equally shared, i.e., 50% of costs to be funded out of core funds and 50% by mission or regional add-ons, while local intervention costs such as salary support, training and IE&C are expected to be 40% funded from core and 60% funded from add-ons. Long-term programs will be phased in gradually as countries are identified.

In intensive programs a resident advisor, local office and staff will collaborate with counterpart institutions over a 3-4 year period to develop a national capability and commitment to sustain a program of breastfeeding promotion and support. This will include a full spectrum of technical assistance as well as financial support for interventions to promote breastfeeding, including: policy formulation/advocacy, planning, research, enhancement of services, training, communication, information dissemination, and monitoring and evaluation systems for tracking trends in breastfeeding practices and cost-effectiveness of interventions.

Countries selected for less-intensive long-term programs will provide variable opportunities for activities that range from local to national, depending on the size of the country. This group

could include countries that already have a strong infrastructure and local expertise with potential for breastfeeding promotion. It could also include countries that are just beginning a breastfeeding effort, and where developing, testing and demonstrating strategies for improving breastfeeding practices could lay the foundation for more intensive efforts later. Interventions in these countries will not require the services of an expatriate resident advisor, but will benefit from repeated, short technical assistance visits. A full spectrum of short-term technical assistance as well as financial support for breastfeeding promotion will be made available to these countries.

A prerequisite for all long-term country programs, either intensive or less-intensive, will be the development by the CA of a database for breastfeeding indicators to track trends in breastfeeding practices and to evaluate the impact of the program. Indicators of breastfeeding practices will be standardized and reported across all countries by the CA for international comparison. At a minimum, these indicators and databases will be expected to provide information to evaluate the achievement of the goal of the AID Breastfeeding for Child Survival Strategy in the long-term country programs with respect to initiation, exclusivity and duration of breastfeeding, and appropriate weaning practices. These monitoring and evaluation efforts will be coordinated to assure standardization and comparability with any major surveys collecting similar information, e.g., the AID-supported Demographic and Health Surveys.

Likewise, the recipient institution will be required to document all costs of the interventions in long-term country programs and carry out cost-effectiveness analysis (CEA) studies. Currently there is a limited amount of literature on the costs and effectiveness associated with breastfeeding programs: See Annex C: Economic Analysis. Cost-effectiveness analysis of breastfeeding interventions supported by the BMNH Project will be helpful in answering questions such as: What aspect of the program is consuming most of the funds and what management changes might improve the efficiency of the program;? and What is the cost per infant death averted by breastfeeding programs?

## 2. Short-Term Technical Assistance and Support

Technical assistance for short periods (three months or less) will be available to as many countries as possible to conduct breastfeeding assessments or surveys, develop country breastfeeding strategies, design projects, strengthen breastfeeding components of ongoing programs, address implementation and evaluation concerns, review and develop training, identify and strengthen community-based mother support groups and assist USAID and other agency field offices in developing breastfeeding activities within the context of their development strategies. An estimated 160 person months of expatriate and 70 person months of local short-term technical assistance will be supported by the breastfeeding component with an estimated 70% supported by S&T core funds and 30% by add-ons.

The cooperating agency receiving breastfeeding assistance will respond to field needs for short-term technical assistance. In addition, specialized expertise not available through this primary field support entity will be accessed through additional funding for buying-into other S&T existing agreements which promote breastfeeding. Support for national programs will be

provided to strengthen local capacities in epidemiological and ethnographic assessments, data analysis and use, policy development, program design, training, social marketing, expansion of community-based support groups, program management and monitoring/evaluation.

Outcomes of the technical assistance will include: strategies that are appropriate given prevailing conditions, program design including prioritization and phased implementation, development of community level infrastructure capable of facilitating mothers in achieving optimal breastfeeding practices, rapid assessments/ethnographic research/economic analyses, and local information dissemination activities to allow national program staff to remain cognizant and actively involved in breastfeeding issues. Wherever possible, as part of short-term technical assistance, the CA will attempt to establish monitoring and evaluation databases on standardized breastfeeding indicators consistent with the approach described under long-term country programs. This will increase the number of countries with data on breastfeeding practices available for international comparison.

### 3. Applied Research

The objective of applied research is to provide policy makers and program managers with the information they need to mobilize support and resources for breastfeeding, overcome obstacles and improve service delivery activities. Applied research as defined here includes information collection through surveys and surveillance, use of operations research approaches, systems analysis, use of ethnographic tools, focus groups, KAP studies, testing innovative modes of mobilizing community support for breastfeeding mothers and other aspects of breastfeeding promotion, economic analysis and cost-effectiveness studies, and field testing of intervention technologies.

An illustrative list of applied research activities that could be supported in up to ten studies under the breastfeeding component are:

- assessment of the constraints to initiation of breastfeeding immediately after birth and solutions;
- assessment of the constraints to exclusive breastfeeding in the first four to six months of life and solutions;
- trials of hospital and community-based interventions that aim to promote exclusive breastfeeding during the first 4-6 months of life;
- evaluation of alternative health facility based approaches to the promotion of exclusive breastfeeding;
- development of key indicators for baseline program assessments, progress monitoring, and impact evaluation;

- ethnographic and other community-based studies of the need for, and ways to mobilize entities that can support women in practicing optimal breastfeeding;
- studies on existing breastfeeding knowledge, attitudes, practices, and policies in a range of sectors for the purpose of identifying potential points of intervention and potential barriers to optimal breastfeeding;
- development of growth charts appropriate for exclusively breastfed infants;
- studies on maternal nutritional supplementation, maternal nutrition and lactation;
- studies on ways to maximize breastmilk consumption in infants of working women;
- documentation of the mortality and morbidity prevention impacts of optimal breastfeeding in different conditions and at different ages during infancy;
- studies on the cost-effectiveness of specific breastfeeding interventions;
- studies of actual expenditures on infant formula by households, by income groups;
- review of specific employer policies related to the accommodation of the breastfeeding mother in the workplace, with emphasis on the initial and continuing costs of such activities, and the efforts required to overcome barriers to institution of such policies;
- studies to estimate the costs of large-scale breastfeeding promotion programs, and measurement of their impact on household decisions regarding breastfeeding;
- studies of household beliefs about the health and contraceptive effects of breastfeeding to understand how the relative costs and benefits of breast and bottle feeding are perceived;
- development of improved theoretical framework to conceptualize household decisionmaking about breastfeeding, and understand the relationship between perceptions of economic consequences and realized economic consequences.

From time to time other topics will be identified and subjected to field study for the purpose of improving the cost-effectiveness of programs. The recipient institution and/or its sub-recipients will manage the bulk of applied research. In addition, AID may directly award small grants to WHO, professional associations or buy into existing AID projects for some research, outside of the cooperative agreement.

Per S&T guidelines dated 19 September 1990, every research activity exceeding \$100,000 will be subject to peer review. Under the breastfeeding component peer review will be performed by a Technical Advisory Group. A detailed peer review plan is found in Annex E. The estimated total value of applied research under the breastfeeding component is \$2.5 million

dollars. It is envisioned that of the ten studies planned, approximately two will begin toward the end of year 1, two more in year 2, five more in year 3, with the final study commencing in year 4. The average length of each study is expected to be two to three years. These ten studies are in addition to research activities that are an integral part of long-term country programs. The sources of funding for the applied research is estimated to be 100% from S&T core funds.

#### 4. Support for Other Related Activities in Breastfeeding

A portion of program resources will be reserved for activities of a worldwide policy nature that will further breastfeeding efforts. These activities will be funded entirely out of core funds and may include:

- Support for WHO and other multilateral entities.
- Support for an interagency group to coordinate and exchange breastfeeding information, somewhat parallel to the International Nutritional Anemia Consultative Group (INACG), the International Vitamin A Consultative Group (IVACG), or the International Council for the Control of Iodine Deficiency Disorders (ICCIDD). Given the past success of the Interagency Group for Action on Breastfeeding (IGAB) in coordinating breastfeeding efforts and exchanging information between AID, WHO, UNICEF and SIDA, a special emphasis will be placed on reactivation of this group, with expanded membership to include other interested donors, and with a goal of consolidation and integration, not duplication of breastfeeding efforts.
- As stated earlier, many different organizations have programs designed to have an impact on maternal and neonatal health. Funds may be used to provide technical assistance (long or short term), program support and training to such organizations in a way that will improve the breastfeeding component of their activities. Possible examples are: PVOs (such as SCF, CARE, FCI, AFRICARE), Pathfinder Fund, the International Center for Research on Women, the International Council of Nurses, local PVOs and professional associations. Cost sharing with the cooperating organizations will be sought, to the extent possible.
- Some technical services may be required that are most available through other U.S. Government Agencies. Existing PASA/RSSA agreements will be used to access these services. If funding already available under these agreements is not sufficient to meet the needs of this project, limited project funds may be put into these agreements.

#### C. Project Interventions

As mentioned previously, a mix of project interventions will be selected depending on the country situation. Table 1 shows major S&T managed worldwide projects that are targeted for coordination with and to complement the new breastfeeding component. Given the variation in what the intervention mix might look like from country to country and the role of many other

**TABLE 1: SELECTED LIST OF MAJOR AID S&T WORLDWIDE PROJECTS FOR COORDINATION OF BREASTFEEDING ACTIVITIES**

PROJECT TITLE	S&T OFFICE	IMPLEMENTING ORGANIZATION	PREDOMINANT ACTIVITY(IES)
Women's and Infants' Nutrition (WIN) Subproject: Lactation Mgmt. Education	Nutrition	Wellstart	Education and training of hospital-based personnel, training of other health care providers and community-based approaches.
Women's and Infants' Nutrition (WIN) Subproject: Service, Technical Assistance and Field Support in Infant Feeding	Nutrition	Education Development Center (EDC)	Supports comprehensive infant & young child feeding (0-3 years of age) interventions in at least four countries; provides technical assistance in project design, analysis, evaluation and monitoring to USAID missions and host country institutions; carries out collaborative inquiries with country institutions to test feasibility of new approaches to solving infant and young child feeding problems; and conducts in-country and regional seminars to disseminate new knowledge and relevant skills.

<p>Women's and Infants' Nutrition (WIN) Subproject: A Global Clearinghouse on Women's and Children's Nutrition</p>	Nutrition	American Public Health Association (APHA)	Information dissemination. Collects and disseminates literature on all aspects of infant feeding and maternal nutrition, including breastfeeding. Publishes newsletter, <u>Mothers and Children</u> , three times a year.
<p>Nutrition Education and Social Marketing (Nutrition Communication Project)</p>	Nutrition	Academy for Educational Development (AED)	Communication and social marketing. Provides field support for nutrition education activities, especially growth monitoring, breastfeeding and weaning practices.
<p>Technology for Primary Health Care (PRITECH II)</p>	Health	Management Sciences for Health (MSH)	Policy dialogue; training; communication and social marketing. Promotes and assists development of ORT/CDD programs through planning and management assistance to governmental and nongovernmental organizations. On a limited basis, advocates breastfeeding promotion, in the context of breastfeeding's role in diarrhea prevention and case management. Stimulates policy dialogue about the need to support breastfeeding activities.
<p>Maternal and Neonatal Health and Nutrition (Mother Care)</p>	Health	John Snow, Inc. (JSI)	Prenatal care and maternal nutrition, training of health care providers, community-based approaches, applied research, rapid assessment, strategy formulation and project design, communication and social marketing.

<p>Natural Family Planning</p>	<p>Population</p>	<p>Institute for International Studies in Natural Family Planning (IISNFP), Georgetown University</p>	<p>Information dissemination, operations research, policy dialogue. Make information and technical resources on natural family planning and breastfeeding available to family planning service providers, consumers and developing country policy makers. Technical assistance and training provided on a limited basis.</p>
<p>Demographic and Health Surveys (DHS)</p>	<p>Health and Population</p>	<p>Institute for Resource Development, Inc.</p>	<p>Surveys to assess trends. Provides technical assistance and financial support for surveys on health- and population-related topics including contraceptive use, antenatal and maternity care, and breastfeeding.</p>

players in supporting different components of a total program, estimation of the percentage of AID program funds from the breastfeeding component to be devoted to each intervention within the comprehensive long-term country programs, is not possible at this stage. However, a comprehensive national program should include all of the following interventions which the breastfeeding component would seek to support, if not already underway or funded by other sources, including other AID projects.

### 1. Policy Dialogue

Policy makers and planners at the national, community and institutional levels have a primary role to play in determining the most appropriate actions to take in the promotion and support of breastfeeding. Public health sector and hospital/clinic policies play a crucial role in mothers' feeding choice and ability to breastfeed. Mothers' abilities to optimally feed their infants and young children are also influenced by labor and worksite policies. In the community, the availability of support structures and organizations (mothers' and women's groups, marketing cooperatives, etc.) similarly influence many women not working in the formal sector. Policies regarding the marketing of breastmilk substitutes, bottles and teats are another key factor. Policy dialogue regarding the economic, health, population and nutrition benefits of breastfeeding will be targeted toward host government policy makers and program designers (in ministries or other government organizations), PVOs and NGOs, medical and other professional associations, administrators of hospitals and other relevant institutions.

Where applicable and appropriate, policy dialogue efforts will be coordinated with those of S&T/Population's Natural Family Planning project. This project is currently making information and technical resources on natural family planning and breastfeeding available to developing country policy makers, such as the booklet and video "Breastfeeding: Protecting a Natural Resource," prepared in collaboration with the S&T/POP Impact Project. In addition, policy dialogue efforts will be coordinated with those of PRITECH II in countries where PRITECH has an active presence and has extended its policy dialogue efforts beyond the control of diarrheal diseases to include breastfeeding promotion.

### 2. Training and Curriculum Development/Revision

Training is expected to play a large and significant role in the Agency's response to the need for assistance in breastfeeding. In such instances where hospital-based lactation management training will be the focus for training activities, the CA will rely on the unique capability of the San Diego Lactation Program, i.e., Wellstart, (subproject of S&T/N's WIN Project). If additional funds are needed to support complementary Wellstart activities in the long-term country programs, this can be accomplished by using BMNH project funds to add-on to Wellstart's existing cooperative agreement with AID. In addition, the CA will draw on Wellstart's extensive network of graduates for the BMNH in-country activities. Where the focus is on training other workers outside of hospitals, e.g., rural health workers, the CA will coordinate with other projects such as PRITECH II, if applicable and appropriate, in addition to ensuring coordination with other donors and agencies.

The primary target audience for training activities includes:

- managers of programs reaching women and infants in significant numbers in a range of sectors;
- public health policymakers;
- entities in charge of basic and in-service medical, nursing, midwifery and nutrition education and training as well as training of traditional birth attendants;
- health workers and their supervisors who implement maternal and child health and child survival activities and who can track key indicators of breastfeeding practices;
- personnel involved in agricultural extension and rural development programs, primary school education, food aid, and family planning programs.

Technical support and limited funds for awareness and sensitization seminars and information exchange meetings aimed at policy and program planning/monitoring staff are included in the breastfeeding component. Wherever possible all training will be planned and co-sponsored jointly with key in-country institutions and other donors. Attempts will be made to provide a steady flow of the most up-to-date information in the local language to trainers and training institutions.

Sponsorship of host country nationals in key posts for brief study tours (up to 4 weeks) to the U.S. or third countries will also be possible. Participant training in the U.S. or in third countries will be available through the project under special conditions when there is no local facility for such training. It will be primarily limited to short-term, in-service training of key country personnel carefully selected by the missions, AID/W and the cooperating agency. Most participants will attend existing courses. However, some courses could be developed and tailor-made by the CA or an institution hired by them for building skills and knowledge in the area of breastfeeding.

Under this component, existing educational materials, including medical, nursing and midwifery school curricula and textbooks, and other paraprofessional training materials will be revised where needed to incorporate appropriate and supportive breastfeeding information. These changes will be facilitated by working closely with medical and other professional health associations. In addition to revising existing materials, new curricula and textbooks will be introduced where appropriate.

Competency-based training methods and curricula will be tailored to fit local needs and conditions. Topics expected to be included are:

- the nature, magnitude and significance of suboptimal breastfeeding practices;
- sociocultural, technological, and political factors that influence breastfeeding practices;

- current status of maternal and child health (MCH) in the country and risk factors for MCH;
- biological and psychosocial aspects of breastfeeding;
- anatomy of the breast and the physiology of lactation;
- nutrition of the mother and child during pregnancy and lactation;
- lactation and birth spacing: the lactational amenorrhoea and other methods;
- clinical skills for the initiation and management of lactation;
- lactation management: mothers who work outside the home and other special circumstances;
- communication and teaching skills for health and other professionals;
- communication and counseling techniques for breastfeeding education at the family level;
- interventions to effect change in health care service delivery systems;
- breastfeeding promotion at the community and societal levels;
- evaluation of breastfeeding promotion activities.

### 3. Communication and Social Marketing

Communication and social marketing programs can positively affect breastfeeding practices by providing information, support and advice to nursing mothers, women and their families; reaching audiences other than families such as policy makers, government officials, administrators, employers, and other influentials; and creating a favorable social environment for breastfeeding mothers by portraying breastfeeding as a normative behavior. Communication activities under the breastfeeding component will stress the following:

- systematic diagnosis of the incidence and underlying causes of specific breastfeeding behaviors and use of social marketing techniques to develop strategies and materials;
- provision of detailed, actionable information on how to breastfeed optimally which moves beyond mere "breast is best" platitudes;
- identification of other issues which are constraints to behavior change such as policies in the workplace or in hospitals and integration with efforts to remove these obstacles;
- evaluation of behavioral change, in order to gauge impact.

Communication and social marketing activities will be closely coordinated with those of other communication projects, including the Nutrition Communication Project and the information, education and communication (IEC) component of MotherCare. At the country level, if other projects (funded by AID or other sources) are already undertaking well-designed IEC activities to promote breastfeeding on a national scale, it will then not be necessary for the BMNH breastfeeding component to support such activities in that country.

#### 4. Outreach to Women

Prenatal and postnatal education and support, community-based support and strategies for working women comprise the three major programmatic areas essential for outreach to women.

- a) Education and counseling will be offered during the prenatal and postnatal period in order to provide pregnant and lactating women with accurate, essential and timely information and advice on how to meet the increased nutrient requirements of pregnancy and lactation and other basic elements of preparation for and "how-to's" of breastfeeding. For this aspect of outreach to women the CA will ensure linkages with the MNHN contractor.
- b) Due to rapid urbanization and the separation of the extended family, new support systems need to be established to assist mothers in their management of both household tasks and breastfeeding. Support systems are needed especially in urban areas where mothers lack the encouragement and practical advice needed for successful breastfeeding. Mother support groups including existing support networks, such as hospital and community outreach workers, traditional community groups and women's clubs will be encouraged. It will be important for the CA to link its efforts with those of indigenous groups such as local La Leche Leagues, as well as other groups.
- c) The project can play an effective advocacy role in demonstrating to employers the benefits of a work environment conducive to breastfeeding. Studies have revealed that efforts by employers to provide on-site day care facilities, places and equipment for expressing and storing milk, and flexible work schedules, have resulted in increased employee productivity, morale and reduced absenteeism. The CA will ensure close coordination with the Women's and Infants' Nutrition Support (WINS) subproject, where appropriate.

#### 5. Information Dissemination

With respect to information dissemination, the breastfeeding component will concentrate on widely distributing important research and intervention findings generated by the project and on sharing such information at seminars, workshops and conferences. The CA will defer to the Clearinghouse on Infant Feeding and Maternal Nutrition to distribute more general information on breastfeeding and coordinate with the Clearinghouse to ensure that the most up-to-date breastfeeding literature is made available to local institutions upon request. Names of individuals and institutions that would like to receive Clearinghouse publications and newsletters on a regular basis will be shared with the Clearinghouse.

#### **D. Phasing of Activities**

The breastfeeding component is expected to be phased in, starting with sensitization and awareness raising through country assessments and strategy formulation followed by field activities, full-fledged program assistance, and finally by stock-taking and reviews of lessons learned at the end of the fifth year of the cooperative agreement. Specific activities at each stage are expected to evolve as follows:

**Phase I (Years 1-2):** Primarily awareness raising regarding the problem of suboptimal breastfeeding practices and advocacy for change:

- Rapid country assessments of breastfeeding situation.
- Country breastfeeding strategy formulation.
- Policy dialogue on benefits of breastfeeding and quantification of benefits, especially economic benefits.
- Work with medical and other professional associations.
- Long-term country program design and implementation.
- Applied research.

**Phase II (Years 3-5):** Short- and long-term technical assistance for breastfeeding promotion projects including:

- Promotion of breastfeeding within child survival/primary health care and family planning projects of governments and PVOs.
- Training of health care workers (outside hospitals), curriculum development, revision of textbooks.
- Mother support groups and community-based activities.
- Strategies for working mothers.
- Research.

**Phase III (Year 5):** Reinforce, review and revise next plan of action, including:

- Evaluations/lessons learned.
- Long-term maintenance of changes made.

- Addressing quality of care and services issues.

#### E. Expected Achievements (End-of-Project Status)

The expected achievements for the breastfeeding component at the purpose level in each long-term country are:

1. Visible, accountable person of appropriate authority responsible for breastfeeding within the country, with chairmanship responsibilities for a national breastfeeding steering committee.
2. National breastfeeding steering committee composed of representatives from relevant government departments, non-governmental organizations, medical associations, donor organizations and PVOs.
3. National breastfeeding policy with targets for improving breastfeeding practices and a system for monitoring achievement of targets.
4. Successful, comprehensive national breastfeeding program with set of appropriately designed interventions, based on assessments, implemented with improved effectiveness.
5. Significant host government budget allocations for breastfeeding activities.
6. Breastfeeding promotion integrated into overall health and development policies.
7. Improved monitoring and evaluation mechanisms established.
8. Results of research disseminated widely to and applied by policy makers to improve breastfeeding programs.

These achievements represent the minimal elements of a successful national program. Progress toward these individual elements will be a gauge by which to measure program success. Making progress toward each of these elements is a purpose of the breastfeeding component of the BMNH project.

The expected achievements for the breastfeeding component at the output level are:

#### Long-Term Country Programs (Country-specific targets will be developed for each.)

1. Percentage of women counseled on appropriate breastfeeding practices using up-to-date, effective communication and social marketing techniques.

2. Percentage of health and other workers trained in a competency-based manner regarding lactation management and breastfeeding promotion.
3. Percentage of health facilities with reformed breastfeeding policies (per WHO/UNICEF "Ten Steps to Successful Breastfeeding" (Annex F).
4. Number of functional mother support groups established.

#### Worldwide

1. Number of breastfeeding curricula developed and/or revised.
2. Seven to ten research projects completed.
3. Number of national assessments of the breastfeeding situation.
4. Database on standardized breastfeeding indicators for tracking trends in breastfeeding practices in all long-term countries and across countries.

In some cases, these outcomes are based on assumptions that are beyond the control of the project itself. For example, it is assumed that adequate levels of funding for the breastfeeding component will be available throughout the life of project. An adequate level of health and other infrastructure and host country participation and resources are assumed. The continued interest and commitment of other donors and other AID entities, especially missions (mission add-ons) is also assumed.

#### F. Coordination

Coordination at every level will be important for program success. To assure coordination within AID, S&T's Breastfeeding Cluster will expand its membership to include regional bureau representatives and will meet on a monthly basis to review activities of all AID centrally managed projects with major breastfeeding promotion components, including this one. The Cluster will play a key role in coordinating long-term breastfeeding country programs across various S&T projects.

The respective CTOs for each of the major centrally managed S&T projects which promote breastfeeding will keep the CA's advised on information reviewed by the Breastfeeding Cluster that the CAs need to know to coordinate their activities. The CAs will in turn be responsible for coordinating all breastfeeding efforts with those of ongoing projects in-country. Special efforts will be made to coordinate, consolidate and integrate breastfeeding activities within the S&T bureau-managed projects with the goal of launching at least 20 comprehensive national breastfeeding programs by the end of the decade of the 90s that are truly expansive or additive and not duplicative.

## **VII. IMPLEMENTATION ARRANGEMENTS**

### **A. Role of Participating Parties**

#### **1. S&T/Health**

An Office of Health-assigned CTO will be responsible for the breastfeeding component and will undertake appropriate coordination with other offices in the Agency such as S&T/N, S&T/POP, PPC, the Regional Bureaus, FVA/PVC and USAID Missions. Much of the coordination, as mentioned previously, will be undertaken through the Breastfeeding Cluster. The CTO will arrange for appropriate mission clearances for proposed activities. The Regional Bureaus and USAID Missions will contribute to this project through appropriate reviews, submissions of requests and clearances, and cost sharing (or add-ons) related to in-country operations and technical assistance.

#### **2. Cooperative Agreement**

The cooperative agreement through which most of the breastfeeding component is likely to be implemented is planned to be competitively bid and preferably awarded to an institution with an established reputation in the field of breastfeeding promotion, and with most, if not all, key staff on the Cooperating Agency's (CA) core team. An established expertise in the breastfeeding area is essential to achieve AID objectives. Existing specialized groups in this field have tended to be focused on a limited set of interventions, and AID will require a CA with capability to manage a comprehensive portfolio of activities. Therefore potential recipients must be willing to expand beyond their current areas of specialization and be comprehensive to compete effectively for the award. In addition from an administrative, management and technical standpoint, a cohesive unit structure committed to the goals and objectives of the project and working together as a team on a day-to-day basis is ideal. The CA will be requested to have their office in the metropolitan Washington area.

The CA will need to establish a core group of individuals that will be responsible for the planning and implementation of the project. The Director, Deputy Director and technical advisors must have management as well as technical skills, as the responsibility for backstopping each of the long-term country programs will be with this core group, with the aid of program assistants. In addition, the members of the core staff will be expected to, except in unusual circumstances, travel frequently and work on this project on a full-time basis. Language capability (FSI-3) in at least French and Spanish will be required among the core team. The tentative staffing plan for the core group which is expected to be funded 100% out of S&T core support, is as follows:

- Director
- Deputy Director

- **Breastfeeding Technical Advisor**
- **Applied Research/Evaluation Advisor**
- **Communication/Social Marketing Advisor**
- **Training Advisor**
- **Program Assistant (3)**
- **Administrative Officer**
- **Secretary (2)**
- **Financial Officer (0.5)**

The CA will be expected to submit reports to AID as follows:

- **Annual Work Plans**
- **Monthly Activity Reports**
- **Annual Progress Reports**
- **Final Report**

The annual progress reports will cover the following areas:

- **Summary of results to date.**
- **Progress made to date on the specific work objectives of the previous year and anticipated date of completion.**
- **Work in progress.**
- **Problems, difficulties, solutions.**
- **Assistance or guidance required of the CTO.**
- **Work objectives for the next year, with anticipated dates for completion of each activity.**

### 3. Relationship with Host Countries

This will remain the same as the original project. Prior to the initiation of a long-term involvement in any country, there will be a written agreement between the CA and the host country counterpart that describes project activities and the responsibilities of both parties, and which the local USAID mission and AID/W CTO must approve. It is expected that host country personnel (from the government, universities, or PVOs) will play a major role in the implementation of project activities and that expatriate technical assistance will be used only as necessary. Thus the placement of a long-term advisor in a selected country will only be approved by AID after it is clear that host country personnel are not available and/or able to carry out the project activities.

Applied research activities will be handled in a similar way. Following successful peer review, there will be an agreement between a local implementing organization and the CA, approved by the host government (or other organizations as necessary) as well as the local USAID mission and AID/W, that describes the study and spells out individual and joint responsibilities.

An important output of the breastfeeding component will be the development of capabilities in cooperating countries to design, implement and evaluate breastfeeding promotion projects.

### 4. Technical Advisory Group

In addition to the TAG already set up for the maternal and neonatal health and nutrition component, it is planned to establish a second TAG to assist AID in technical monitoring and review of the breastfeeding component, in addition to performing peer review for all research exceeding \$100,000. As peer review panelists, members of the TAG will be impartial experts from international organizations, the U.S. academic community, other donor organizations, PVOs, relevant AID projects, independent consultants and persons representing the views of developing countries. In order to optimize collaboration among AID S&T projects with breastfeeding activities, there should be some sharing of TAG members between this breastfeeding agreement and other S&T projects, including the maternal and neonatal health and nutrition component of this BMNH project.

In addition to its peer review role for applied research, the TAG will provide expert review of other aspects of the project and make recommendations for improvements. TAG meetings are expected to be held four times over the life of the breastfeeding agreement, although other meetings may be convened. TAG members will meet to review initial work plans for project implementation approximately three months after the project starts. Important functions of this first review meeting will be the development of a research plan, criteria against which project achievements will be measured, and indicators of breastfeeding practices to be monitored.

The next meeting of the TAG is expected to be held approximately 18 months after the agreement starts. The purpose of this meeting will be to review beginning implementation of long-term program activities and the research component of the project. The meeting will also review

the adequacy of the database for breastfeeding indicators and the evaluation criteria that have been designed, the coverage and other objectives that have been established for country programs.

The third TAG meeting will be held at the end of the third year of the agreement. The theme of this meeting will be the development of plans to integrate the information from the different project activities (plus information being developed elsewhere) into lessons learned and plans for the future.

The final TAG meeting will be held close to the end of the project. This meeting will focus on review/evaluation of project activities, the degree to which project objectives have been met and dissemination of lessons learned and future activity in the breastfeeding area.

Members of the TAG may be invited to participate in regular ongoing evaluations of the progress of the project. They may also assist the CA in developing research plans and in reviewing proposals, and will provide general assistance to the CA and AID as requested.

#### B. Schedule

A schedule of major project activities is attached as Annex B.

#### C. Evaluation

The original Maternal and Neonatal Health and Nutrition project's MotherCare contract will have an external mid-project and final evaluation per design. The breastfeeding agreement and Phase II maternal and neonatal health and nutrition agreement will also have external mid-project and final evaluations, and an additional final evaluation for the breastfeeding component if it is extended for two additional years. The new tentative schedule of evaluations will be:

- Maternal and Neonatal Health and Nutrition I
  - Mid-project evaluation..... 11/91
  - Final evaluation..... 6/93
- Maternal and Neonatal Health and Nutrition II
  - Mid-project evaluation..... 4/96
  - Final evaluation..... 6/98

● **Breastfeeding Promotion**

- Mid-project evaluation..... 4/94
- Final evaluation..... 6/96
- If extended for 2 more years,  
a second final evaluation  
will be done..... 6/98

The scope and content of the evaluations in the MNHN project paper remain valid.

**VIII. FINANCIAL PLAN**

**A. Funding Levels, Sources, Buy-Ins/Add-Ons**

The original project paper estimated project costs for maternal and neonatal health and nutrition activities at \$17.5 million for five years. Ten million was to come from S&T and the remaining \$7.5 million from other sources such as buy-ins. This amendment increases the total budget of the project to \$86 million. Of the new total \$49.8 million will be authorized by S&T, an additional approximately \$12 million is anticipated in OYB transfers from other offices in S&T, Regional Bureaus and USAID missions. The remainder will come from buy-ins/add-ons from other sources such as Regional Bureaus and USAIDs. Regional bureaus have expressed interest in adding-on to the BMNH's breastfeeding cooperative agreement and a provision will be made for region-wide add-ons on an annual basis in addition to country-specific add-ons.

**B. Use of S&T and Other Funds**

S&T funds totaling \$49.8 million will be used to cover the majority of the core costs of implementing the project. Core costs include long-term CA staff, information services, evaluation, office expenses, applied research and workshops. S&T funds will also be used for topping-up cooperative agreements, grants and contracts procured by other AID centrally located offices for breastfeeding promotion which are underfunded and critical for the accomplishment of BMNH project objectives. A portion of long-term programs and short-term technical assistance activities will also be funded by S&T funds. Regional Bureau, USAID and other funds will be utilized primarily for long-term country interventions, and short-term technical assistance.

Tables 1 through 5 provide a more detailed breakdown of funding. Table 5 shows the assumed proportionate distribution of core funding versus buy-ins/add-ons by activity. An average of \$300,000 per year for local interventions to promote breastfeeding has been derived from an

analysis of the costs of successful national breastfeeding programs of the last decade (See Annex D: Financial Analysis.)

NB:

Contained within the following budgets is a detailed breakdown of the costs for the breastfeeding cooperative agreement, years 1991-1996. No detailed budget for the Maternal and Neonatal Health and Nutrition agreement, Phase II has been provided. The Phase II MNHN agreement budget will be constructed at a later date based on recommendations from the project's mid-term evaluation in the Fall of 1991. However, for the time being, it is assumed that proportionate distribution of the total budget by line item for this component will be similar to that of Phase I (plus inflation). The mid-term evaluation of the breastfeeding component will provide the basis for a detailed budget for years 6 & 7 should the cooperative agreement be extended. For the time being, it is assumed that proportionate distribution of the total budget by line item will be similar to that of Years 1 through 5 (plus inflation).

**TABLE 1**  
**ANTICIPATED PROCUREMENTS BY COMPONENT**  
**(\$ MILLION)**

PROCUREMENTS	S&T	BUY-INS	TOTAL
<b><u>Breastfeeding Component</u></b>			
Cooperative Agreement - FY 91-96	20.0*	10.0	30.0
Cooperative Agreement - FY 96-98	8.0*	4.0	12.0
Topping-Up Other Procurements	5.0	0.0	5.0
WHO, PVO, and Other Grants	0.5	0.0	0.5
Evaluations, Conferences, Others	0.5	0.0	0.5
<b>TOTAL</b>	<b>34.0</b>	<b>14.0</b>	<b>48.0</b>
<b><u>Maternal and Neonatal Component</u></b>			
JSI Contract - FY 88-93	11.3*	2.2	13.5
Follow-On Contract - FY 93-98	15.0*	8.0	23.0
WHO Grant	0.7	0.0	0.7
Evaluations, Other	0.8	0.0	0.8
<b>TOTAL</b>	<b>27.8</b>	<b>10.2</b>	<b>38.0</b>
<b>GRAND TOTAL</b>	<b>61.8</b>	<b>24.2</b>	<b>86.0</b>

\* Assumes OYB transfers of \$5 million for BF Cooperative Agreement FY 91-96; \$2 million for BF Cooperative Agreement FY 96-98; \$2 million for JSI Contract FY 88-93; and \$3 million for Follow-On Contract FY 93-97.

**TABLE 2**  
**Breastfeeding, Maternal and Neonatal Health**  
**Estimated Budget by Activity**  
**(\$ million)**

	<b>BREASTFEEDING</b>			<b>MATERNAL/ NEONATAL</b>		
	<b>S&amp;T **</b>	<b>Buy- Ins</b>	<b>Total</b>	<b>S&amp;T **</b>	<b>Buy- Ins</b>	<b>Total</b>
Short-term TA/Training	10.6	5.6	16.2	8.4	4.3	12.7
Long-term Assistance	11.3	6.4	17.7	11.1	5.8	16.9
Applied Research	4.5	2.0	6.5	6.6	0.1	6.7
Other*	7.6	0.0	7.6	1.7	0.0	1.7
<b>GRAND TOTAL</b>	<b>34.0</b>	<b>14.0</b>	<b>48.0</b>	<b>27.8</b>	<b>10.2</b>	<b>38.0</b>
(%)	(71)	(29)		(73)	(27)	

\* Includes S&T/H allocation to project purposes not through the principal CA such as buy-ins to other S&T procurements, midterm and final project evaluations, support for information dissemination, support for coordination of work with other agencies, grants to WHO, and other unsolicited proposals.

\*\* Includes projected OYB transfers per Table 1.

NB: Under the breastfeeding component, short-term TA and training comprise 34% of total expenditures, long-term assistance 36%, applied research 14%, and other 16%. For the maternal and neonatal health and nutrition component, short-term TA and training comprise 34% of total expenditures, while long-term assistance comprises 44%, research 18% and other 4%.

**TABLE 3**  
**OBLIGATION SCHEDULE - S&T FUNDS ONLY**  
**(\$'000)**

<b><u>FISCAL YEAR</u></b>	<b><u>OBLIGATIONS</u></b>	<b><u>EXPENDITURES</u></b>	<b><u>PIPELINE</u></b>
1988	582	-	-
1989	1584	510	1656
1990	2550	1594	2612
1991	6540*	3100	6052
1992	6600	6750	5902
1993	7244	7850	5296
1994	8300	8000	5596
1995	8300	9000	4896
1996	8200	9000	4096
1997	7700	9000	2796
1998	4200	6996	-
<b>TOTAL</b>	<b>61,800</b>	<b>61,800</b>	

\*The S&T/H OYB for the MNHN Project for FY 91 is \$4.14 million (including two OYB transfers from Indonesia and AFR). Efforts are being made to secure the remaining \$2.4 million required in FY 91 for the breastfeeding component from fallout, reserve or de-obligated funds.

**TABLE 4**  
**BREASTFEEDING COMPONENT BUDGET ESTIMATES - OVERVIEW**  
**Cooperative Agreement: FY 91-96**

<b><u>S&amp;T HEALTH AND ADD-ON FUNDS</u></b>	<b><u>\$000</u></b>
Salaries and Fringe	4400
Overhead	2900
Consultants	1180
Travel, Transportation & Per Diem	3000
Allowances	700
Subprojects (includes country programs & research)	15965
Nonexpendable Equipment & Commodities	230
Other Direct Costs	1500
Contingency	125
<b>GRAND TOTAL</b>	<b>30000</b>

TABLE 5: DETAILED BUDGET ESTIMATES

BUDGET FOR BREASTFEEDING COOPERATIVE AGREEMENT 1991-1996 (US \$)

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL	CORE TOTAL	ADD-ON TOTAL
<b>SALARIES</b>								
Project Director	70000	73500	77175	81034	85085	386794		
Deputy Director	60000	63000	67150	69458	72930	331538		
Breastfeeding Tech. Advisor	55000	57750	60638	63669	66853	303910		
Research/Evaluation Advisor	55000	57750	60638	63669	66853	303910		
Training Advisor	55000	57750	60638	63669	66853	303910		
Communication Advisor	55000	55000	57750	60638	63669	292057		
Program Assistant (3)	81000	85050	89303	93768	98456	447576		
Administrative Officer	35000	36750	38588	40517	42543	193397		
Financial Officer (0.5)	15000	15750	16538	17364	18233	82884		
Secretary (2)	40000	42000	44100	46305	48620	221025		
Fringe @ 12%	62520	65646	68928	72375	75993	345462		
<b>TOTAL -- SALARIES</b>	<b>583520</b>	<b>609946</b>	<b>640443</b>	<b>672465</b>	<b>706089</b>	<b>3212464</b>	<b>3212464</b>	
							(100%)	
<b>OVERHEAD (70% D.L.)</b>	<b>408464</b>	<b>426962</b>	<b>448310</b>	<b>470726</b>	<b>494262</b>	<b>2248724</b>	<b>2248724</b>	
							(100%)	
<b>CONSULTANTS</b>								
@ Daily Rate \$250 (expat.) 22 d/mo x 160 person mo.	176000	184800	194040	203742	213929	972511		
@ Daily Rate \$125 (local) 22 d/mo x 70 person mo.	38500	40425	42446	44569	46797	212737		
<b>TOTAL -- CONSULTANTS</b>	<b>214500</b>	<b>225225</b>	<b>236486</b>	<b>248311</b>	<b>260726</b>	<b>1185248</b>	<b>829674</b>	<b>355574</b>
							(70%)	(30%)
<b>TRAVEL</b>								
<b>AIRFARE/International</b>								
Core Staff 25 RTs/yr @ \$3000/RT	75000	78750	82688	86822	91163	414422	414422	
							(100%)	
Consultants 40 RTs/Yr @ \$3000/RT	120000	126000	132300	138915	145861	663076	464153	198923
							(70%)	(30%)
Technical Advisory Group 5 TAG @ \$3000/RT (1 RT/Yr 1,2,3,5)	15000	15750	16538	0	18191	65479	65479	
							(100%)	
<b>AIRFARE/Domestic</b>								
Core Staff 15 RT/yr @ \$400 RT	6000	6300	6615	6946	7293	33154	33154	
							(100%)	
Technical Advisory Group 5 TAG @ \$400/RT (1 RT/Yr 1,2,3,5)	2000	2100	2205	0	2426	8731	8731	
							(100%)	

TRANSPORTATION

US Trans. (taxi,bus,etc.)	2000	2100	2205	2315	2431	11051	11051 (100%)	
In-country Field Trans. 200 Trips/Yr x \$150/Trip	30000	31500	33075	34729	36465	165769	82884 (50%)	82884 (50%)
TOTAL -- TRAVEL	250000	262500	275625	269727	303830	1361681		
PER DIEM								
Core Staff \$140/d x 24d x 25 RTs/Yr	84000	88200	92610	97241	102103	464153	464153 (100%)	
Consultants \$140/d x 30d x 40 RT/Yr	168000	176400	185220	194481	204205	928306	649814 (70%)	278492 (30%)
Technical Advisory Group \$131 x 10 x 2d x 4 mtgs	10480	11004	11554	0	12710	45748	45748 (100%)	
TOTAL -- PER DIEM	262480	275604	289384	291722	319017	1438207		
NON-EXPENDABLE EQUIP./COMM.								
Computer Equip. & Supp.	40000	1500	1575	1654	1736	46465		
Office Equip. & Furn.	35000	500	525	0	0	36025		
TOTAL -- E/M/S	75000	2000	2100	1654	1736	82490	82490 (100%)	
OTHER DIRECT COSTS								
Office Rent	42000	44100	46305	48620	51051	232077		
Office Utilities	7200	7560	7938	8335	8752	39785		
Office Supplies, exp.	8000	8400	8820	9261	9724	44205		
DBA Insurance @4.25/\$100	7000	7350	7718	8103	8509	38679		
Comms.-Phone,DHL,Post	36000	37800	39690	41675	43758	198923		
Dissemination of Reports	10000	10500	11025	11576	12155	55256		
Workshops 1/yr @ \$36,000	36000	37800	39690	41675	43758	198923		
Reproduction	25000	26250	27563	28941	30388	138141		
Confer. (TAG, NCIH/APHA)	2000	2100	2205	2315	2431	11051		
Books/Subscriptions	1000	1050	1103	1158	1216	5526		
Equipment Rental/Repair	8400	8820	9261	9724	10210	46415		
Outside Services/Typing	8400	8820	9261	9724	10210	46415		
Other Expenses	1800	1890	1985	2084	2188	9946		
TOTAL -- ODC	174200	182910	192056	201658	211741	962565	962565 (100%)	
APPLIED RESEARCH								
10 @ \$75000/Yr/Study (1/yr 1, 4/yr 2, 9 yrs 3,4, & 10/yr 5)	75000	315000	744188	781397	546978	2462562	2462562 (100%)	

LONG TERM ASSISTANCE WITH ADVISOR

SALARIES

(2 countries/yr 2

4 countries/yr 3, 4 & 5)

Advisor @ \$5,000	0	110000	231000	242550	254678	838228
Fringe @ 12%	0	13200	27720	29106	30561	100587
Subtotal	0	123200	258720	271656	285239	938815
Overhead (70% D.L.)	0	86240	181104	190153	199667	657170

LOCAL STAFF

Admin. Officer @ \$8000	0	16000	33600	35280	37044	121924
Secretary @ \$5000	0	5000	10500	11025	11576	38101
Guards (2) @ \$2000	0	8000	16800	17640	18522	60962
Driver @ \$2000	0	4000	8400	8820	9261	30481
Subtotal Local Staff	0	33000	69300	72765	76403	251468

Subtotal Salaries	0	242440	509124	534580	561309	1847453
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TRAVEL & TRANSPORT

AIRFARE/International

Advisors & Family

RT Entry/Exit @ \$1500	0	12000	12600	0	25760	50360
R&R/yr @ \$2000	0	16000	0	35200	0	51200
Home leave @ \$3000	0	0	25200	0	0	25200

Subtotal Travel	0	28000	37800	35200	25760	126760
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SHIPPING

Air Freight	0	6300	6615	0	29106	42021
Sea Freight	0	11520	12096	0	25344	48960
Vehicle Transport	0	4000	4200	0	8800	17000
HHE Storage	0	7240	11634	8448	11316	38638

Subtotal Shipping	0	29060	34545	8448	74566	146619
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ALLOWANCES

Post differential @ 20%	0	22000	46200	48510	50936	167646
Housing	0	40000	84000	88200	92610	304810
Temporary Lodging	0	3000	3150	0	0	6150
Education	0	28000	58800	61740	64827	213367

Subtotal Allowances	0	93000	192150	198450	208373	691973
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OTHER DIRECT COSTS

DBA	0	3000	6300	13230	27783	50313
SOS	0	1000	2100	4410	9261	16771
Office Rent	0	40000	84000	88200	92610	304810
Communications	0	14000	29400	30870	32414	106684
Copying	0	2000	4200	4410	4631	15241
General	0	2000	4200	4410	4631	15241
Postage	0	3000	6300	6615	6946	22861

Subtotal DDC	0	65000	136500	152145	178274	531919
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<b>EQUIPMENT/MATERIALS</b>								
Household furnishings	0	7000	7350	1000	0	15350		
Office Supplies	0	8000	16800	17640	18522	60962		
Shipping	0	4000	8400	1000	1000	14400		
Computer Equip./Office Furn	0	17000	35700	1000	1000	54700		
Subtotal EMS	0	36000	68250	20640	20522	145412		
Subtotal LT Advisor	0	493500	978369	949463	1068804	3490136	1745068 (50%)	1745068 (50%)
<b>LOCAL INTERVENTIONS</b>								
Per country/year local costs research, salary support, training, IEC -- 2/yr 2, 4/yr 3,4,5 @ \$300,000/yr)	0	630000	1323000	1389150	1458608	4800758	1920303 (40%)	2880455 (60%)
TOTAL--LT COUNTRY W/ADVISOR	0	1123500	2301369	2338613	2527411	8290894		
<b>LONG-TERM ASSISTANCE (WITHOUT ADVISOR)</b>								
Per country/year local costs research, salary support, training, IEC -- 1/yr 1, 3/yr 2, 6/yr 3,4,5 @\$300,000/yr)	300000	945000	1984500	2083725	2187911	7501136	3000455 (40%)	4500682 (60%)
SUBTOTAL	2343164	4368647	7114461	7359997	7559702	28745971	18703894 (65%)	10042078 (35%)
CONTINGENCY @ 4.5%	105442	196589	320151	331200	300647	1254029	1254029 (100%)	
GRAND TOTAL	2448606	4565236	7434612	7691197	7860349	30000000	19957923 (67%)	10042078 (33%)

**ANNEX B: IMPLEMENTATION SCHEDULE**

A revised schedule of major project activities by Fiscal Year is given below:

**BREASTFEEDING, MATERNAL AND NEONATAL HEALTH AND NUTRITION PROJECT  
(936-5966)**

<b>A.I.D. ACTIONS</b>	<b>88</b>	<b>89</b>	<b>90</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>
PP Approval	x										
PP Amendment Approval				x							
<u>Breastfeeding Component</u>											
-Cooperative Agreement Signed				x							
-Extension of CA									x		
-Buy-Ins to Other Projects					x	x	x	x	x		
-WHO, PVO, and Other Grants				x	x		x		x		
-Evaluations						x			x		x
-TAG Meetings					x	x		x	x	x	x
<u>Maternal and Neonatal Component*</u>											
-J/SI Contract	x										
-Follow-On Contract						x					
-WHO Grant	x										
-Evaluations				x		x			x		x
-TAG Meetings			x	x	x	x	x	x		x	x
<u>CA ACTIONS</u>											
<u>Breastfeeding Component</u>											
-Long-term country program assistance											
Intensive Countries (2 in year 2; 4 in years 3, 4, & 5)						x	x	x	x		
Less-Intensive Countries (1 in year 1; 3 in year 2; 6 in years 3, 4 and 5)					x	x	x	x	x		
-Short-term technical support					x	x	x	x	x		
-Applied Research (1 study/year 1; 4 studies/year 2; 9 studies/years 3 & 4, and 10 studies/year 5)					x	x	x	x	x		
-Other					x	x		x			

\*The implementation plan for the Phase II Agreement (FY 93-FY 98) will be designed based on the mid-term evaluation recommendations (Fall 1991) from Phase I.

Narrative Summary (NS)	Measurable Indicators (MI)	Means of Verification (MOV)	Important Assumptions
<p><b>Goal:</b></p> <p>1 To improve the health &amp; nutritional status of women &amp; children in developing countries.</p>	<p>1.1 Reduction of maternal, neonatal &amp; infant morbidity, mortality &amp; malnutrition. Improved breastfeeding, prenatal &amp; birthing practices.</p>	<p>1.1 National vital statistics, DHS data, surveys.</p>	<p>(goal to supergoal)</p> <p>1.1 Selected health &amp; nutrition strategies/interventions (including breastfeeding) are effective in changing practices and improving maternal &amp; child health &amp; nutritional status.</p>
<p><b>Purpose:</b></p> <p>1 To promote breastfeeding &amp; demonstrate feasibility of providing a package of effective, appropriate maternal &amp; neonatal health and nutrition services &amp; education to women &amp; their infants in selected developing country settings.</p>	<p><b>End of Project Status:</b></p> <p>1.1 National programs of maternal/neonatal care adopted in 5 of 8 project countries.</p> <p>1.2 Successful, comprehensive national breastfeeding programs in 8-10 countries including: person of appropriate authority responsible for breastfeeding (BF); national BF steering committee; nat'l BF policy with targets for improving BF practices &amp; a system for monitoring achievement of targets; set of appropriately designed interventions based on assessments; significant health budget allocations for BF; BF promotion integrated into overall health and development policies.</p> <p>1.3 Improved monitoring &amp; evaluation mechanisms established in all long-term country sites.</p> <p>1.4 Results of research widely disseminated.</p>	<p>1.1 Project records, MOH reports.</p> <p>1.2 Project records, MOH reports and surveys.</p> <p>1.3 Project records, MOH reports.</p> <p>1.4 Project records, TAG reviews.</p>	<p>(purpose to goal)</p> <p>1.1 MOHs will commit resources &amp; adjust policies to support program maternal/neonatal care.</p> <p>1.2 Same as 1.1.</p> <p>1.3 Improved techniques and indicators will be available for monitoring and evaluation.</p> <p>1.4 Cooperative Agency will have skills needed to identify and carry out relevant research projects.</p>
<p><b>Outputs:</b></p> <p>1 Increased coverage of women with interventions to prevent tetanus, prenatal care &amp; safe delivery by trained attendants, &amp; with BF promotion interventions, i.e., IEC, mother support groups, maternity care &amp; follow up by trained providers in health facilities with supportive BF policies.</p> <p>2 Health and other workers trained in BF and maternal/neonatal care; curricula developed/revised; health facilities policy reforms.</p> <p>3 Research projects in BF &amp; maternal/neonatal health/nutrition implemented.</p>	<p><b>Magnitude of Outputs:</b></p> <p>1.1 Percent of reproductive-age women &amp; newborns protected against tetanus via complete immunization or clean delivery; percent of pregnant women who received at least 3 prenatal care visits; percent of women delivered by a trained birth attendant; percent of women receiving BF counseling; number of functional mother support groups established for BF.</p> <p>2.1 Percent of health professionals trained.</p> <p>2.2 Number of curricula developed/revised.</p> <p>2.3 Percent of health facilities with reformed BF policies. (Site-specific targets to be developed for #'s 1.1., 2.1, &amp; 2.3)</p> <p>3.1 Number of research projects completed.</p> <p>3.2 Methodology for conducting rapid assessments of the BF situation and number of assessments completed.</p> <p>3.3 Database on standardized BF indicators for tracking trends in BF practices in all long-term countries &amp; across countries.</p>	<p>1.1 Health interview surveys, project records.</p> <p>2.1 Health worker, facility surveys, project records. (Same for 2.2 and 2.3)</p> <p>3.1 Project records.</p> <p>3.2 Project records.</p> <p>3.3 Project records.</p>	<p>(output to purpose)</p> <p>1.1 Relevant skills &amp; expertise required to increase coverage with quality services will be mobilized by MOH &amp; project staff &amp; women will use services.</p> <p>2.1 Training will improve workers' skills &amp; contribute to health facility reforms and improved quality of care; improved curricula will contribute to better health professional KAP and improved information given to women &amp; their families.</p> <p>3.1 Appropriate research questions &amp; projects will be identified &amp; carried out well.</p> <p>3.2 Improved techniques &amp; indicators will be available for studying BF behavior.</p> <p>3.3 Technical expertise is available.</p>
<p><b>Purpose:</b></p> <p>1 Technical assistance, training, materials and equipment, partial salary support, and support for interventions and research.</p> <p>2 Local governmental &amp; non-governmental program resources.</p>	<p>1.1 See budget.</p>	<p>1.1 Project records &amp; budget.</p> <p>2.1 Midterm and final evaluation.</p>	<p>(purpose to goal)</p> <p>1.1 AID child survival, family planning &amp; food assistance will continue to be available in a timely, appropriate fashion.</p> <p>2.1 Contractor/recipient implementation mechanism able to meet broad interdisciplinary needs.</p>

## **ANNEX C: ECONOMIC ANALYSIS\***

Awareness of the economic contribution of breastfeeding, and the costs associated with its decline, are crucial from a policy perspective. In this section, the economic contribution of breastfeeding is considered, largely drawing upon a recently completed, comprehensive study that reviewed all of the cost analysis literature from the mid-1970s to the present. The study was funded by AID's Bureau for Program and Policy Coordination and authored by Drs. Ruth Levine and Sandra Huffman of the Center to Prevent Childhood Malnutrition. Their review and proposed conceptual framework for studying the economic benefits of breastfeeding provide an excellent foundation upon which to build the further cost-effectiveness analysis proposed under the new breastfeeding component. Building on the work started by Drs. Levine and Huffman, the new breastfeeding component will include collection of cost-effectiveness data for the breastfeeding interventions undertaken with AID assistance in 8-10 long-term countries.

The dearth of empirical studies done to date preclude a precise estimation of the relationship between programmatic costs of promoting breastfeeding and the health, nutrition, population and child survival outcomes (effectiveness or impact) that will result from those investments. The new breastfeeding component through the cost documentation and impact evaluation of the long-term interventions and through applied research is expected to make a major contribution to filling this gap in the current state of knowledge on the economic benefits of breastfeeding.

Of the studies that provide cost-effectiveness information, most have examined the economic value of breastfeeding at four distinct levels: the nation as a whole, the public sector, the individual health care institution, and the household. Elements considered when analyzing the costs and savings associated with breastfeeding at these four levels in developing countries are described in Table C.1. Other studies have related the cost of breastfeeding programs to health impacts such as averting diarrheal morbidity and mortality.

### **National Level**

At a national level, expenditures for imports of breastmilk substitutes range annually from \$1 million for small Central American countries to over \$20 million per year in larger countries, with Brazil spending \$70 million per year in the 1970s. The value of breastmilk at a national level has also been estimated, based on the potential cost of replacing current breastmilk production with substitutes. These replacement costs range annually from \$12.5 million for Papua New Guinea to \$140 million for Bangladesh. In a comprehensive discussion of the economic value of breastmilk to the Indonesian economy, Rohde (1982) estimated the net value of mother's milk, calculated as its retail value less production costs, at roughly \$400 million in 1980. In comparing this net value with the Indonesia Government's Budget and Trade for 1980, mother's milk was found to be worth roughly twice the entire 1980/81 Indonesian health budget,

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\* The economic considerations for the maternal and neonatal health and nutrition component of this project remain as outlined in the original project paper.

**Table C.1. Elements of costs and savings associated with breastfeeding in developing countries**

	<b>Costs of breastfeeding</b>	<b>Costs of bottlefeeding</b>
<b>National Level</b>	<ul style="list-style-type: none"> <li>■ Potential loss of women's productivity/economic contribution</li> <li>■ Potential loss of taxes from sales of locally-produced breastmilk substitutes</li> </ul>	<ul style="list-style-type: none"> <li>■ Aggregate expenditures on breastmilk substitutes and supplies (goods costs)</li> <li>■ Infant and child lives lost</li> </ul>
<b>Public Sector</b>	<ul style="list-style-type: none"> <li>■ Costs of breastfeeding promotion activities (mass campaigns)</li> <li>■ Costs of breastfeeding promotion activities (within public health care institutions)</li> <li>■ Potential loss of tax revenues from local breastmilk substitute manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>■ Expenditures for breastmilk substitutes and supplies by government institutions (goods cost)</li> <li>■ Public health care costs</li> <li>■ Public family planning costs</li> <li>■ Interest on debt incurred by importation of breastmilk substitutes</li> </ul>
<b>Hospital Level</b>	<ul style="list-style-type: none"> <li>■ Staff training</li> <li>■ Education and support of new mothers</li> <li>■ Modification of physical plant to allow rooming-in</li> </ul>	<ul style="list-style-type: none"> <li>■ Staff time for preparation and feeding</li> <li>■ Expenditures on breastmilk substitutes, bottles and other equipment, pharmaceutical supplies (oxytocin, etc.)</li> <li>■ Increased hospital stay and health care costs</li> </ul>
<b>Household Level</b>	<ul style="list-style-type: none"> <li>■ Maternal time for feeding and lost employment opportunities</li> <li>■ Maternal dietary intake increased</li> </ul>	<ul style="list-style-type: none"> <li>■ Caretaker's time for preparation and feeding</li> <li>■ Expenditures on breastmilk substitute, bottles and other equipment, fuel</li> <li>■ Expenditures on health care for ill child</li> <li>■ Caretaker's time for care of ill child</li> <li>■ Loss of child's potential productivity/economic contribution</li> <li>■ Expenditures associated with higher fertility, or increased use of contraceptives</li> </ul>

with a value to the economy close to that of exported rubber or coffee, or imported textiles or rice in 1978. Rohde further calculated that if breastfeeding practices were to change significantly, i.e., a reduction in the mean duration of breastfeeding, the loss to the economy would be over \$200 million, a figure that would have to be made up to a large degree by imported milk. Another study in 1979 concluded that the costs to feed a sufficient quantity of formula to an infant are four to five times greater than the costs of breastfeeding including increasing the dietary intake of the mother to meet the nutritional requirements of lactation. Even if the mother's food were imported, it would cost less than half the foreign exchange of importing formula. It is clear from these studies that mother's milk is a major national economic resource.

### Public Sector Level

Distinct from the national level, the public sector comprises the full range of government-supported agencies and programs, as well as the government itself. At this level, the costs of communication programs may be considered. One study estimates the costs of mass media programs at approximately \$1 to \$5 per mother exposed (Patel, 1989). Phillips, et al (1987) estimate costs at \$1.50 to \$11.00 per mother. Also at this level, one may examine the cost implications of breastfeeding to family planning programs. Rohde's (1982) study in Indonesia reported that an additional \$80 million would have to be spent on family planning services in the absence of breastfeeding. These estimates were based on the prevalence and assumed contraceptive effect of breastfeeding and the cost of family planning. In countries where the public sector provides infant formula or milk to families with infants, public sector costs can be substantial. In the U.S. for example, over \$500 million is spent annually on infant formula alone through the Women, Infants, and Children Supplemental Feeding Program (WIC) (Harvey, et al, 1989). This represents about 30% of all infant formula sales in the U.S., and more than one-third of the entire WIC budget.

### Hospital Level

At the individual health care institution level, savings have resulted from training hospital-based personnel, who have in turn instituted practices and policy reforms more conducive to breastfeeding within their institutions. For example, costs of regional training workshops for hospital personnel in the AID-funded Panama Breastfeeding Promotion Project ranged from \$9.83 to \$67.41 per participant. Hospital reforms, in turn, have resulted in cost savings in reduced staff time, use of purchased formula, bottles, glucose water, and oxytocin.

Table C.2 summarizes the findings of the literature review on costs and direct savings resulting from changes in hospital practices to promote breastfeeding in a number of developing countries including the Philippines. In the Philippines, the Jose Fabella Memorial Hospital, with an average of 100 deliveries a day and an average length of stay of 3 days per birth, documented impressive personnel savings as a result of changing hospital practices to promote breastfeeding. With the institution of rooming-in (keeping mothers and babies together and closing the separate nursery), nursing staff needs were reduced by \$154,286 per year, or approximately \$4.20 per

**Table C.2. Summary of Costs and Direct Savings Associated with Changes in Hospital Practices to Promote Breastfeeding\***

	ACTIVITY	SITE	COST	REFERENCE
COSTS	Lobbying/conference	hypothetical	\$475/participant \$0.01-1.00/delivery	Phillips <i>et al</i> , 1987
		Panama	\$463/participant	Huffman, 1990
		Ecuador	\$65/participant	Artieda, 1990
		Ethiopia/Liberia	\$600/participant	Armstrong, 1990
		Colombia	\$51/participant	Bruges, 1990
		Indonesia	\$150/participant	Suradi, 1990 Masoara, 1990
	Staff training	hypothetical	\$10-860/participant \$0.05-1.40/delivery	Phillips <i>et al</i> , 1987
		Panama	\$10-67/participant	Huffman, 1990
		Honduras	\$212/participant \$5.50/delivery	Huffman, 1990
		El Salvador	\$44/participant	King, 1988
	Lactation counseling	hypothetical	\$0.35-4.00/participant \$0.35-4.00/delivery	Phillips <i>et al</i> , 1987
	Rooming-in	Panama	\$0	Huffman, 1990
		Indonesia	\$0	Daga, 1985
SAVINGS	Less staff time with rooming-in	Philippines	\$4.20/delivery	Brownlee & Naylor, 1990
		Chile	\$35/day	Labbok, 1990
	Less infant formula	Honduras	\$0.50/delivery	Autotte, 1985
		Philippines	\$0.82/delivery	Bagalay, 1989
	Fewer bottles	Honduras	\$0.60/delivery	Autotte, 1985
		Philippines	\$0.32/delivery	Bagalay, 1989
	Less oxytocin	Honduras	\$0.10/delivery	Autotte, 1985

Levine, R. and Huffman, S. The Economic Value of Breastfeeding: The National, Public Sector, Hospital, and Household Levels - A Review of the Literature. Washington, D.C., 1990.

\* Only listed are those cases in which absolute dollar amounts were available; see text for additional information on percent increase or reduction in costs in these and other settings.

delivery. Personnel costs were also cut due to reduced time spent on preparation of infant formula at an estimated rate of \$6,857 or \$0.19 per delivery.

An AID-funded project in Honduras, further elaborates the cost savings of training hospital-based personnel in lactation management toward the goal of instituting hospital reforms. During Phase I of the PROALMA project, (1983-1985), activities to promote breastfeeding were based at three major hospitals. During this time more than 1500 nurses, auxiliaries and other professionals were trained in breastfeeding promotion and in the resolution of specific breastfeeding problems. In 1985, all physicians received training during their year of social service work following graduation from medical school. Human milk banks were set up in each project hospital for feeding expressed breastmilk to premature and sick infants. Phase II (1986-1988) focused on expanding the activities begun under Phase I to a national level. Training of health care professionals and hospital and clinic staff continued and national norms/policies for all hospitals were established. Average yearly program costs for Phase I were \$146,000 while average costs for Phase II were \$272,000. Over the 2 1/2 years of PROALMA I, the estimated savings were \$198,750 for the three hospitals. A significant savings on infant formula imports was reported, with one hospital saving \$34,000 in one year alone. Furthermore, national imports of infant formula fell from 6.12 kg per newborn in 1980 to 3.0 kg in 1987 (Figure C.1).

Given that the total project costs, excluding the project evaluation, were \$332,459, estimated savings in hospital costs alone represent more than half of the total project costs. (The impact of PROALMA II on cost savings is not yet available.) However, these estimates do not include savings on staff or overhead. Nor do they take into account the savings to families, the improvements in nutritional status of infants, or the reductions in morbidity and mortality also observed in the project and their associated costs which would further improve the cost/savings ratio. Moreover, this investment in the PROALMA program produced a significant increase in the duration of breastfeeding, from only six months in 1982 to more than one year in 1989 (Figure C.2).

### Household Level

Ultimately, it is within the household that breastfeeding decisions are made. Information on household-level costs is often difficult to interpret, in large part because many of the most important factors must be imputed, i.e., the value of the woman's time and the potential costs of illness and increased fertility. Ultimately, the picture that emerges is one in which bottle feeding is more costly than breastfeeding, directly and indirectly. In a recent study of the cost of adequately feeding infants (for one year) with commercial formula, the International Baby Food Action Network (IBFAN) found that households would have to spend \$216 in Botswana (18% of the minimum wage), \$224 in Zimbabwe (25% of the minimum wage), \$203 in Sierra Leone (108% of the minimum wage), \$311 in Ghana (198% of the minimum wage) and \$558 in Nigeria (264% of the minimum wage) (IBFAN, 1989). In Costa Rica, the cost of infant formula would be \$8.35, \$16.70, \$33.40 and \$50.14 for months 1, 2, 3 and 4. This represents 6%, 11%, 23% and 34% of the minimum salary of \$145.71 per month (CEFEMINA, 1990).

Figure C.1.

### INFANT FORMULA IMPORTS IN HONDURAS

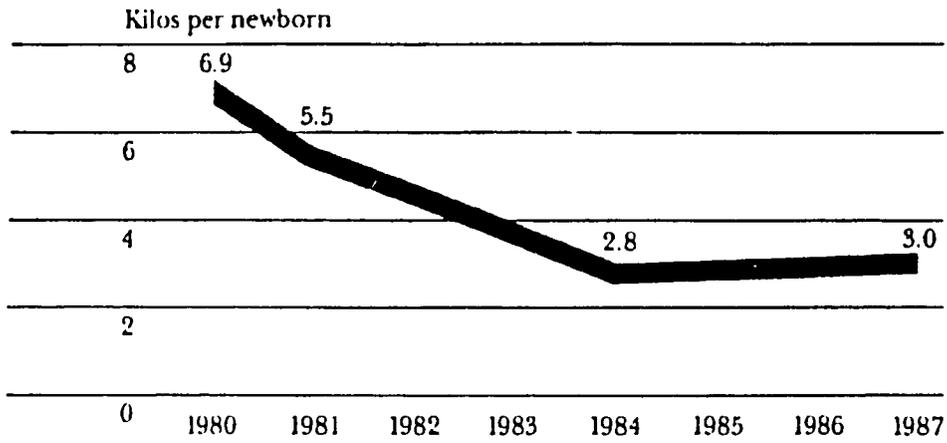
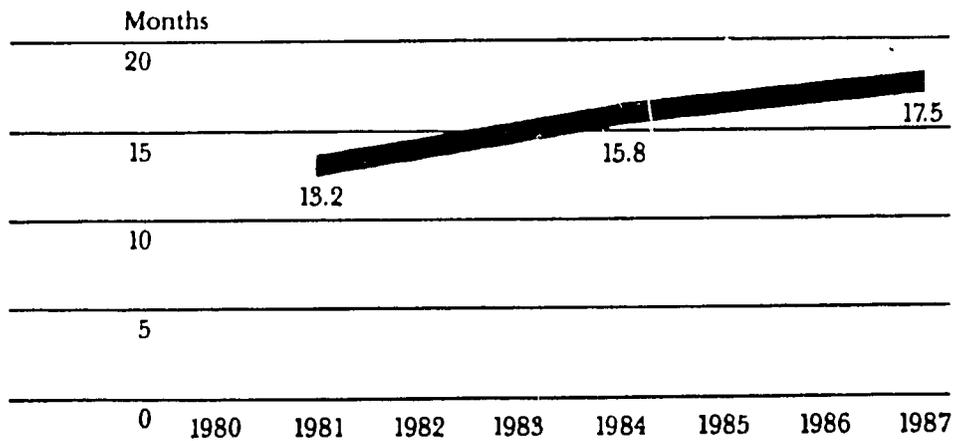


Figure C.2.

### MEDIAN DURATION OF BREASTFEEDING OF HONDURAN INFANTS



SOURCE: Popkin, B., et al., "An Evaluation of a National Breast-feeding Promotion Program in Honduras," *Journal of Biosocial Science*, October 1990 (in press).

Several studies have compared the cost of breastmilk substitutes with the cost of additional nutrients required by lactating women. From a detailed study in the Ivory Coast, Greiner et al (1979) found that the total additional food required by a lactating mother would cost a total of between \$51 and \$102 or a daily cost range of \$0.07 to \$0.14 for breastfeeding for two years after birth of the baby. The range depended on whether the additional calories would come from fofou and peanut sauce or from the less expensive rice and peanut sauce. This was compared with the total cost of bottle feeding for two years, including breastmilk substitutes, equipment and fuel, which ranged from \$305 to \$386 or a daily cost range of \$0.42 to \$0.53. Here the range depended on whether imported infant formula was used during the entire period or whether whole dry milk was used instead of formula after month 4. In sum, the cost of bottle feeding was found to exceed that of breastfeeding by an order of magnitude of at least three.

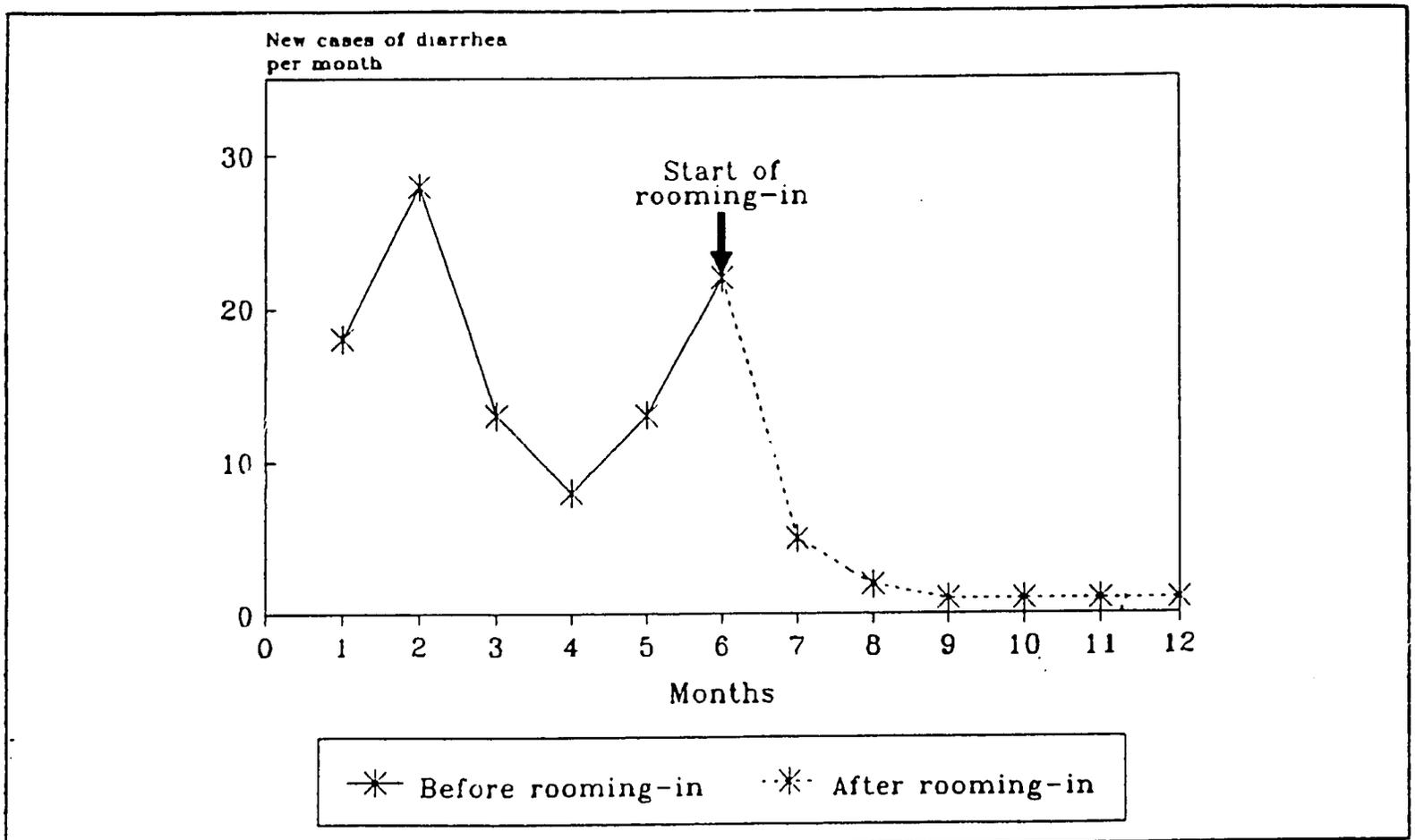
### Health Impacts

A few studies have estimated the cost of averting diarrheal morbidity and mortality through breastfeeding interventions. One model that attempted to do so did not take into account the cost savings resulting from reduced purchase of infant formula or diarrhea treatment medications due to the intervention; consequently, the estimations varied widely from \$2.40 to \$143 per diarrheal episode averted, and \$87 to \$10,750 per diarrheal death averted. Another study from Indonesia examined the health impact of an intensive breastfeeding program that included the institution of rooming-in, on the incidence of diarrheal and other infectious diseases. Participating hospitals in Indonesia, which account for close to 100,000 births a year, reported that infant mortality from infectious diseases in the hospitals declined 63 percent and infant morbidity dropped 87 percent within six months after improved lactation management practices were implemented. In Sanglah Hospital in Bali, diarrhea incidence in newborns decreased from 4.2% to 0.6%, neonatal sepsis from 3.3% to 0.9%, meningitis from 1.3% to 0.2% and acute ear infection from 11.1% to 0.9%. Figure C.3 illustrates the dramatic decline in the incidence of diarrhea in one Indonesian hospital. Furthermore, hospital stays for normal deliveries were cut in half, and those of cesarean section mothers from seven to five days.

### CONCLUSION

Although only a few studies have been done to date on the economic benefits and cost-effectiveness of breastfeeding promotion, the results are impressive. Further work planned under the breastfeeding component will provide state-of-the-art information on the cost-effectiveness of specific breastfeeding interventions where little information currently exists, particularly pertaining to mother-to-mother support or community-based approaches, communication and social marketing, curriculum development, training and policy dialogue, in addition to expanding upon the knowledge base regarding the health impacts and economic benefits of breastfeeding.

Figure C.3. Incidence of Diarrhea in Relation to the Introduction of Rooming-in at an Indonesian Hospital following Wellstart Training



Source: Soetjningsih and Suraatmaja, Paediatrica Indonesiana 26: 229-35, 1986.

## **ANNEX D: FINANCIAL ANALYSIS**

The breastfeeding component of the Breastfeeding, Maternal and Neonatal Health Project (936-5966) will undertake long-term activities in 8 to 10 countries, up to 4 of which will be intensive programs (with resident advisor) and up to 6 of which will be less-intensive (without advisor). Countries for long-term assistance and support will be phased in gradually. The budget (see Table 5: Detailed Budget Estimates) has been calculated with the following assumptions for phasing:

### Intensive Sites:

2 countries in year 2

4 countries in year's 3, 4 and 5

### Less Intensive Sites:

1 country in year 1

3 countries in year 2

6 countries in years 3 and 4 and 5

Costs for long-term countries have been estimated from a review of three AID-funded breastfeeding projects for which budget data were available. All three projects were in Central America. Local breastfeeding promotion intervention costs for PROALMA in Honduras, CALMA in El Salvador, and the Panama Breastfeeding Promotion Projects ranged from \$101,000 to \$272,000 per year exclusive of expatriate technical assistance. In Honduras, total costs for the six-year project were \$1,181,660. (Phase I of PROALMA from 1983-85 at selected hospitals, cost \$365,000 and Phase II of PROALMA from 1986-1988 cost \$816,660 to expand to a national level). The four-year Panama project, which took place between 1984 and 1988 cost \$720,000. The total cost of CALMA from 1980 to 1989 was \$909,000, with \$762,000 provided by USAID.

The three programs had a mix of programmatic interventions, but primarily consisted of training of health professionals, institution of milk banks in hospitals, education of mothers, and preparation and dissemination of publications. None of the three projects contained a curriculum development component, nor, except in the case of Panama, communication/social marketing campaigns. Relatively little was done in the way of mother support at the community level. Very little was allocated to baseline and follow-up monitoring and evaluation surveys. Moreover, research was not a component of these programs.

A technical experts meeting on breastfeeding promotion held by the World Health Organization (WHO) in June of 1990 concluded that a model breastfeeding program that is comprehensive

enough to demonstrate a significant impact, or reach a critical mass, for the investment made should include:

- assessment of nature, magnitude and determinants of the problem
- formulation of a national breastfeeding policy and establishment of a high level breastfeeding committee
- policy dialogue
- training
- curriculum development/revision
- communication and social marketing
- outreach to women
- information dissemination
- applied research
- monitoring and evaluation, including cost-effectiveness/impact studies

The AID Breastfeeding for Child Survival Strategy also endorses this comprehensive approach to breastfeeding promotion. Therefore, this comprehensive approach will be followed under the proposed breastfeeding component by investing sufficient resources in long-term country interventions to achieve the greatest improvement in breastfeeding practices possible over the five-year agreement.

Thus, extrapolating from the 1980s budgetary data of the three Central American programs, but factoring in a full-scale, comprehensive package of breastfeeding promotion interventions and inflation at 5% per year, a minimum average initial annual cost of \$300,000/per country for local interventions has been derived for the new breastfeeding component. To complement this amount, additional funds for resident advisors, short-term consultants and applied research have been reserved in separate lines in the budget (Table 5). Resident advisor costs have been calculated at an additional, approximate \$250,000 per year for four of the long-term countries where such intensive technical assistance and support is anticipated to be necessary.

## **ANNEX E: PEER REVIEW PLAN**

Title: Breastfeeding, Maternal and Neonatal Health

Project Number: 936-5966

Tech. Office: S&T/H/HSD

Date Initial Obl: FY 1988

Date PACD: 9/30/98

Project Purpose: To promote breastfeeding and demonstrate the feasibility of providing a package of effective, appropriate maternal and neonatal health and nutrition services and education to women and their infants in selected developing country settings.

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### **I. Research Program or Topic**

#### **Maternal and Neonatal Health and Nutrition Component**

Research under the current Maternal and Neonatal Health and Nutrition contract, valid through 1993, remains as outlined in the original project paper. Peer review is currently undertaken by a panel of technical experts on an informal basis. (Please see II. Peer Review Mechanisms Used to Approve Research Awards.) The Peer Review Plan for Phase II, for the 1993 through 1998 period, will be developed with S&T/PO guidance based upon the mid-term evaluation findings and recommendations, which are expected in the Fall of 1991.

#### **Breastfeeding Component**

The breastfeeding component of the Breastfeeding, Maternal and Neonatal Health Project will provide funding for applied and not basic research. Approximately 7-10 separate applied research activities will be undertaken during the life of the project. This is in addition to research activities that are an integral part of long-term country programs. Research will comprise approximately 14% of total project obligations.

The objective of the applied research is to provide policy makers and program managers with the information they need to mobilize support and resources for breastfeeding, overcome obstacles, and improve service-delivery activities so that women and key decision makers in their support network will be reached with the most up-to-date information regarding optimal breastfeeding and its benefits for infant survival. Applied research as defined here includes information collection through surveys and surveillance, use of operations research approaches,

**systems analysis, use of ethnographic tools, focus groups, KAP studies, testing innovative modes of mobilizing community support for breastfeeding mothers and other aspects of breastfeeding promotion, economic analysis and cost-effectiveness studies, and field testing of intervention technologies.**

**The exact topics to be explored under the research program are not yet firmly identified. However, in the development of AID's Breastfeeding for Child Survival Strategy, outside experts assisted AID to identify priority applied research topics. In addition, a recently conducted cost analysis study, funded by AID's Bureau for Program and Policy Coordination, highlighted a number of research topics which if pursued could contribute to a more complete picture of the economic value of breastfeeding. A comprehensive, illustrative list of the applied research topics suggested by both sources is presented below.**

- assessment of the constraints to initiation of breastfeeding immediately after birth and solutions;**
- assessment of constraints to exclusive breastfeeding in the first four to six months of life and solutions;**
- trials of hospital and community-based interventions that aim to promote exclusive breastfeeding during the first 4-6 months of life;**
- evaluation of alternative health facility based approaches to the promotion of exclusive breastfeeding;**
- development of key indicators for baseline program assessments, progress monitoring and impact evaluation;**
- ethnographic and community-based studies of the need for, and ways to mobilize entities that can support women in practicing optimal breastfeeding;**
- studies on existing breastfeeding knowledge, attitudes, practices and policies in a range of sectors for the purpose of identifying potential points of intervention and potential barriers to optimal breastfeeding;**
- development of growth charts appropriate for exclusively breastfed infants;**
- studies on ways to maximize breastmilk consumption in infants of working women;**
- studies on maternal nutritional supplementation, maternal nutrition and lactation;**
- documentation of mortality and morbidity prevention impacts of optimal breastfeeding in different conditions and at different stages during infancy;**

- studies on the cost-effectiveness of specific breastfeeding interventions;
- studies of actual expenditures on infant formula by households, by income groups;
- review of specific employer policies related to the accommodation of the breastfeeding mother in the workplace, with emphasis on the initial and continuing costs of such activities, and the efforts required to overcome barriers to institution of such policies;
- studies to estimate the costs of large-scale breastfeeding promotion programs, and measurement of their impact on household decisions regarding breastfeeding;
- studies of household beliefs about the health and contraceptive effects of breastfeeding to understand how the relative costs and benefits of breast and bottle feeding are perceived;
- development of improved theoretical framework to conceptualize household decisionmaking about breastfeeding, and understand the relationship between perceptions of economic consequences and realized economic consequences.

## II. Peer Review Mechanisms Used to Approve Research Awards

### Maternal and Neonatal Health and Nutrition Contract

Under the applied research component of the competitively awarded MotherCare contract between AID and John Snow, Inc. (JSI) for maternal and neonatal health and nutrition, the following subcontracts have been entered into by JSI:

<u>Title of Study</u>	<u>Subcontractor</u>	<u>Cost</u>	<u>Peer Review</u>
Management Assessment of MOH Maternal Health Program, Peru	PRISM	\$41,000	No
Low Birth Weight Incidence and Perinatal Mortality, Indonesia	Padjadjaran University	\$150,186	No
Improved Iron/Folate Distribution for Maternal Anemia, Indonesia	Center for Child Survival	\$156,005	No
Evaluation of Kangaroo Mother Method of Care of Low Birth Weight Babies, Ecuador	Isidro Ayora Maternity Hospital	\$71,959	No

The above subcontracts for the applied research component of the MotherCare contract have each been approved by AID (both S&T/H and the Contracts Officer, with USAID Mission concurrence) without further competition based on the unique capabilities of the local entities chosen to implement the research. With the exception of the study in Ecuador, they have not been submitted to formal outside peer review since this is not a requirement in JSI's contract with AID. However, each of the proposals has been extensively reviewed by a number of experts in AID (both in AID/W and USAIDs) and within the MotherCare consortium which consists not only of JSI but of eight other affiliated subcontractors which are independent of JSI and of the host country sub-contractors. No research study has been approved until consensus or resolution has been reached on comments by all of the expert reviewers. Furthermore, at the outset, the TAG for MotherCare reviewed the overall research plan and provided its recommendations during the first year of the contract. Members of the TAG as well as other independent experts have been asked to review certain proposals, such as the one for Ecuador, where outside expertise was deemed necessary. Any additional research subcontracts made by JSI during the remainder of their contract through FY 93 (few, if any, are expected) will follow the above procedures consistent with the existing contract. When a new contract is signed for Phase II maternal and neonatal health and nutrition activities (FY 93-98) a formal plan for independent review of all research will be included.

#### Breastfeeding Cooperative Agreement

Under the proposed breastfeeding cooperative agreement, the bulk of the research will be managed by the recipient institution (CA) and/or its sub-recipients. There is no provision for the acceptance and review of unsolicited research proposals under this agreement. However, with funds from the BMNH Project, AID may directly award small grants to WHO or professional associations, or buy into existing AID projects for some research, outside of the cooperative agreement. After the cooperative agreement is competitively awarded, the recipient institution, under the technical direction of the AID Cognizant Technical Officer (CTO), will appoint an external (to AID and to the project's implementing institutions) Technical Advisory Group (TAG). It should be noted that the functions of the TAG encompass, but are not limited to, peer review. The TAG will also assist AID in the technical monitoring and review of the breastfeeding component. All research subject to peer review will be examined for its design, feasibility, technical merit, and cost. As research proposals are formulated by the CA's staff and host country counterparts, peer review of these proposals will be largely handled through correspondence with TAG members, although special meetings may be called to review research in addition to the four scheduled TAG meetings.

### III. Ongoing Small Grant or Subcontract/Subgrant Research

#### Maternal and Neonatal Health and Nutrition Contract

Please refer to II. Peer Review Mechanisms Used to Approve Research Awards regarding subcontracts for research.

### Breastfeeding Cooperative Agreement

If during the course of project implementation it becomes clear to the recipient institution that a substantial modification of the research program is indicated, perhaps on the advice of the TAG, and that to carry out new research elements one or more institutions not previously involved in the project should be accessed, the TAG may be asked to review proposals submitted to AID at its invitation, and to advise the recipient institution on the quality of such proposals. However, in all instances, the final decision about award of sub-agreements under an existing cooperative agreement will be made by AID. In such cases, care will have to be taken to assure that the advice given by TAG members represents their best professional judgment, and is not colored by other considerations. Where AID receives proposals from institutions with which one or more TAG members are associated, those members will be expected to recuse themselves from TAG consideration of the merits of the proposals. In some instances, AID may create a separate peer review mechanism to assure that it receives objective advice.

#### IV. Ongoing Peer Review Mechanisms

##### Maternal and Neonatal Health and Nutrition Contract

Please refer to II. Peer Review Mechanisms Used to Approve Research Awards regarding how peer review is being handled under the current contract. As mentioned previously, the Peer Review Plan for Phase II, for the 1993 through 1998 period, will be developed with S&T/PO guidance based upon the mid-term evaluation findings and recommendations.

##### Breastfeeding Cooperative Agreement

Following award of the cooperative agreement, a Technical Advisory Group (TAG) composed of 6-10 experts in the field of breastfeeding will be identified jointly by the CA and AID CTO with final selection of members cleared by the AID CTO. Members of the TAG will be selected for the unique technical contribution that they can make in their particular area of expertise relating to breastfeeding. Experts in a range of technical areas will be considered for membership. It will be critical that TAG members be impartial contributors from academic institutions, international organizations, other donor organizations or PVOs, other relevant AID projects or independent consultants, in addition to persons representing the view of developing countries. In their capacity as TAG members, they will not represent any particular institution, class of institution or geographic area. In order to optimize collaboration among AID S&T projects with breastfeeding activities, it is planned to share TAG members between the breastfeeding CA and other S&T projects, including the maternal and neonatal health and nutrition component of this project. The TAG will be convened at least four times over the life of the agreement. It will review and comment on:

- overall project priorities and work planning;
- core research agenda;

- annual workplans and progress reports;
- research proposals;
- core research in process;
- policy findings and reports;
- project evaluation;
- possible changes in direction or priorities in light of trends in host countries and international needs and policies.

The TAG will not be a statutory government board. The CA and AID CTO will be jointly responsible for defining the scope of work for the TAG and convening meetings of the TAG and setting the agenda for each meeting. The Director of S&T/H, the CTO and his/her staff may observe TAG meetings, but will not be members of that body. A report of the proceedings of each TAG meeting will be prepared by the CA and cleared by the AID CTO. Funds allotted to the recipient institution may be used to cover reasonable expenses of TAG members in conjunction with their attendance at TAG meetings (e.g., travel and per diem). No compensation will be paid, but where necessary, to secure the participation of highly regarded experts, AID may offer honoraria.

## Ten steps to successful breast-feeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breast-feeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breast-feeding.
4. Help mothers initiate breast-feeding within a half-hour of birth.
5. Show mothers how to breast-feed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless *medically* indicated.
7. Practise rooming-in — allow mothers and infants to remain together — 24 hours a day.
8. Encourage breast-feeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breast-feeding infants.
10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

Source: Joint WHO/UNICEF Statement, "Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services."