

OVERVIEW

INTEGRATED POPULATION AND COASTAL RESOURCE MANAGEMENT (IPOPCORM) APPROACH

PROJECT DESIGN

In year 2000 the David and Lucile Packard Foundation awarded a planning grant to PATH Foundation Philippines - a local NGO - to design a community-based and integrated approach to address inter-linked population, environment and food security dynamics in the Philippines coastal zone. PATH Foundation, in turn, organized a team of public health, coastal conservation and development specialists that facilitated consultative meetings with government and NGO leaders to identify the root causes and underlying factors driving poverty, malnutrition and food insecurity in rural coastal areas. Available data suggest an association between high growth of human populations and declining rates of fish catch (Figure 1) exacerbated by overfishing and rampant destruction of coastal ecosystems that serve as breeding/nursery grounds for fish (coral reefs, mangrove stands). Using this and

other information the team created a graphic illustration of the environment and social dynamics in coastal Philippines and the direct and indirect threats to human and ecosystem health (see Figure 2). Four underlying causes that emerged from the analysis suggest opportunities for intervention e.g., (1) lack of access to family planning services in rural coastal areas, (2) weak enforcement of existing environmental laws and codes designed to protect life-sustaining ecosystems, (3) few alternative livelihood opportunities in fishing-dependent communities and (4) traditions and preferences that

influence family size. These insights informed the design of the community-based and integrated population and coastal resource management (IPOPCORM) approach and the common goal that its sectoral objectives contribute to, namely:

Common Goal: “Improved food security and quality of life in coastal communities while maintaining the diversity and productivity of life-sustaining marine ecosystems.”

Figure 1: Inverse relationship between population growth and fish catch rates in Philippines: 1950-2000

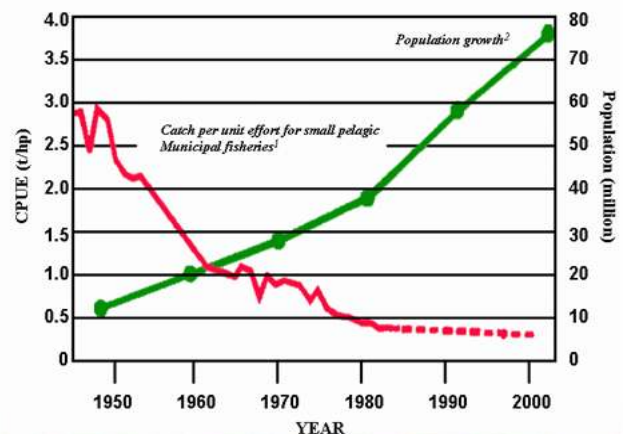
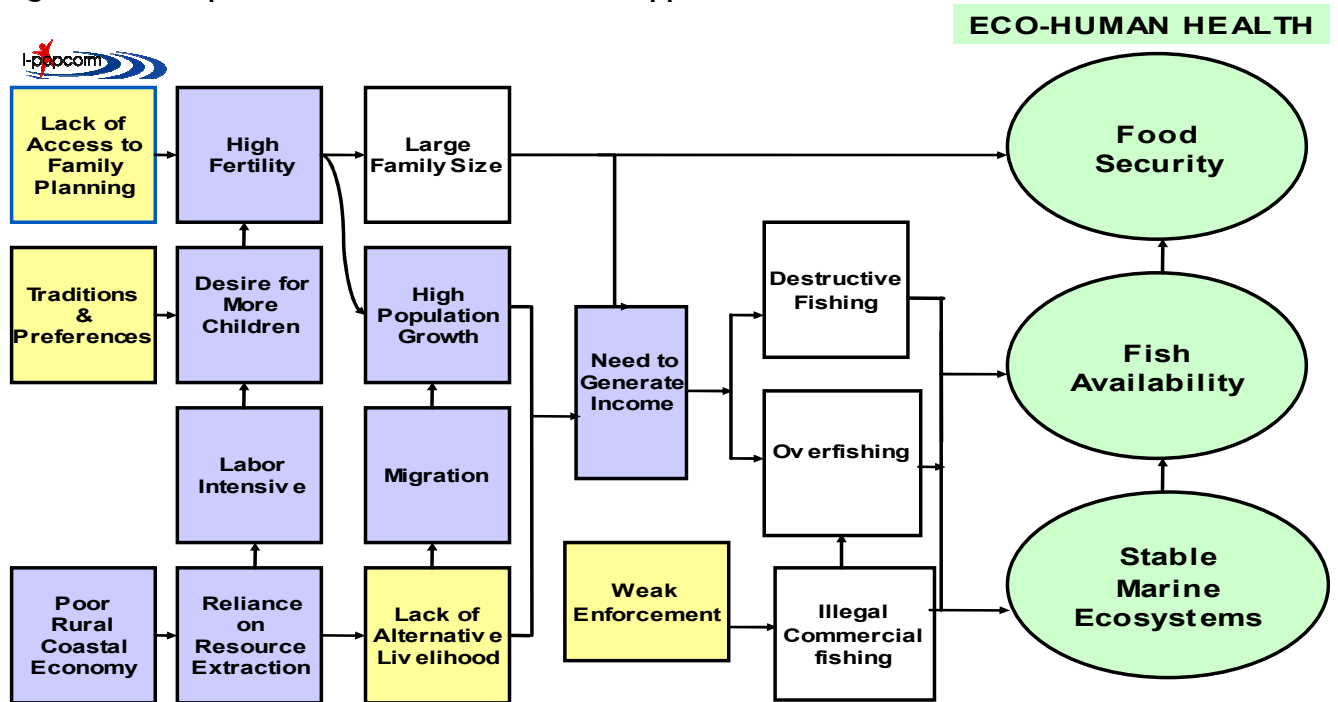


Figure 2 Conceptual Model for the IPOPCORM Approach



The *Vision* of the project is summarized in the upper right corner of the Model:

- “Eco-Human Health”. This vision implies an inter-relationship between the health status of ecosystems and the health status of human population in biodiversity-rich areas. Whatever affects one - affects the other.

The *Target Conditions* requisite for Eco-Human Health and the linkages among them are depicted by the Circles:

- “Food Security”
- “Fish Availability”
- “Stable Marine Ecosystems”

The *Direct Threats* to the Target Conditions are shown in the White boxes immediately to the left of the Targets:

- “Large Family Size” - a threat to food security at the household level
- “Destructive Fishing” - damages coral reefs and threatens the stability of related ecosystems
- “Overfishing” - depletes fish stock which in turn pose threats to food security and stable ecosystems

- “Illegal Commercial Fishing” -depletes fisheries reserved for subsistence fishers; threatens food security

The root causes or *Indirect Threats* (Blue box) and Opportunities (Yellow box) are position to the left of the Direct Threats. The arrows depict the inter-relationships among these factors which include:

- “High fertility” resulting in large family size. Community research points to several factors underlying high fertility rates in rural fishing communities e.g., lack of access to FP information and products (Opportunity), desire for more children driven by Traditions and Preferences (Opportunity), and desire for more children driven by the labor-intensive nature of fishing and the need to generate income for the family.
- “Need to generate income” or to maintain ones income is the driver of threats posed by overfishing and destructive fishing. As catch rates decline, subsistence fishers employ more efficient methods of harvesting fish that are also more destructive to the marine environment e.g., use of dynamite or cyanide.
- “Lack of alternative livelihood” (Opportunity) impels many people to migrate to other areas in search of employment, which contributes to high population growth in biodiversity-rich areas. It also is one of the root causes of overfishing as people in coastal areas have few options to feed their families and make money other than fishing. This links back to the resource-dependent nature of the economy in rural Philippines.
- “Weak enforcement” (Opportunity). The Municipal government is the front-line stewards of the environment in the Philippines but some are lax in their efforts to enforce compliance with access rights and environmental protection laws. Their negligence enables commercial fishing boats to poach fish from near-shore fisheries reserved under law for small-scale fishers. Some officials are intricately involved in these illegal commercial operations while other municipalities lack resources for surveillance and enforcement.

OBJECTIVES, STRATEGIES AND INTERVENTIONS

Based on the above analysis, the IPOPCORM design team identified three short-term outcomes (objectives) that individually and collectively could contribute to the project’s vision and goal, and which the team believed were achievable by 2006. The anticipated outcomes are elucidated in the project’s stated objectives, namely:

- (1) Reproductive health outcomes improved in coastal communities
- (2) Coastal resource management (CRM) capacity developed at the community level
- (3) Public and policymaker’s awareness and support for PHE integration increased

Mapping the Gaps for Strategy-setting

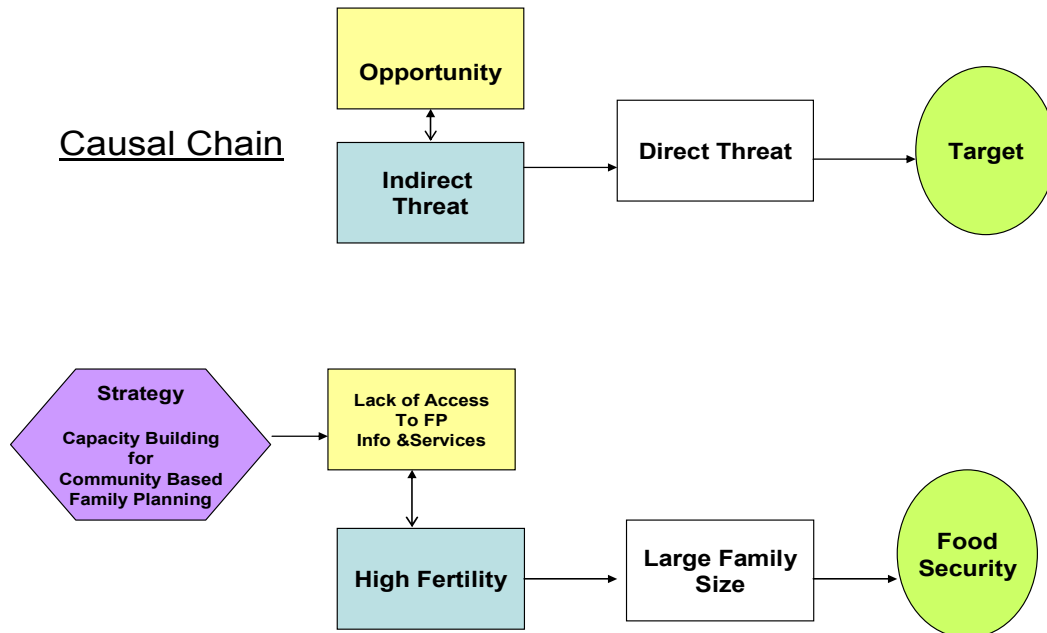
Before it could operationalize the Conceptual Model, the IPOPCORM design team had to first identify the possible means (strategies) to achieve the stated objectives. This required additional information about the resources available in the project focal areas and the gaps in access to FP, conservation and development information and services at the grassroots level, which was obtained through consultations with fishing communities and other stakeholders. The IPOPCORM design team developed a map to illustrate the gaps (see [Annex 1.](#)) The illustration shows that the majority of people in coastal Philippines reside in rural hamlets (sub-villages). The government's health system, however, penetrates only to the level of the *barangay* or village, while agriculture and environment management services are concentrated at the municipal (town) level. Government funds for village development (including conservation) are administered by the municipal government and its Planning and Development Unit is supposed to engage the Barangay Development Councils (lowest administrative unit) in the process of programming the funds and revenue allotments earmarked for their villages and communities. In practice, however, most local Councils lack skills in planning/budgeting and receive little or no assistance from municipal officials to meet the annual application deadline. As such, the Councils miss out on the opportunity to decide how their development funds will be invested.

The Philippines Local Government Code mandates that local government units (LGU) are to create and implement mechanisms for fisheries and natural resource management (NRM). One such mechanism is the Fisheries & Aquatic Resource Management Council (FARMC) organized by the Ministry of Agriculture, which is also responsible for fisheries. The FARMC are support to operate at both the municipal and barangay (village) level to facilitate conservation actions in the coastal zone. Many, however, are inactive due to lack of technical, management and material support from the municipality. As such, there is a gap in the availability of services at the village and hamlet levels. While some communities use traditional methods of fisheries management - such as "closed season" during fish spawning, these measures are no longer adequate to sustain stock levels and must be complemented with modern management mechanisms such as "no take zones" and marine protected areas (MPA). Without assistance from the FARMC or an NGO or other technical source, the communities lack the knowledge and skills to implement modern mechanisms of fisheries and coastal resource management.

At the hamlet level, the only existing institutions are Peoples Organizations (resource users groups), women and youth associations, and small convenience (sari-sari) shops operated by private entrepreneurs. While the law contains a provision mandating a role for civil society in village governance, in practice few members of these institutions participate in Barangay Development Council activities. The low level of education attainment among fisherfolk and women discourage many from seeking executive positions with the Council while poverty - which disproportionably affects fishers and women - precludes others from having the time to participate in Council meetings and events.

Conceptualizing the Strategies

In conceptualizing a general approach (strategy) to bridge a gap or redress a threat, the design team teased out a single causal-chain from the IPOPCORM Conceptual Model and inserted an additional symbol (hexagon) to the left of each Opportunity box to illustrate the proposed strategy (see diagram below).



The project designers and stakeholders felt that building the self-help capacity of coastal communities to meet their own needs for FP information and products was the most practical and sustainable approach to addressing the issue of Lack of Access to Family Planning and its consequences e.g., high fertility, large family size and food insecurity. The team rejected a simpler option that many PHE projects employ - refer couples to the nearest government health center for FP services - because the distances are far and the cost to access service (both in terms of transport expense and time away from work) is beyond the reach of most people living in remote coastal areas. Also, the group decided that it was not feasible to send a medical team out from the health center to deliver the services because the cost of doing so is prohibitive and other projects have shown that mobile service delivery is difficult to sustain. Instead, the project set out to build the capacity of existing institutions and women/youth groups in the hamlets to serve as Peer Educators and Community-Based Distributors (CBD) of FP information and products. It also oriented these same actors to PHE concepts and trained them in coastal conservation techniques. Finally, it helped the hamlet-based institutions/groups to link with government units at higher levels for technical and commodities assistance.

The design team went through the same exercise for each of the causal chains in the Conceptual Model, always searching for solutions that maximize use of local resources to bridge the gaps. To address threats posed by the weak enforcement and the lack of conservation services and action, the project selected another capacity-building strategy that strengthened the skills of local Councils and Peoples Organizations to advocate with the municipal government for better enforcement, and transferred marine protected area management know-how to the communities. Altogether, the team identified four strategies which are listed below under each of the respective objectives they contribute to:

1. Reproductive health outcomes improved in coastal communities:

- Capacity building for community-based family planning/reproductive health (CB-RH) management including access to affordable and accessible FP products and information on human sexuality and HIV/AIDS prevention, and referral mechanism for STI management and other RH needs

2. Coastal resource management (CRM) capacity developed at the community level

- Capacity-building for community-based fisheries and coastal resource management including an accompanying information campaign to educate community members on the importance of their marine and coastal resources
- Capacity-building for environment-friendly enterprise development (EED) including a micro-credit facility to relieve fishing pressure and reduce food security risks

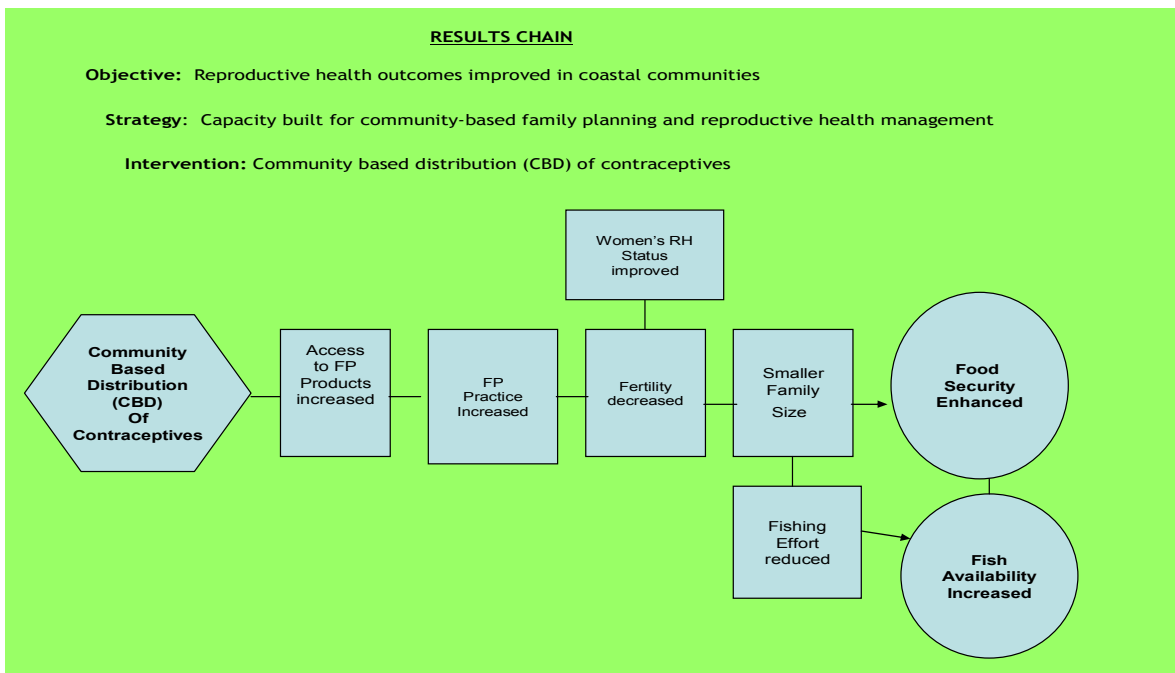
3. Public and policymaker's awareness and support for PHE integration increased

- Capacity-building for PHE advocacy and IEC including legal literacy and rights-based advocacy, skills-building for local PHE development planning, and education campaigns to increase community and decision-makers understanding of population-environment dynamics and links to food security.

Each of the strategies involves a number of interventions (set of activities) and specific actions (procedures) which are summarized in *Annex 2: IPOPCORM strategies, interventions and activities*. In selecting the interventions and tools to operationalize each strategy, the design team looked for “evidence-based” interventions i.e., procedures and activities validated through experimental studies or rigorous evaluation designs. Community-based distribution (CBD) of contraceptives is one such intervention that has been field tested, evaluated and successfully applied in a number of developing countries to reduce access barriers to - and latent demand for - family planning. State-of-the-arts (SOTA) practices in building community capacity to implement and manage CBD approaches and activities are well documented and sources of technical assistance are available in the region. One of the early pioneers in CBD is the Population and Community Development Association (PDA) of Thailand, which transferred the know-how to PATH Foundation. Because the Philippines Department of Health does not support contraceptive distribution outside of medical institutions, the project had to secure the approval of the Local Governments to implement the CBD strategy in IPOPCORM focal areas which they did through formal Memorandums of Agreement that provided the umbrella under which trained volunteers in the community could provide counseling and screening services to potential users and distribute condoms, pills and emergency contraceptive pills to eligible couples.

Testing Assumptions about Interventions

In order to evaluate their assumption about the ability of an intervention to impact a desired change and contribute to a longer term objective, the design team created result chains to visually depict their hypotheses. A results chain is a diagram that maps out a series of causal statements that link factors in an “if...then” fashion. The result chain shown below illustrates this point using the CBD intervention. The hexagon symbol represents the Intervention. The boxes depicts the expected Outcomes (change in human behavior or habitat status), and the circle depicts the Impact (result or target). The lines represent the “if...then” linkages between the related symbols. In the case presented below, the logic is as follows: If community based distribution (CBD) of contraceptives is implemented in coastal hamlets, then access to FP information and products will increase leading to increased FP practice among couples (human behavior change) that will result in fertility decline and improvements in the health status of women in the community (impact). Reduced fertility will also result in smaller family size (desired outcome) and enhanced food security at the household level (impact). IF family size is reduced, then fishing effort will be reduced (human behavior change) resulting in greater Fish Availability (impact) which reinforces Food Security. Because this single intervention has the potential to impact two Targets, it is referred to as a “value-added” intervention e.g., adds value in one sector as a result of work targeted at another sector



For each proposed intervention, the team went through the same exercise of testing its assumptions and in some cases the logic did not follow through and the intervention was discarded. The exercise also helped the team to identify which indicators would be needed to measure whether or not the expected behavior change or habitat status change had in fact occurred, and whether it lead to the short-term outcome that was envisioned.

OPERATIONALIZING THE CONCEPTUAL MODEL

Two types of integration are required to operationalize an integrated PHE approach. The first is primary integration which, in the IPOPCORM case, seeks to integrate CRM and reproductive health (RH) at the policy and management levels. The other thrust is secondary integration - integration of CRM and RH at the operational level (training, services, IEC, and monitoring and evaluation) to obtain synergies that maximize their efficiency and impacts. With IPOPCORM, primary integration was enabled by the presence of an existing sub-national framework for CRM for food security which the project built upon to forge PHE linkages. The framework entails nine strategies of which four provide entry points for linking family planning and RH management strategies with CRM (see Annex 3). The team rationalized the proposed integration to the stakeholders by explaining how RH management would contribute to the realization of the framework's three intermediate results: fishing effort reduced, critical habitats protected and illegal fishing stopped. In each of the municipalities where the project works, local governments enacted ordinances and policies supporting the integrated CRM-RH framework that paved the way for integration at the field level and for the project to leverage resources from the government to support implementation.

To facilitate integration in field operations, the PATH Foundation first had to organize a multi-disciplinary team to develop integrated training and IEC materials used to train partner NGO staff in PHE concepts, technical aspects of CRM and RH, and mechanisms to deliver the services in an integrated fashion. The NGOs, in turn, used the materials to orient the stakeholders and train the actors and practitioners at each level in the system. The training and IEC tools were thoroughly pre-tested before application and refined in the process of use. Some examples of integrated messages and illustrations used in posters, billboards and other print media include the following:



To assure food security, we must plan our families and protect the coastal environment



Every youth has a dream, but those who guard their sexuality and the coastal environment have a brighter future

Selection of Focal Areas and Hotspots

There are 35 priority areas for conservation of marine biodiversity in the Philippines of which 14 are ranked “extremely high” and the remaining 21 are ranked either as “very high” or “high” priority. The ranking is based on a valuation system set forth in the Philippines Biodiversity Conservation Strategy. Some of these areas are under-populated while others are densely populated and expanding at rates that exceed national and regional average rates. These high-growth biodiversity-rich areas are herein referred to as “hotspots.” The IPOPCORM design team had to review data from the most recent census and Demographic and Health surveys to obtain additional information to determine whether natural increase, in-migration or both were the root cause of population growth in the hotspot areas. Using this information, they narrowed down the selection of possible sites where the project might operate to the hotspots where high fertility and high population momentum (youth bulge) were the main drivers of current and future growth of local populations. Twelve priority areas scattered across six of the Philippines eight bioregions satisfied these criteria. Although the design team recognized that the resources at hand would not be sufficient to introduce integrated FP and CRM (IPOPCORM) to all of these far-flung areas, nevertheless it took a long-range view and set-out a plan to cover all 12 priority areas in a period of eight years. Starting with three pilot sites, the plan envisioned an incremental scale-up to five additional areas within six years and all 12 areas within eight years. If successful, the integrated approach would be operating in 57% of the country’s extremely imperiled marine hotspots by 2008. By having a scale-up plan at the onset, the design team surmised that it would facilitate rapid mobilization of resources once the success of the pilot was demonstrated. Similarly, by building sound monitoring and evaluation activities into the pilot, the team was able to generate the evidence needed to convince sponsors and stakeholders to buy-into the scale-up plan¹.

Field Implementation

The IPOPCORM team considered a number of field implementation modalities for PHE integration including a social mobilization prototype which, at the time, was being tested by Save the Children-Philippines under a PHE project entitled PESCODEV. It also reviewed community resource management models that a number of university groups and environmental NGOs were applying in terrestrial and marine conservation areas of the country. Lastly, it considered a community outreach peer education (COPE) model that PATH Foundation had successfully used to build local government and NGO capacity to mount effective HIV responses in urban Philippines during the decade of the ‘90s. The modality eventually selected uses elements of all three models as described below.

¹ As it turned out, the scale-up was completed two years ahead of time (2006) as the project was able to piggyback onto a number of ongoing conservation projects in the focal areas and to leverage significant resources from international donors (Packard, USAID, UNFPA) as well as provincial and local government units, partner NGOs and the communities themselves.

Social Mobilization: One way that integration occurs is by mobilizing and engaging three specific groups in critical coastal ecosystems as the facilitators, actors and practitioners of CRM-RH strategies and actions, namely: fisherfolk, youth, and small-scale entrepreneurs. Subsistence fishers and other traditional users of coastal resources are critical players because the project's research shows they comprise the bulk of the coastal population and considerable proportions are living in poverty and have unmet FP needs. Youth entering reproductive age (15-19 years) are another important group because they represent the future stewards of the environment and their age-group is the one that will largely impact future population growth. Community research revealed high levels of unintended pregnancy among rural youth and little awareness of the importance of coastal ecosystems. Finally, the program engages small entrepreneurs in coastal hamlets, particularly shopkeepers who have the potential to become social entrepreneurs through participation in social marketing and CBD activities the project supports to increase availability of affordable reproductive health products in coastal areas².

Community Management: The Philippines is the first country in the world to develop community-based mechanisms for fisheries and coastal resource management. In the 1970s, the Silliman University Marine Research Institute initiated a community-based coastal resource management (CB-CRM) project on Apo Island in the Central Visayas³. This CB-CRM model has since been the subject of rigorous evaluations and peer reviews which have validated its effectiveness, sustainability and replicability. The Apo Island model is considered the "gold standard" for CB-CRM implementation, which is why the design team selected this modality for application in the IPOPCORM project. In discussions with Apo Island's CB-CRM managers, the team learned that - due to rapid growth of the island's population - the spill-over effect of the reserve was no longer sufficient to meet the needs of local families for food fish. The leaders were also concerned about the risk of HIV/AIDS as the sanctuary is a magnet for divers and several small resorts on the island are catering to a growing number of international and domestic tourists. As such, the project offered to assist the CRM committee to integrate family planning and AIDS prevention interventions into their operations. Apo Island is now one of the learning sites that IPOPCORM uses to expose and train local government and non-government leaders from other provinces in PHE integration via mechanisms of community resource management.

Community Outreach Peer Education (COPE): Outreach is a mechanism for bringing information, goods and know-how to people living in remote areas. It requires the development of systems like those used in agricultural extension service programs (which also represent good platforms for PHE integration). The health sector, however, tends to rely on static or fixed points of service delivery requiring people to come to the providers rather than the providers reaching out to the people. This is one of the reasons why health services are under-utilized in many developing countries - either the people don't know about the services available at the static clinic or they can not access them due to geographic, financial or other

² Social marketing applies modern marketing principles to promote a concept -such as PHE, or a product - such as modern contraceptives. Socially marketed products may be subsidized but are never distributed for free. Under IPOPCORM, contraceptives are socially marketed at fair price structures determined by price elasticity studies conducted among rural coastal residents.

³ Apo Island is an island barangay of Dauin municipality.

barriers. Some conservation and rural development organizations employ community organizers that live and work among their target communities. These same individuals can be utilized to facilitate system development for community based CRM-RH service delivery. In searching for potential implementing partners, PATH Foundation prioritized NGOs that had community organizers on staff or knew how to train and support individuals to do community organizing work. If none existed in a priority focal area, an NGO from a neighboring island with community organizing experience was recruited to expand their operations into the project site. Community organizers begin by working with what the people already know and whatever resources they have on hand; and from experience they learn to be resourceful and imaginative. These skills are paramount to PHE field integration for which community organization is a pre-requisite.

Manpower Development

Depending on the size and distribution of the population residing in the hotspot area, an NGO may need to employ more than one community organizer. In the areas where IPOPCORM works, one community organizer (outreach worker) per 5,000-8,000 people was the norm. These individuals participated in the identification and selection of indigenous leaders of fisherfolk and youth groups which s/he then mentored to serve as the change agents, CBDs and peer educators for family planning and conservation practice. The project designers created a list of qualifications and criteria that the facilitators used to screen and select individuals that were then trained and mentored under the program to serve as change agents, peer educators, CBDs, CB-CRM managers, fish/forest wardens, and planners and implementers of PHE media events, coastal clean-up campaigns, mangrove reforestation and other habitat enhancement activities. All serve on a voluntary basis and most function in more than one capacity (i.e. peer educator for family planning and fish warden for MPA surveillance). Incentives that sustain their volunteerism include periodic opportunities to participate in technical training sessions, priority consideration for micro-credit, service recognition events and certificates awarded by the BDC or Mayor's office, and tee-shirts and shoulder bags with the project logo which distinguish them as a change agent and which they use to carry IEC materials, contraceptives and other materials used in their day-to-day work in the project.

The Outreach Worker also helped to identify and develop the referral mechanisms and linkages that enabled the community volunteers to connect with and access resources from other organizations and institutions in the general vicinity of the project. In their work, the Outreach Workers were aided by a Field Supervisor who provided onsite technical and oversight support, as well as by PATH Foundation staff who trained all of the NGO personnel involved in project and made frequent visits to the project areas to provide ad-hoc technical assistance. The schematic presented in Annex 4 illustrates the COPE model and graphically shows how a few Community Organizers working with several CBDs and peer educators can deliver information and services to a significant population of people.

Establishment of Marine Protected Areas (MPA)

Under Philippine law, a legal marine tenurial agreement (MTA) must be secured before a community can establish a fish sanctuary or mangrove reserve. As such, the project also had to assist the BDCs and Peoples Organizations to conduct participatory coastal resource assessments (PCRA) to identify the ideal site for location of the reserve, and then to advocate with the Municipal Mayor for a MTA. These steps took nearly 2 years to complete whereas the RH and PHE information, education and communication interventions took only 12 months to put in place. Since this description is very heavy on the FP/RH and very light on the environment/conservation I would also add that in addition to securing the MTA, the BFARMC also developed the management plans/rules and regulations for the MPAs which determined allowable activities within the MPA (such as gleaning) and unallowable activities (such as fishing) as well as within the buffer zone. Finally, the BFARMC played an important education and enforcement role to ensure that people abided by the rules and regulations that governed the MPA. Also, you might want to add a discussion on the trainings done to educate coastal communities on the existing fisheries laws and strengthen their community enforcement (Bantay Dagat) efforts in order to ensure that there was no illegal fishing (dynamite etc).

Achieving Coverage at an affordable price

The project was able to replicate IPOPCORM's implementation scheme in over 1,090 communities during 2001-2006 but most of the communities opted to strengthen the management of an existing fish/mangrove reserve rather than establish a new marine protected area (MPA). Nevertheless, 24 new MPAs were established under the project and 64 others were strengthened by developing community-based CRM capacity. On average, it required 36 months to develop the service delivery mechanisms and build the capacity of local NGOs and institutions to implement integrated population and coastal resource management actions. The program investment averaged about \$5,000 per hamlet including the cost of management and technical services provided by PATH Foundation and its 14 local NGO partners.

MONITORING AND EVALUATION

Prior to field implementation, the project management team devised a two-part plan to monitor the outputs of IPOPCORM strategies and to measure the extent to which the project achieved its stated objectives. Key indicators, data collection methods and means of verification are presented in *Annex 5 IPOPCORM Monitoring Plan*. The project also included an operations research component that applied a quasi-experimental evaluation design to test whether the integrated approach generated high impact compared to non-integrated (vertical) approaches to reproductive health and coastal resource management. In some areas, only RH was implemented. In other areas, only CRM was implemented and in a third location both CRM and RH (IPOPCORM) were implemented in an integrated fashion. The results of this 6-year study indicate the integrated approach generated higher impacts on both CRM and RH indicators, and at lower cost.

SUSTAINABILITY

IPOPCORM strategies and interventions are institutionalized through annual action plans and budgets formulated by the Barangay Development Councils (VDC) which then qualifies them for funding from Municipal governments to sustain and expand their CRM-RH activities. The project also encouraged the councils to involve more fisherfolk, women and youth on their boards and executive committees which, in turn, enhances the inclusiveness and transparency of the BDC. Local government units (LGUs) at the municipal level also play an important role in the sustainability of project activities. IPOPCORM provides LGUs with direct technical assistance to encourage them to promote local regulations to protect critical marine habitats, restrict unsustainable and destructive fishing methods, and integrate reproductive health management into fisheries and coastal management agendas, plans and policies at the municipal level. To this end, 30 municipal governments have integrated RH into their environmental management policies and plans can you add a sentence that describes what this means - for example that the LGUs allocated budget for FP commodities?. By linking the project to an existing government framework, the IPOPCORM program was able to leverage significant resources from local sources (\$800,000 over six years) while at the same time helping LGUs to implement their CRM agendas.

By involving small-scale shop-keepers (sari-sari store owners) in the social marketing of family planning products, in particular pills, condoms and emergency contraception, a rural network of 914 community based distribution (CBD) points were created that enabled a 13-fold in FP access in the project catchment areas. Because this system recovers the cost of commodities, the CBDs are able to continue to operate after the project's end. Over 18,000 couples now purchase their FP products from these outlets and, as a result, rates of fertility and unwanted pregnancy have declined significantly in the areas where the program operates. Based on the project's success, several other municipal governments have asked for assistance to establish similar CBD systems and operations in both marine and terrestrial high-growth hotspots. Under a follow-on project, PATH Foundation is assisting 25 others to replicate the model but in this instance the LGUs rather than NGOs will be the main facilitators for PHE integration.

CONCLUSIONS

Results from the IPOPCORM project demonstrate benefits to integrating reproductive health activities into natural resource management agendas in the developing world context. First, the integrated strategy lends sustainability to resource management interventions by addressing population dynamics. The project empowered coastal communities to make decisions about their fertility and household size by providing basic reproductive health and family planning information through peer educators and affordable products through the community based distributors system. Meanwhile, marine environmental education and management activities provide these communities with an acceptable context within which to discuss family planning. IPOPCORM educational materials highlight the importance of small family size in improving family welfare, by using food security as the theme unifying population and environment, and provide a tangible, immediate context within which

communities can comprehend and accept the need to limit family size. As a result, the CRM component of the project serves as a catalyst for RH and FP promotion, understanding and acceptance. This reinforcing synergy is particularly noticeable in circumstances when there are significant cultural and religious barriers to discussing and promoting family planning. The integrated strategy makes the family planning component less of a target of resistance in the predominantly Catholic, morally conservative rural coastal communities. The coastal education component also allows the project to better reach youth in these communities, who are generally secluded from information and discussions about sexuality and reproduction. As a result of the IPOPCORM project, youth can access sexual and reproductive health information and avoid unintended pregnancy.

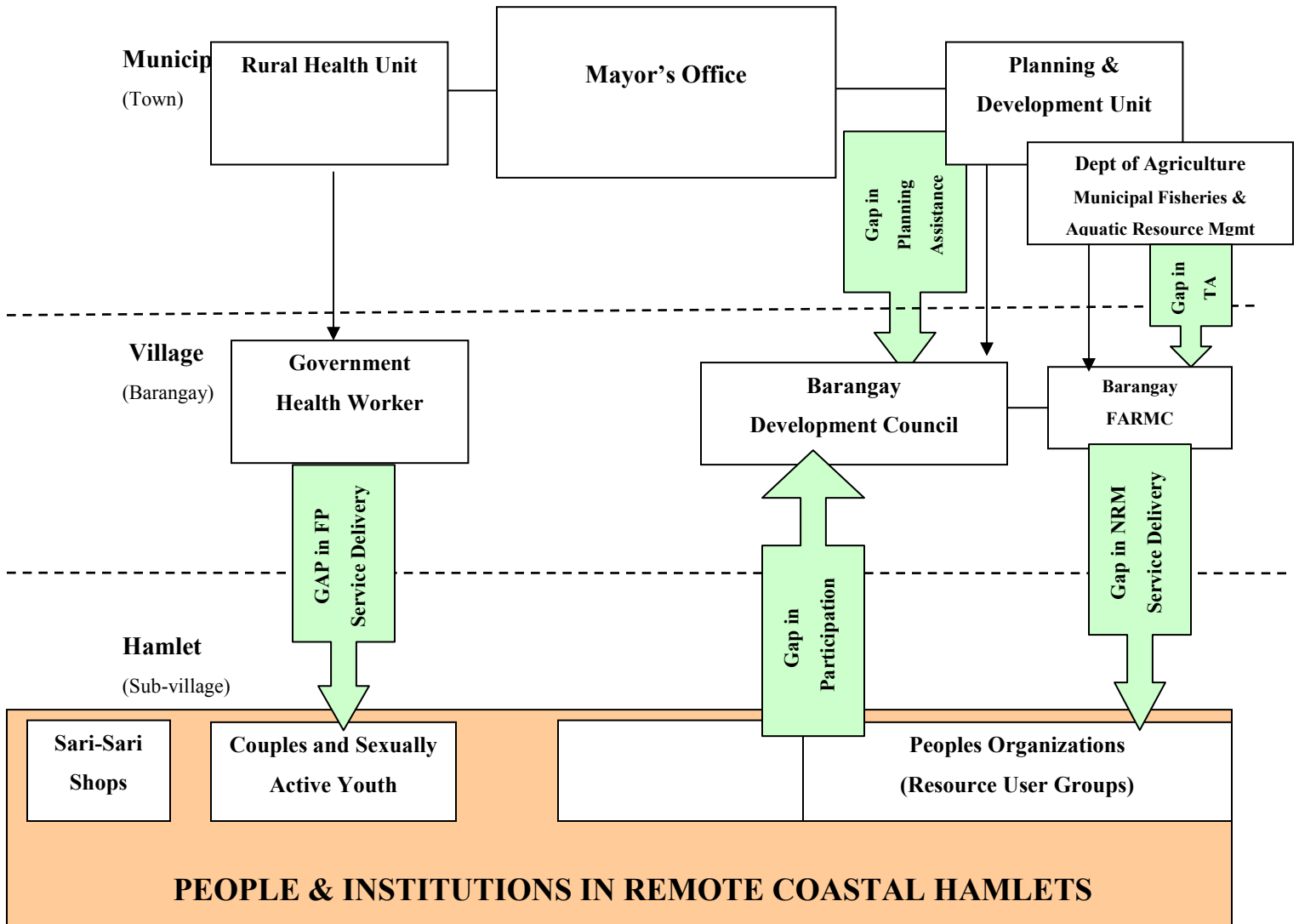
The family planning component, on the other hand, enhanced the sustainability of the gains from conservation (by reducing population growth and human pressure on ecosystems). It also attracted women to coastal management activities, increasing their participation in community management boards and governance structures. Such gender sensitive programming allows women to participate fully in the management of the resources they depend on for livelihood and food. An added benefit is the project's focus on involving men in their family's family planning decisions, empowering them to take responsibility for traditionally female issues such as family size, birth spacing, and reproductive health.

Finally, results from program monitoring and external evaluations show that the approach generated synergies through:

- Linked IEC messages delivered by trained Peer Educators who effectively communicated the food security message to communities
- Target Groups who participate in both activities e.g. Peer Educators for family planning are involved in MPA establishment and MPA management team members also promote FP
- Policy and Advocacy activities - resulting in the incorporation of policies/budgets for FP/RH and CRM
(municipal environment plan, village development plan)
- One organization implementing both FP and CRM strategies in a coordinated fashion - i.e., local NGO and/or Peoples Organization

Annex 1

Gaps in Access to FP, Conservation and Development Services in Coastal Hamlets



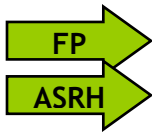
Annex 2: IPOPCORM strategies, interventions, and activities

STRATEGY (general approach)	INTERVENTION	ACTIVITIES	FACILITATOR ACTOR PRACTITIONER
Objective #1: Reproductive health outcomes improved in coastal communities			
Capacity-building for community-based family planning and reproductive health (FP/RH) management	Memorandum of Understanding (MOU)	Negotiate and execute MOU with municipal government for implementation and co-financing of CBFP activities	NGO partner and Peoples Organization
	Community outreach	Train NGO personnel to assist communities to develop CBFP systems and services	Community organizers from NGOs that have ongoing environment or health or community development activities in the focal area
	Peer education	Train, support and monitor indigenous leaders from the community to deliver behavior change communication	Adult peer educators (20-49 yrs) and Youth peer educators (15-19 yrs)
	Community-based distribution (CBD)	Train, resupply and monitor members of the PO and private entrepreneurs to promote FP and distribute non-clinical methods of FP (pills, condoms)	Existing vendors, shop-keepers and Peoples Organizations
	Referral mechanism for health services	Establish linkage with nearest health facility; orient health workers to the project and provide refresher training in FP/RH (if needed)	Government rural health unit personnel (midwife, nurse, barangay health worker)
	Behavior change monitoring	Periodic surveys to track change in FP and fishing practices	NGO outreach workers
Objective #2 Coastal resource management (CRM) capacity developed at the community level			
Capacity-building for community-based fisheries and coastal resource management	Participatory coastal resource assessment (PCRA)	Survey and map near-shore ecosystems (coral reefs, mangrove stands, sea grass beds) to identify potential sites for MPA establishment	Peoples Organizations with technical assistance from NGO, municipal environment officer and village development council
	Marine Tenurial Agreement (MTA)	Process MTA with municipal government for establishment of MPA (fish sanctuary, mangrove reserve, “no take” area)	Peoples Organization with assistance from Village Development Council and NGO partner
	Marine Protected Area (MPA) Management Committee	Organize MPA management committee; develop MPA management plan and designate volunteer fish wardens	Peoples Organization with planning and training support from municipal environment officer and partner NGO
	Marine Protected Area (MPA) establishment	Demarcate MPA boundaries and core zones, post signs prohibiting entry	MPA Management Committee with assistance from the community
	Surveillance and Enforcement	24-hour patrol of MPA, apprehend illegal fishers/loggers	Deputized fish wardens, other volunteers from the community
	MPA monitoring	Periodic monitoring survey to track changes in coral/fish status and mangrove coverage	MPA Management Committee with assistance from community, NGO partner and government environment officer

STRATEGY (general approach)	INTERVENTION	ACTIVITIES	FACILITATOR ACTOR PRACTITIONER
	Habitat enhancement	Mangrove reforestation, coastal cleanup campaigns	Adult and youth peer educators, community volunteers
Capacity-building for Environment-friendly Enterprise Development (EED)	Organizational assessment	Assess and strengthen the capacity of Peoples Organization to administer micro-credit funds and evaluate business plans	NGO partner
	Micro-credit facility	Establish eligibility criteria and interest rates; evaluate business plan; administer micro-credit funds; collect payments from beneficiaries	Peoples Organization with oversight from NGO partner
	EED	Deliver training in EED to fishers and women whose business plans satisfy requirements	NGO partner with assistance from local government units and Peoples Organization
	EED monitoring	Monitor compliance with EED requirements/repayment schedule	Peoples Organization with oversight from NGO partner
Objective #3: Public and policymaker's awareness and support for PHE integration increased			
Capacity-building for PHE advocacy and IEC	Policy advocacy for PHE	Advocate with local government units for integration of FP into CRM and development plans	NGO partner, Peoples Organization
	Legal literacy	Educate communities and their Peoples organizations about their rights under the Fisheries Code and Local Government Code	NGO partner
	Rights-based advocacy	Advocate with local government units for improved enforcement to stop illegal and destructive fishing/logging	NGO partner, Peoples Organization and Village Development Council
	Skills-building for PHE development planning	Transfer planning/budgeting skills to village development councils for linked CRM-RH activities and assist the councils to meet annual requirements to qualify for funding from the municipal government	NGO partner
	Community Education	Using traditional media, disseminate key messages about family planning, family food security, and marine resource management	Peoples Organization, youth and adult peer educators

Annex 3

Philippines Coastal Resource Management Framework and Entry Points for Population and RH Interventions: The IPOPCORM Model



1. Fisheries management
2. Habitat management
3. Coastal zoning
4. Shoreline management
5. Legal arrangements & institutional development
6. Waste Management
7. Watershed Management



8. Enterprise and Livelihood Development
9. Eco-Tourism Management

Family Planning (FP) is integrated into fisheries and coastal resource management agendas to reduce fishing effort and human pressures on municipal fisheries and coastal habitats.

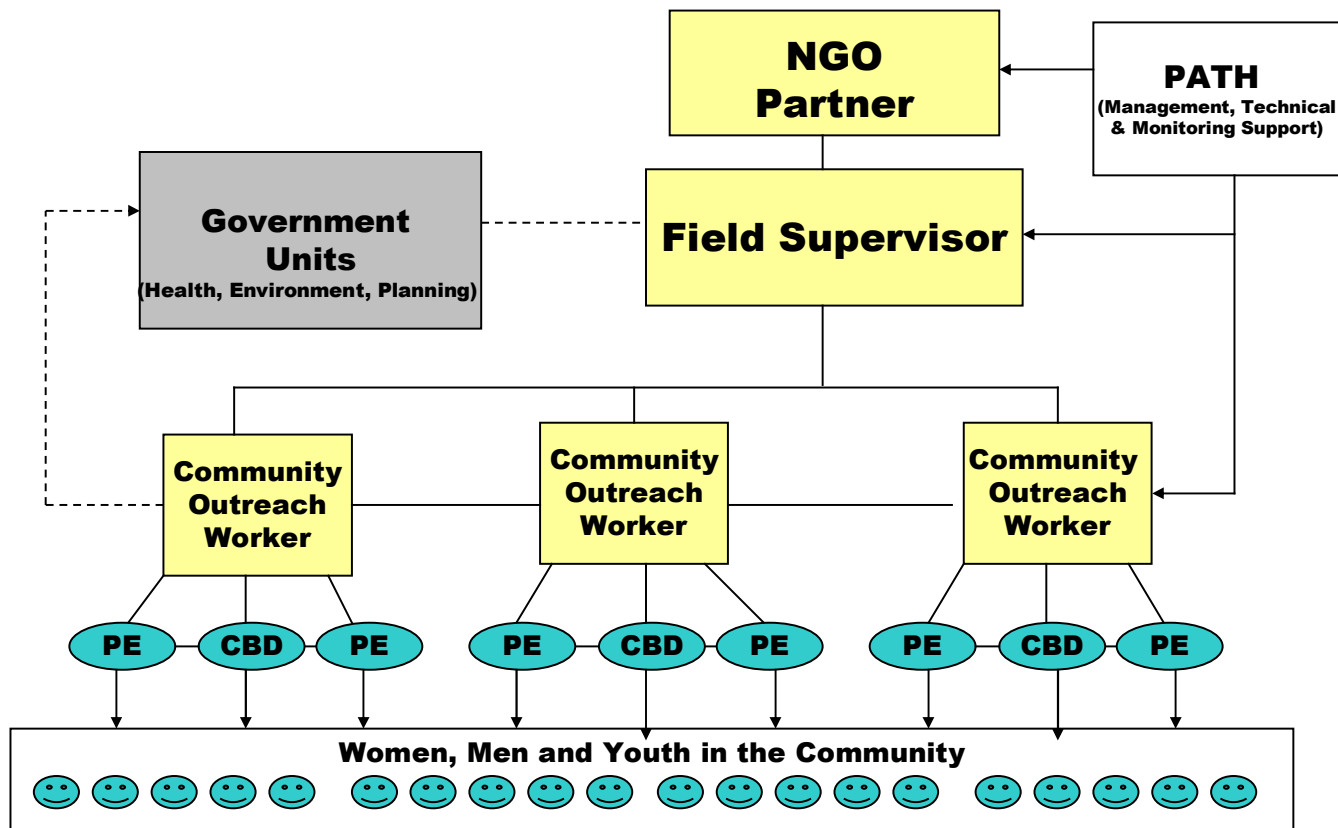
Adolescent Sexual and Reproductive Health (ASRH) is integrated into Habitat Management through IEC activities that encourage young people to become stewards of their sexuality and the environment.

Community Based Distribution (CBD) of FP products uses cost recovery or social marketing approaches. Small shop keepers in coastal communities are trained to counsel and screen potential FP users and to dispense non-clinical methods of FP at subsidized or fair-price structures.

AIDS = HIV/AIDS prevention education is indicated to mitigate HIV risks associated with eco-tourism development.

Annex 4

Community Outreach Peer Education (COPE)



Manpower for PHE Integration and Service Delivery

- 1 Field Supervisor mentors and supports 5 Outreach Workers
- 5 Outreach Workers each mentor 5 CBD agents (total 25 CBDs)
- 5 Outreach Workers each mentor 8 Peer Educators (total 40 PE)
- 25 CBDs each serving 120 couples/year (total 3000 couples)
- 40 PEs each interacting with 50 peers/year (total 2000 peers)

Note: CBDs and PEs also include members of Peoples Organizations that NGO partners work through