

The cost of action: CRM investment in the Philippines

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Abstract

Knowing the cost of investment in coastal resources management (CRM) is important especially in understanding the cost of undertaking one and ascertaining whether the outcomes are worth the money spent. In the Philippines, various CRM projects have already been initiated and no studies have tried to account for the total level of investment. This paper provides an estimate of money spent or invested on CRM in the Philippines and examines the investment per km² of coral reefs.

Introduction

Information about CRM investment is important in determining whether the lessons learned so far from all CRM initiatives are worth the money spent. The cost of CRM investment can be especially important in future planning, particularly in a country where sources of funds are heavily dependent on bilateral and multilateral sources¹. Several authors have stated or implied that the Philippines have had the most number of experiences in coastal resources management (CRM) due to the number of projects implemented since the 1970s (e.g., Pollnac et al. 2001). These experiences have brought about significant lessons, notably that the active participation of direct resource users and other stakeholders is an essential element for successful coastal management (Juinio-Menez 2002).

This paper does not seek to review these lessons, but provides an estimate on how much was spent or invested for CRM projects in the Philippines from the early 1970s to 2000 and examines the investment per hectare of coral reef during the same period. Inquiries on CRM investment in the Philippines are scarce, if not totally lacking, except for efforts to size up the number of projects implemented and the lessons learned (e.g., Jacinto and Gervacio 1997; Pomeroy and Carlos 1997; Crawford et al. 2000; White and Vogt 2000; Pollnac et al. 2001).

Often, such investment is assumed to be extremely significant.

Methodology and limitations of the review process

CRM as used in this paper refers to activities undertaken to manage the coastal zone and its resources through various ways (i.e., integrated, multi-sectoral, government-led, NGO-initiated, and fisherfolk-led) and focus (i.e., livelihood, education, research, advocacy, conservation, population and others). Typologies such as ICM (integrated coastal management), ICAM (integrated coastal area management), ICZM (integrated coastal zone management), CB-CRM (community-based coastal resources management), CBRM (community-based resource management), and IAD (integrated area development) are considered to be part of CRM, as long as the project tackles the management issues of one or a collection of coastal resources.

The data used in this study were derived from key informant interviews, annual reports, online publications, and other published information. Most interviews were made between December 2001 and January 2002. Previous studies that attempted to review CRM in the Philippines were initially reviewed to get a sense of the scope of the research and to serve as baselines (such as Jacinto and

Gervacio 1997; Pomeroy and Carlos 1997; Crawford et al. 2000; White and Vogt 2000; Pollnac et al. 2001). An unpublished work of Hagart-Alexander (1996) was also reviewed. Projects that are purely biological or ecological, fisheries or marine science research are not included. In situations where donors and grantees report different amounts for the same project, the information from the donors were used.

The average US\$ equivalents of project grants as provided by www.oanda.com were used except for the Philippines peso (PHP), which was based on the Central Bank of the Philippines (www.bangkosenral.gov.ph) for the project duration.

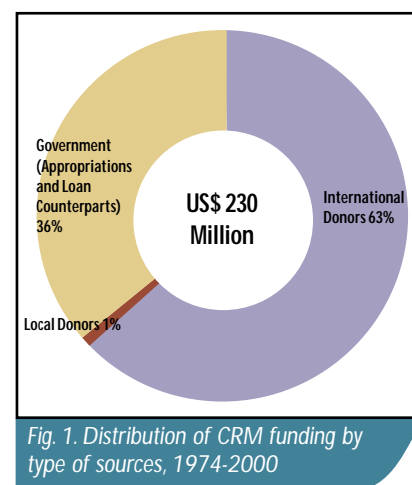


Fig. 1. Distribution of CRM funding by type of sources, 1974-2000

¹ Bilateral sources refer to bilateral institutions that facilitate development cooperation programs from a single northern country with a southern or developing country such as USAID, CIDA, AusAID, JICA, OECF, Sida, GTZ, SNV, etc. Official development assistance is disbursed from their government to recipient countries. On the other hand, multilateral sources are donor institutions jointly headed and managed by several governments such as the World Bank, ADB, EU, the UN and its affiliate agencies (The Association of Foundations Philippines 2000).

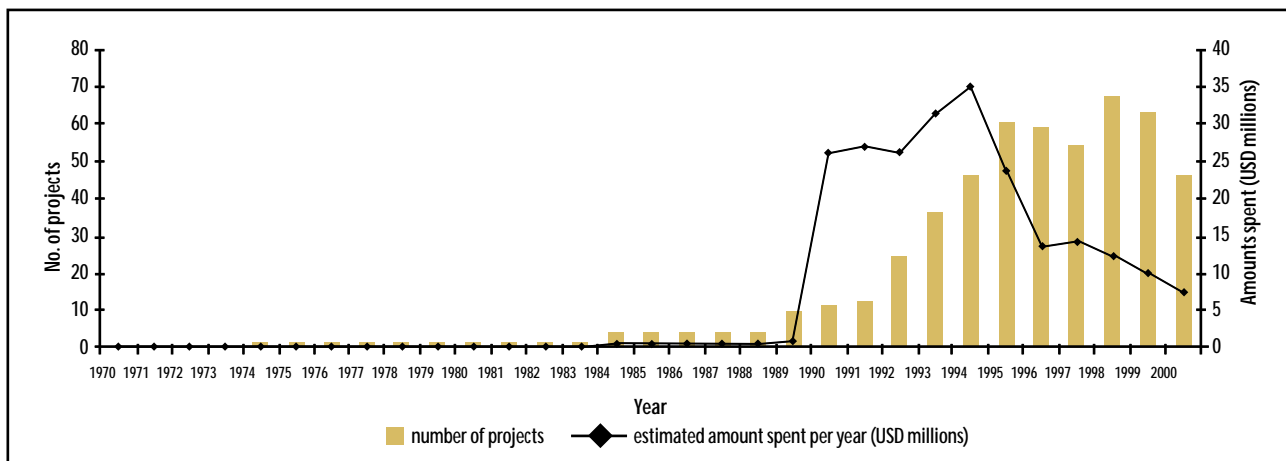


Fig. 2. Estimated number of and amount spent on CRM projects in the Philippines, 1974-2000

An approximation of the yearly estimate of the amount of funding is generally based on the total grant divided by the number of years (i.e., project duration). Multi-year projects that ended in 2001 and those that started in 2000 are not included as their results fall outside the review period.

In the case of the Conservation of Priority Protected Areas Program (CPPAP) and the National Integrated Protected Area Program (NIPAP), both huge projects by Philippines standards covering mostly terrestrial ecosystems, the coastal component of the funding was derived by dividing the total project cost by the number of project sites. The coastal or marine projects were added to get the coastal component. Although the data gathering was attempted to be as comprehensive as possible, limitations of time, financial resources, and availability of key informants have prevented other organizations from being included. The estimates might have been a little bit higher had organizations such as the Philippines Council for Aquatic and Marine Resources Development (PCAMRD), and some smaller NGOs been included.

The cost estimated here is the direct cost of CRM-related projects from 1974 to 2000 and represents a first crack at a highly complicated situation. This does not include the cost associated with the departments (e.g., Department of Environment and Natural Resources

and Department of Agriculture) and line agencies or staff bureaus (e.g. Philippine Coast Guard, Bureau of Fisheries and Aquatic Resources and PCAMRD) tasked with managing the country's coastal resources. The cost of doing marine research is also not included in this study although factoring them in can easily double the costs.

What do the figures show?

From 1974 to 2000, at least 200 projects were implemented with an estimated total funding of at least US\$ 230 million. Sixty-three per cent of the funding came from bilateral and multilateral sources, the international NGO community, and from international philanthropic organizations (Figure 1). This finding parallels that of observations by several authors that donor assistance is one of the major driving forces influencing CRM development in the country (Christie and White 1997; Pomeroy et al. 1997; Rivera and Newkirk 1997; Courtney et al. 2000; Courtney and White 2000; White and Salamanca 2000; White and Vogt 2000; Pomeroy et al. 2001; White et al. 2002).

In terms of the size of grants, the top three major donors from 1974 to 2000 were the Asian Development Bank, the European Union and the US Agency for International Development. Among the philanthropic organizations (POs), Oxfam-Great Britain, the Rockefeller Brothers

Fund, and Helvetas were the top three major donors (Table 1).

The largest local source of funds comes from the general appropriations of the government, largely as counterparts to loans or some grants as required in certain bilateral and multilateral arrangements and funding to the Coastal Environment Program². Projects or programs such as the Fishery Sector Program (FSP), Central Visayas Regional Project (CVRP), CPPAP and NIPAP had substantial government counterparts. Local funding for NGO initiatives during the period was largely provided by the Foundation for the Philippines Environment (FPE) and the UNDP-GEF-Small Grants Program (SGP). The latter was especially important during the end of the 1990s.

From 1992 to 1999, FPE had funded around 50 CRM-related initiatives to more than 40 NGOs, POs and academic institutions (Foundation for the Philippines Environment 1996).

UNDP-GEF-SGP, on the other hand, had 22 projects since 1992, designed primarily to provide assistance to NGOs, POs and community-based organizations (CBOs). It awards grants to a project of up to a maximum of US\$ 50 000 (Cunanan, pers comm.).

The largest number of projects implemented during the review period

² Data from the Philippines Coast Guard, BFAR and PCAMRD were not covered in this review. Including them would have raised the funds from local sources several notches higher, but would have been incomparable with those of bilateral and multilateral donors.

occurred from 1995 onwards, although the amount of funding was highest during the first half of the 1990s (Figure 2). This is so because most of the large projects covered in the review were started during the early part of the 1990s. There appears to be no correlation between the amount spent annually and the total number of projects implemented for that year.

There were several NGO-implemented CRM activities in the early 1990s funded under the auspices of FSP such as those identified in Rivera and Newkirk (1997) and Ferrer et al. (1996), but their activities and funding were taken as part of FSP in this review.

During the review period, investments for CRM in the Philippines went largely to the government for implementation (Table 2). Most multilateral assistance to CRM was provided through government agencies such as the DENR and DA. Loans form a sizeable part of such assistance.

Models of CRM revolve around the protection and management of the coral reefs (White 1987; White 1989; Ferrer 1992; Ferrer et al. 1996; Pomeroy et al. 1997; Courtney and White 2000; Crawford et al. 2000; White and Vogt 2000; White et al. 2000; Pollnac et al. 2001; Pomeroy et al. 2001; Courtney et al. 2002). Estimates used in recent studies showed that the country has around 26 000 km² of coral reefs (Bryant et al. 1998; Spalding et al. 2001; Burke et al. 2002). Extrapolating the amount invested to protect these reefs would represent the conservation investment (cf. Parks and Salafsky 2001) per km² of coral reefs for the review period. In the Philippines, it is estimated that about US\$ 9 000 was already invested per km² of coral reefs to arrive at the lessons pointed out in other publications (e.g., Courtney et al. 2000; White and Vogt 2000; White et al. 2002). Yet, this amount is definitely less than what White and Cruz-Trinidad (1998) considered as the absolute minimum to ensure sufficient management. In their estimate, at least 5 per cent annually of the national economic benefits of coral reefs (i.e., US\$ 1.35 billion in 1996) should be invested for management. In comparison to temperate countries, the cost of doing fisheries management can be anywhere between 3 to 26 per cent of the value of their fisheries landings

Table 1. Sources of CRM grants in the Philippines, 1974-2000

International Sources of Funds
Asian Development Bank (ADB)
Australian Agency for International Development (AusAID)
Bread for the World
Canadian International Development Agency (CIDA)
Catholic Organization for Development Cooperation (CEBEMO)
Center for Development and Population Activities
Christian Aid
Christian Initiative Center for International Learning
Danish International Development Agency (Danida)
David and Lucille Packard Foundation
Debt-for-Nature Swap (DENR-WWF-Haribon)
Department for International Development (DFID)
Embassy of Japan
European Union (EU)
EZE (Protestant Association for Cooperation in Development)
Food and Agriculture Organization (FAO)
Global Environmental Facility (GEF)
Helvetas (The Swiss Association for International Cooperation)
Henry Foundation
International Center for Research on Women-Promoting Women in Development (PROWID)
International Development Research Center (IDRC)
Keidanren (Japanese Federation of Economic Organizations)
John D. and Catherine T. MacArthur Foundation
National Center for Cooperation in Development (NCOS)
Novib – Oxfam Netherlands
Oxfam – America
Oxfam – UK and Ireland
Oxford University
PLAN-Netherlands National Office
Rockefeller Brothers Fund
Royal Netherlands Embassy
SNV (Netherlands Development Organization)
Swedish International Development Cooperation Agency (Sida)
Swiss Catholic Lenten Fund
The Asia Foundation (TAF)
TRAFFIC-Southeast Asia
Trocaire (Irish Catholic Agency for World Development)
United Nations Development Program (UNDP)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
US Agency for International Development (USAID)
Voluntary Service Overseas (VSO)
The World Bank (WB)
World Resources Institute (WRI)
World Wildlife Fund - US
Local Sources of Funds
ABS-CBN Foundation
Angelo King Foundation
Foundation for the Philippine Environment
General Appropriations from the Government of the Philippines
Philippines Network of Rural Development Institute, Inc (Philnet-RDI)
Silliman University Marine Laboratory

Table 2. Data by type of implementor, 1970 - 2000

Type of Implementor	Number of projects		Amount	
	Count	Per cent %	US \$	Per cent %
Others	3	1.03	56 963.88	0.02
Academe-NGO partnership	1	0.34	250 000.00	0.11
Academe	10	3.45	760 444.04	0.33
International NGO	5	1.72	1 308 566.00	0.57
International organization	10	3.45	2 298 858.67	1.00
LGU	2	0.69	4 255 000.00	1.85
Government-NGO partnership	1	0.34	8 000 000.00	3.47
NGO	231	79.66	12 394 746.64	5.38
National government	27	9.31	201 169 239.94	87.28
Total	290	100.00	230 493 819.17	100.00

(Arnason et al. 2000), which is sizeable.

Conclusion

While the analysis provided in this review only approximates or estimates the costs of CRM projects implemented until 2000, they provide important insights into CRM costing, i.e., CRM is expensive and external sources of funding are important. Already there are signs that donor fatigue is felt in the CRM sector. Questions to be explored further by the stakeholders should include elucidating whether the substantial investments on CRM in the Philippines have led to positive and sustainable outcomes in the use, management and development of coastal resources especially in light of recent studies showing that 98 per cent of its coral reefs are at risk from human activities (Burke et al. 2002).

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