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Models of area-based convergence: Lessons from the Bicol River Basin Development Program (BRBDP) and other programs

Jeanne Frances I. Illo¹

Background

The Bicol River Basin Development Program (BRBDP) was an early experiment the Philippines in geography based planning, one that was independent of political administrative boundaries. Planning and programming were focused on a ‘river basin,’ or a hydrologic area. It assumed that if development was successfully concentrated in an area with high growth potentials (in more recent planning lingo, if there is convergence of development inputs in these areas), the realized growth prospects would trigger economic development throughout the region. All these would also improve the chances of improved human development.

Launched in the early 1970s, it was one of the major regional development programs of the Marcos administration in a region that had one of the highest poverty incidences. It was also a region that was then beset by insurgency and political unrest.

Program Funding and Management

The BRBDP was a product of pre-devolution, of centralized governance, planning and programming. The Ministry (now Department) of Public Works and Highways practiced oversight of the program. A grant from the United States Agency for International Development (USAID) supported the Bicol-based program office, which managed the program and coordinated the various agencies involved in various projects. The Program also supported and coordinated with national programs that covered parts or the whole of the Bicol River Basin.²

Under the USAID Bicol grant technical assistance project, the program office was expected to prepare project packages and secure major financing from external donors for the Bicol Program. Sub-loan project feasibility studies, institutional and other technical assistance were provided to facilitate the entry of other donors. The first major project with another donor was signed in October 1979. It was a

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² This applied particularly to USAID-assisted projects, including the rural electrification, provincial development and rural roads, agrarian reform, cooperative marketing, integrated agricultural production and marketing, small farmer irrigation systems, real property tax administration, plus population, health and nutrition project activities. Another example is the agricultural education outreach project that provided support to the Camarines Sur State Agricultural College and six other such institutions.

\$46.8 million package which included a \$41 million Asian Development Bank (ADB) loan³ and a grant of \$5.8 million from the European Economic Community (EEC). The USAID funding for the BRBDP ran for a decade (1973-1983), but the Program itself, or at least some of its components, went on for at least another decade (Koppel and others, 1985). The BRBDP, therefore, was heavily supported by overseas development aid funding through grants and loan packages. All these financed projects in eight smaller integrated area development (IAD) projects that focused on rural infrastructure (roads and flood controls), agricultural, agrarian reform (land consolidation), and integrated population and health projects. The ‘integration’ of development inputs was evident in three of the IAD projects in Camarines Sur (Koppel and others 1985).

Libmanan IAD I Project

The Libmanan IAD I project involved the construction of a 4,000 hectare irrigation and drainage system plus flood control, salt water intrusion protection facilities, and farm access roads in an economically depressed area in the lower Basin that was considered to have high growth potentials. Along with the infrastructure inputs were institutional (organization of farmers’ cooperatives and irrigators’ associations) and agricultural support from the agriculture ministry, but the National Irrigation Administration (NIA) was the lead implementing agency. Direct beneficiaries included 2,500 small-scale farm households; indirect beneficiaries numbered some 10,000 households in two major towns. The irrigation project was reportedly plagued with problems, such as poor design and engineering supervision, inadequate coordination between the NIA and the BRBDP, environmental damage, and poor institutional development. Thus, by the end of USAID funding in the mid-1980s, the constructed system was serving only half of the irrigable area. Since then, the NIA had taken on post-BRBDP rehabilitation and institutional support to the water users’ groups.

Bicol IAD II Project

The Bicol IAD project was a combined land consolidation and (pump) irrigation project covering 2,300 hectares in the middle Basin. The project included construction of community buildings, improved water supply facilities, organization of farmer associations and cooperatives, and training of project area residents in agriculture and health. The agrarian reform ministry (now, the Department of Agrarian Reform, or DAR) was the lead implementing agency. Six other line agencies were involved in the institutional, agricultural and community support activities. By the mid-1980, there were an estimated 1,230 small-scale farm family beneficiaries. The project was significantly delayed and substantial cost overruns were incurred. However, although there were some initial difficulties associated with resettlement, some resistance to resettlement seemed to have been overcome when a successfully resettled village was provided a wide range of support services. Two decades later, the Bicol IAD II area had been resettled, and farmers’ cooperatives continued to manage the irrigation system and cooperative business. A brief story of the BRBDP interventions in the area, and post-BRBDP developments is found in box 1, below.

Rinconada IAD III Project

³The ADB-assisted project included major irrigation and related components in two IADS (Naga-Calabanga and Rinconada), providing resources for irrigation, drainage, access roads, agricultural support services, and the development of community water systems.

Box 2. The Land Consolidation Project in San Isidro, Bula, Camarines Sur

The beneficiaries of the BRBDP land consolidation project in San Isidro were rice cultivators in what used to be the Lirag Estate. The BRBDP intervention package included land tenure improvement and institutional development, the construction of secondary road (which farmers believed to be a planned provincial road), installation of an electric-powered pump irrigation system, including the lining of irrigation canals. According to the long-time president of the farmers' cooperative, the farmers were organized into an irrigators' association, with an almost all-male leadership and membership (numbering over 100). The irrigation fee was 14 sacks of palay per hectare. This was found to be unsustainable by the farmers' group. So in the mid-1980s, after the group organized itself into a farmers' coop, it decided to return the electric-powered pumps to NIA and buy crude oil-powered pumps (now they have three). Because of high electric power rates, the cooperative accumulated losses, as it had to cover the high electric bill.

The present irrigation system that is managed and operated by the cooperative consists of the three pumps (on one side of the road) that serve about 40 farms and a community gravity system on the other side of the road that serve over 100 farms. While the pump-irrigated farms pay 7 cavans per hectare and shoulder the cost of crude oil, the farms served by the gravity system only pay 3 cavans per hectare. The cooperative will likely raise the fee of the latter to 4 cavans per hectare.

Apart from the cooperative-owned pumps, there are about four privately owned pumps. Although private, most use the lined canals built by NIA and for which the cooperative is amortizing. A check with the provincial NIA office revealed that the cooperative is repaying for the costs of two programs of work. The most recent rehabilitation assistance was in 1992/93, which covered repairs and improvements of the gravity communal system (dam, canal structures, and 10 km of canalization work). The project cost three million pesos, payable in 50 years. Annual amortization is P75,000, but the highest ever paid so far by the cooperative has been P20,000.

Sources: Personal interviews with Jose Tagum, president of the San Isidro Multi-Purpose Farmers' Cooperative, 13 January 2012; and with Engr. Ma. Elena Revilla, Senior Institutional and Technical Officer of the NIA Camarines Sur Provincial Office, 13 January 2012.

The Rinconada IAD III project involved the development of Lake Buhi into a source of gravity irrigation water for an additional 8,000 hectares by constructing a control structure and regulation facilities and by excavating the outlet channel; and the rehabilitation and expansion of the existing Lalo system. Improved water management, farmer organizations and farm family training in the Lalo service area are also supported under the project. Additional irrigation water from Lake Buhi was to be diverted to the existing Barit Irrigation System and to the service area of the ADB-assisted Rinconada project which will rehabilitate and construct irrigation facilities in the Baa and Bula areas. NIA is the lead line implementing agency for this irrigation component; it adopted the Buhi-Lalo system as a pilot test area for its participatory approach to irrigation development on a national irrigation system. When visited in January 2012, the management of these various irrigation systems have been reconfigured to become the Rinconada Integrated Irrigation Systems (RIIS).

Another component of the project is a pilot upland development program in selected areas within the 10,000-hectare Lake Buhi watershed. This component is under the auspices of the regional office of the Bureau of Forest Development (now the Bureau of Forest Management, or BFM). The objective is to assist poor upland farmers increase their productivity and to protect the watershed and irrigation water source. While the project was small, almost everything has gone awry, with upland residents hired to work for the project periodically subject to long periods of non-payment. In contrast, Upper and Lower Lalo irrigation project was completed on time and within budget. In Upper Lalo, three farmers' irrigation organizations had operated the systems and had repayment rates so high that, when evaluated by USAID in the mid-1980s, NIA was fully recovering operation and maintenance (O&M) costs.

As evident in the illustrative cases, the IAD projects also offer varying implementation experiences, with some being plagued with such problems as poor design; inadequate coordination between the project implementers and lead agencies, on the one hand, and the Program Office, on the other; resettlement issues; and non-payment of local upland farmers who were hired by the project for certain tasks (Koppel and others 1985). The comparison of two irrigation projects (Libmanan and Rinconada) suggests the value of participatory approach to irrigation development that enabled NIA to tap local expertise and inputs in the Rinconada IAD, and to prepare the farmers for the eventual operation of certain parts of the irrigation systems.

In addition to the eight area-based projects were Basin-wide efforts of flood control (mainly dredging of waterways and control structures) and the construction of secondary and feeder roads projects (under the public and highways ministry/department), and an integrated health, nutrition and population project. The secondary and feeder roads project sought to rehabilitate and improve 194 km of secondary roads and 241 km of feeder roads within the Bicol River Basin. The improved roads generally traversed intensively cultivated lands, served small-scale farmers and connected relatively isolated communities with existing highways and market centers (Koppel and others 1985). These connect with farm access roads on main canals and laterals being constructed in the IAD projects.

A major criticism of the BRBDP was its heavy focus on physical infrastructure. However, its irrigation and land consolidation (agrarian reform) projects were accompanied by development of rural organizations and institutions. It also invested in a social services-oriented initiative, the Bicol Integrated Health, Nutrition and Population Project. This project deployed hundreds of Barangay Health Aides, funded environmental sanitation improvements (drainage and waste disposal), and strengthened the health ministry (the lead implementing agency) and inter-agency coordination. By involving local governments in its implementation, it sought their agreement to assume responsibility for providing continuing salary support for the BHAs. This happened, and this was to be strengthened by the enactment of the Local Government Code a decade or so later. Then as now, this was less likely to happen in poorer municipalities, where the need for barangay health services is greatest.

Some Recent Inter-Local Development Modes

In recent years, there have been different attempts at inter-local convergences of services or development inputs. In the 1990s, the integrated area development approach has been translated into alliances, often in the context of delivery of basic services; local economic development or LED, in light of the recent focus of development donors and the Department of Interior and Local Government; natural resources/environmental management, which was the focus in the 1990s and early 2000s, and now being refashioned under the broader rubric of climate change; and infrastructure.

Of these initiatives, two examples stand out: Metro Naga Development Council (MNDC, or Metro Naga), which covers the City of Naga and adjoining 14 municipalities in the Bicol Region;⁴ and, in Central Mindanao, PALMA (now, PPALMA) Alliance, which originally consisted of five municipalities

⁴These municipalities, all in Camarines Sur, are: Bombon, Bula, Calabanga, Camaligan, Canaman, Gainza, Magarao, Milaor, Minalabac, Ocampo, Pamplona, Pasacao, Pili, and San Fernando.

of Cotabato City.⁵ The legal basis for the alliance is found in the Local Government Code, which encourages the coalition of municipalities to achieve a common good.

*PALMA Alliance*⁶

Formalized in 2000 with support from the Local Government Support Program, Phase 2 (LGSP-2) of the Canadian International Development Agency (CIDA), PALMA first coordinated their efforts to save the dying rivers of Libungan and Alamada that was caused by uncontrolled logging in the surrounding forests.⁷ The PALMA Alliance has created the PALMA Alliance Development Board (PADB), headed by one of the municipal mayors on a rotation basis, and a technical working group, with the Provincial Planning Development Office serving as technical consultants. A Project Management Office (PMO) handles the day-to-day operations of the Alliance. Since then an Alliance Framework Plan had been jointly formulated by representatives from the government and non-government sectors of the PALMA municipalities.

The avowed goals of the Alliance include the maintenance of a sound environment, peace and order; increased productivity; equal empowerment of men and women; and infrastructure development. To achieve these goals, the Alliance embarked on the following: management of the Libungan-Alamada watershed; raising the levels of income through sustainable agricultural practices and technologies; increasing the levels of women participation in all manners of consultative action, and in all aspects of decision making processes; increasing the number of men and women engaged in generating sustainable sources of income; and rehabilitation of farm to market roads.

In its first years of operation, the *Kabalikat PALMA Infrastructure Project (KPIP)* served as a common platform for the group. The project aimed at addressing problems of low income and agricultural productivity due to poor road conditions, and the poor access of upland barangays to basic services and development. Under *Kabalikat*, the five municipalities of the Alliance pooled their road construction equipment and systematically rotated equipment use among them free of charge. Each municipality was able to share their dump truck and road grader. Some also brought in their bulldozer (Alamada, Midsayap, and Aleosan), back hoe loader (Alamada, Libungan, and Midsayap), pay loader (Midsayap and Aleosan), and compactor (Midsayap). To support the effort, the provincial government of Cotabato lent the group the trailer for transporting the heavy equipment and made available a road construction team for the project.

The project had reportedly completed more than 150 kilometers of farm-to-market roads, which, in the three years after its completion, benefited more than 50 barangays in the member municipalities of the Alliance. Production of corn, rice and vegetables increased by 20 percent; travel time was cut by half, and travel became safer, cheaper, and more convenient. Finally, the remote barangays have become accessible to government services and assistance.

⁵PALMA stands for Pigcawayan, Alamada, Libungan, Midsayap and Aleosan. With the inclusion of Pikit, the Alliance is now known as PPALMA.

⁶ Sources of information: LGSP (2004), and PCW (2006)

⁷The Alliance implemented a 50-hectare reforestation project in five barangays and a river-rehabilitation program in the ten barangays along the Libungan-Alamada River; all barangays were part of different municipalities.

*Metro Naga*⁸

Metro Naga covers a land area of about 123 thousand hectares, which accounts for 25 percent of the total area of Camarines Sur. Its total population is more than one-third of the provincial total. Six of ten people are found in rural areas, depending on farming and fishing for their livelihood, and living in poverty.

The Metro Naga Development Council, or Metro Naga, was conceived by the local chief executives of Naga City and the 14 member municipalities as a vehicle for metro-wide planning and coordination to address cross-boundary problems that a single local government cannot address. Its programs aim to equalize services provided to constituents, such as livelihood programs under the Metro Naga Public Employment Service Office (PESO), and to unify their investment promotion campaigns. The Metro Naga approach has been documented and lauded as a model for urban-rural linkages for poverty reduction (UN-ESCAP 2005:37-67).

The MNDC was created through a Memorandum of Agreement among the member LGUs. This partnership was later formalized in June 1993 through Executive Order No. 102 issued by then President Fidel V. Ramos. The Council is composed of the Chief Executives of the 15 LGUs, representatives from 13 government agencies, and members from the non-government sector (that is, non-government organizations, civil society organizations, and the private sector). Non-government representatives account for 25 percent of the MNDC members.

The idea of Metro Naga came about because the mayors of neighboring towns of Naga wanted their senior citizens to be able to avail of discounts for fares, movies, and medicine being enjoyed by Naga senior citizens in city establishments and facilities. This inter-local sharing has since grown to include access by members to the heavy equipment pool of three Metro Naga members; an emergency rescue network that allows emergency services to be deployed anywhere within the territorial boundaries of Metro Naga, and a livelihood program which is largely funded by the Naga City but equalizes access to credit and technical assistance by all Metro Naga residents.

The MNDC is a service-based organization that helps improve outreach and quality of services. It is anchored on the principle of resource complementation. The pooling of resources and efforts enable members to have more than what each can individually attain. It benefits not only poor members, as the synergy broadens the choice of resources of better-off members. In addition, Metro Naga serves as an advocacy bloc to gain access to funds from the national government. Poorer members have accessed national funds for road improvement through the representation of Metro Naga, which has a combined population of 640,000.

Metro Naga seeks to attain more balanced economic growth and to accelerate growth by engaging the private sector as a development catalyst. It capitalizes on Naga's economic dynamism and reputation and projects consolidated market and business resources that are more than what the city and municipalities can offer on their own.

⁸Sources of information: IIRR, LGSP, SANREM, CRSP/Southeast Asia (2000:36); UN-ESCAP (2005); and PCW (2006)

The two models of inter-local development and investment promotion underscore the importance of sharing, coordinating, and respect for what each member can offer. They rely on local resources and on what funds the group, as a bloc, can negotiate with the national government. Although both PPALMA and Metro Naga have received official development assistance, they have been in the form of capacity development assistance for better governance, and, more recently, to help develop gender-responsive local economic environment (PCW 2011).

Reflections on the BRBDP and Recent Inter-Local Efforts

The BRBDP and other inter-local development initiatives offer several lessons for geography-based and inter-local development planning and programming. These lessons include acknowledgement that the sub-regional, inter-local program is part of bigger regional or provincial development program, and that participation of beneficiaries and local governments and their leaders is important for sustainability of program initiatives and for the operation and maintenance of constructed facilities. Its technical projects have to be well-designed and processes of bidding, procurement, and inspection of completed works transparent to ensure that public funds and loans are well spent.

Coordination and harmonization with other programs in the region

As a planning exercise, the BRBDP required close coordination with the regional office of the National Economic and Development Authority (NEDA) and the Regional Development Council, which is a more permanent mechanism than ad hoc inter-agency or inter-local government bodies created for the program. This was built into the coordination mechanisms of the BRBDP and its projects, which were developed by the technical agencies and their contractors, were reflected in the regional development plans. The head of the Regional Development Council chaired the Program Executive Committee and the NEDA regional office was a member of the Bicol River Basin Coordinating Committee, which was responsible for policy-making, reviewing plans and programs, and ensuring that these programs were consistent with regional development plans. In the case of PPALMA Alliance, the Provincial Planning and Development Office (PPDO) serves as technical adviser to the Alliance, and its projects have been integrated into the regional development plan.

Well-designed and transparent projects

Poor engineering design had reportedly plagued the Libmanan IAD Project, which required continuous rehabilitation work.⁹ In the Bicol IAD II Project (land consolidation and irrigation), NIA installed an electric pump irrigation system in an area, neglecting to consider the cost of electric power that has been consistently much higher than in Metro Manila. The cooperative ran huge electric bills, and decided to return the pumps to NIA and buy its own crude-oil-powered pumps. While much cheaper to operate, farmers served by the pump system were nonetheless paying more than double the fees paid by farmers whose lands were irrigated by the communal gravity irrigation system (see box 1). Despite persistent problems associated with pump systems, the farmers' cooperative visited in the town of Bula seemed to be doing well, more than a decade after the BRBDP ended, with the provincial agrarian reform office and the NIA providing technical assistance when needed.

⁹ Under the now defunct Bicol River Basin Watershed Management Program, a similar fate befell the Calabanga irrigation project, and one critic attributed these and other unfinished structures as evidence of corruption.

As a program principally of technical physical infrastructure projects, the BRBDP needed perfect designs, which in several areas was not achieved, creating problems for both agencies and the beneficiaries. Poorly-designed infrastructure and unfinished programs of work are waste of public funds or ill use of loans. Unless contracting and procurement processes are transparent, these failed projects suggest not only technical ineptitude, but also corruption and rent-seeking by politicians and their cronies.

Inter-agency coordination and participatory processes

The BRBDP faced challenges of coordinating technical agencies, both lead and supporting national government agencies. This is because the success of infrastructure projects is often dependent not just on the quality of the structures but also on the preparedness of users' organizations to take over at least part of operation and maintenance of the completed projects. This may not be the case with roads and bridges, where maintenance continues to be the responsibility of the public works and highways department, but it definitely has been the case with irrigation projects, as illustrated by the NIA experience with the Libmanan and Rinconada projects. Using a highly participatory approach to irrigation development in the Buhi-Lalo project (Illo and Chiong-Javier , NIA involved the irrigators' associations in the construction or rehabilitation efforts, enabling the latter to effectively manage the sections of the irrigation system that have been turned over to them and NIA to recover its operation and maintenance costs.

Financing, sustainability, and involvement of local governments

With the exception of the pilot participatory irrigation project in Buhi-Lalo, the BRBDP was a product of a top-down approach that marked many centralized or national development efforts in the Philippines. With a strong presidential mandate, a Cabinet-level coordinating body (later replaced by NACIAD) exercised oversight. The BRBDP programmatic focus has been determined with limited input from local leaders, although it is true that the provincial governors of the affected provinces sat in the Bicol River Basin Coordinating Council, and the municipal mayors in the project sites were members of Area Development Teams that purportedly identify projects that are needed in their area and oversee implementations of projects.¹⁰ The multi-layered coordination that marked BRBDP decision-making and management should be taken with great caution. One should heed the USAID evaluation team who, in 1985, wrote: "Extensive reliance on coordinating arrangements without a clear understanding of what these arrangements are expected to accomplish can undermine commitment to the program and lead to negotiation around proprietary rather than facilitative issues" (Koppel and others 1985:13). The issue of ownership—whose program is it—is important for post-program sustainability, but it can undermine efforts to address immediate implementation issues.

Decades later, its successor project (the Bicol River Basin Watershed Management Program, or BRBWMP) was reportedly cast in the same image: a political creation of the Office of the President with limited consultation or input from the provincial government. Both are seen, at least by one critic, as a 'milking cow' for the government administration.¹¹

¹⁰To provide the Program background sociological and anthropological studies and socioeconomic assessment of its projects, the BRBDP contracted the Institute of Philippine Culture, Ateneo de Manila University to create the Social Survey Research Unit (SSRU) to be based at the Ateneo de Naga. The earliest research conducted by the SSRU solicited issue priorities of sample communities in the Bicol River Basin (Lynch 1973).

¹¹ Interview with the Camarines Sur Provincial Administrator, 13 January 2012.

The BRBDP was largely funded by USAID that included a grant for the Program Office, and later, by the European Union and loans from ADB. When the grants and loans dried up, the Program Office was closed. Completed infrastructure projects, however, were maintained and, later, rehabilitated or repaired by the technical agencies (NIA, and public works and highways), while the agrarian reform projects were subsumed under the succeeding Comprehensive Agrarian Reform Program. Components of the integrated health, nutrition and population project were picked up by several local government units.

The BRBWMP was expected to be supported by a loan from the World Bank. When that did not pan out, the Office of the President, with contributions from the DENR and NIA, underwrote program cost. With the election of a new administration, the BRBWMP was one of several locally-funded projects that were closed in an effort to rationalize government spending (Kabling and Ribaya 2010). However, because of persistent flooding problems in the Basin area, there are reportedly efforts to reconstitute a Basin-wide development council and program, one through the executive branch by the Regional Development Council, and another, through Congress by a Representative from Camarines Sur.¹²

In contrast to the big-budget, foreign-assisted or nationally-funded programs such as the BRBDP and the BRBWMP, Metro Naga and PPALMA Alliance are examples of area-based, inter-local initiatives that rely primarily on local resources. Ownership of various initiatives has been established early on, and sustainability of both the alliance and its endeavours is dependent on whether it serves the common good of its members, ensuring that they continue to pool their resources to achieve their objectives as a group.

Inter-local development-oriented coalitions, however, are highly fragile, as they are vulnerable to the political fortunes of the founding local chief executives and the results of local elections. In some places, the effectiveness of alliances has reportedly been weakened in places where the provincial governor and the leader of the sub-provincial alliances are political adversaries.

Capacity to manage inter-local efforts

Development of governance and management capacities requires deliberate strategies to facilitate the learning process of technical working groups, project or management offices or centers, and participating local governments. Of these, the management offices or centers would need technical project management (including management of project finances), while the technical working groups would require coordination and planning skills. In the case of the BRBDP, with its complex management and coordination structures, the capacity development map is more complicated (Koppel and others 1985). Integrated development programs like the BRBDP will need to build capacities among participating agencies and local governments, underscoring the complementary and transfer of experiences and lessons among various stakeholders.

The Significance of BRBDP and Inter-Local Development Initiatives for Human Development

Until the BRBDP introduced its integrated health, nutrition and population project, the Program assumed that the infrastructure projects, along with its various components, would generate business activity and improve household incomes thereby improving health conditions of the population. Some benefits were noted in the mid-1980s in connection with road improvements: greater mobility, travel time savings, improved access to market as well as to medical, educational and recreational facilities, and

¹² Interview with Atty. Romeo Escandor, NEDA Region V Director, 12 January 2012.

higher levels of some trading activities. However, there had been noted, too, a decline in others (rice milling, for instance) that suggests that road improvement is but a first step in realizing economic and human development potentials of an area (Koppel and others 1985). The same can be said of the infrastructure project in PPALMA Alliance, although in its case, the cost per kilometre of road was much lower than in well-funded projects, since the group limited itself to self-financing the rehabilitation of their all-weather barangay farm to market roads.¹³

Some 400 target barangays were provided communal water systems and environmental sanitation facilities. Particularly in Camarines and Albay, mortality rates were down, and so had 2nd and 3rd degrees of malnutrition. However, crude birth rates especially in Camarines Sur continued to rise (Koppel and others 1985). Natural population increase was much higher in the Bicol Region than the national average for the decade following the end of the Program (NSO 2006). Being a net outmigration region, however, its population growth rate has been traditionally lower than the national average (see table in the annex). Life expectancy at birth remains longer than the average for the country.

The number and ferocity of typhoons that visit the region and the ensuing flooding in the Bicol River Basin have made it difficult to maintain economic and human development momentum. Thus, while the region may be growing at a faster rate than other regions in recent years, per capita income remains low. In Camarines Sur, the difficulty of maintaining economic growth is evident in the drop of per capita income between 2003 and 2006 (see annex table). The vulnerability of households to natural disasters is reflected in the see-sawing of poverty incidence that reflects the pattern of typhoons and flooding that destroy crops and businesses. (CHECK THIS AGAINST TYPHOON RECORDS)

Flooding problems plague the communities in the Bicol River Basin. The combination of continuous watershed protection and management, dredging and flood control facilities should address the flooding problem. Meanwhile, the convergence of agricultural/agrarian support, private sector participation, and as found in Metro Naga, allows the communities to bring about development using their pooled resources. At the provincial level, the economy seems to be looking well, with the upsurge of sports and adventure-oriented tourism being promoted by the provincial government.

Trying to track down results and benefits decades after the end of a geography-based program, such as BRBDP, has been challenging. Politicians' views are often influenced by whether they (or their party) had been instrumental of the program, summarily dismissing benefits of programs that are not theirs, choosing instead to focus on the problems, or highlighting the positive effects of their projects and neglecting to reflect on persistent issues. The BRBDP seems to have long-lasting benefits at least in the community visited in January 2012, although in that community and elsewhere, problems persist, some linked to failed projects of BRBDP, while others (like perennial flooding) were due to the nature of a river basin.

¹³ Using the standards of the World Bank-funded Mindanao Road Development Program, the cost for the rehabilitation of a barangay farm to market road per kilometre is P800,000 to P1,000,000. In contrast, under the PALMA infrastructure project, a 10 km to 15 km all-weather farm to market road cost each LGU or barangay only P350,000 to P500,000, or about P35,000-50,000 per km. of road, thereby freeing up LGU funds for other development endeavours (LGSP 2004:7).

References Cited:

G. Dy-Liacco, "USAID and the Bicol River Basin (in Memoriam: Garnett A. Zimmerly)," forthcoming in the USAID/Philippines 50th Anniversary Book.

GREAT Women, Philippine Commission on Women, and Canadian International Development Agency (GWP/PCW/CIDA) (2011), "GREAT Women Project Developments, 2011," Manila: GWP/PCW/CIDA

J.F.I. Illo (1989), "Farmers, engineers, and organizers: The Taisan project," in F. Korten and R. Siy (editors), *Transforming an Irrigation Bureaucracy: The Experience of the Philippine National Irrigation Administration*. West Hartford, Conn.: Kumarian Press. (Also published by the Ateneo de Manila University Press, Quezon City).

J.F.I. Illo and M.E. Chiong-Javier (1993), *Organizing Farmers for Irrigation Management: The Buhi-Lalo Experience*. Naga City: Research and Service Center, Ateneo de Naga.

International Institute of Rural Reconstruction, Philippines-Canada Local Government Support Program, and SANREM CRSP/Southeast Asia (IIRR, LGSP, SANREM CRSP/Southeast Asia) (2000), *Enhancing Participation in Local Governance: Experiences from the Philippines*. Cavite: International Institute of Rural Reconstruction.

G. Kabling and R.R. Ribaya (2010), "10 Palace Offices Abolished, Aquino's move saves P304.62 million," Manila Bulletin, in *The ProPinoy Project*. 24 September 2010. (URL for website)

B.M. Koppel, Z.A. Manalo, E.R. Navera, P.S. Sandoval, A.M. Santiago, and S.D. Talisayan, "Bicol Program Impact Evaluation," submitted to the U.S. Agency for International Development (PD-AR-787-41256), May 1985. www.pdf.usaid.gov/pdf_docs/PDAAR787.pdf. Accessed 3 January 2012.

A.Lange, "Philippines: A Study on Results Based Planning in the Philippine Rural Development Sector. Background paper for ADB TA 7190-PHI: Harmonization and Development Effectiveness." www.adb.org/Documents/Produced-underTA/.../41060-PHI-DPTA.pdf. Accessed 22 December 2011

F. Lynch, S.J. (1973), "What Rice Farmers of Camarines Sur Say They Want from The Philippine Government. SSRU Report No. 1. Naga City: Social Research Unit, Institute of Philippine Culture.

Philippines-Canada Local Government Support Program (LGSP) (2004), *All for One and One for All: Building LGU Alliances for Infrastructure Development*. Pasig City: LGSP.

Philippine Commission on Women (PCW) (2006), "Project Implementation Plan, Gender-Responsive Economic Actions for the Transformation of Women (GREAT Women) Project." Manila: PCW.

United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) (2005), "Rural-Urban Linkages for Poverty Reduction: A Review of Selected Approaches from Asia and the Pacific." www.unescap.org/pdd/prs/ProjectActivities/ongoing/Rural_Urban20%Linkages/.... Accessed 20 January 2012

Comparative tables for Camarines Sur, Bicol and the Philippines

Indicator and year	Camarines Sur	Albay	Bicol Region	Philippines
Growth rate of GRDP (in percent; at 1985 prices)—NSCB 2011				
2006-2007			7.5	7.1
2007-2008			4.3	3.8
<i>Source for the following information: Philippine Human Development Report, 2008/2009</i>				
Income per capita (in pesos at NCR 1997 pesos)				
1997	18,688	18,302		27,896
2000	19,980	18,648		27,338
2003	21,148	18,723		27,515
2006	17,531	18,823		24,727
Poverty Incidence (in percent)				
1991	51.9	54.9		
1994	50.5	47.1		
1997	35.1	49.8		25.2
2000	41.2	43.7		26.4
2003	39.9	43.3		25.6
2006	44.1	30.6		27.0
Life expectancy at birth (years)				
1990	68.3	67.1		64.8
1994	70.1	69.0		66.9
1997	68.1	67.1		66.2
2000	69.8	68.7		67.7
2003	71.4	70.3		69.1
2006	73.0	71.9		70.6
Percent of high school graduates to population 18 years old and over				
1997	36.1	42.2		46.8
2000	35.5	46.0		49.4
2003	42.4	47.6		52.1
2006	50.0	51.7		55.3
Primary and high school enrolment rate (in percent)				
1997	88.7	90.4		87.9
2000	84.5	91.0		88.5
2003	87.5	91.7		90.6
2006	88.2	90.0		90.8
HDI-1 (HDI-1 rank)				
1990	0.545	0.546		0.720
1994	0.618	0.612		(1995) 0.736
1997	0.502 (46)	0.483 (44)		
2000	0.530 (42)	0.546 (35)		--
2003	0.569 (30)	0.559 (35)		0.758
2006	0.566 (36)	0.577 (32)		
GDI (GDI-1 rank; HDI-1 rank minus GDI-1 rank)				
2000	0.520 (45)	0.532 (33)		
2003	0.512 (31,3)	0.526 (26,18)		
2006	0.538 (31,5)	0.547 (27,5)		
HPI (HPI rank)				
2000	12.8	14.7		
2003	15.2 (36)	12.6 (19)		

Indicator and year	Camarines Sur	Albay	Bicol Region	Philippines
2006	14.3 (32)	12.4 (18)		
<i>Source of the following information: Philippine Yearbook, 2006 (Manila: National Statistics Office)</i>				
Population growth rate				
1970-1980	1.49	1.84	1.60	2.75
1980-1990	1.74	1.11	1.18	2.35
1990-1995	1.75	2.01	1.91	2.32
1995-2000	1.77	1.77	1.73	2.36
2000-2005				