PART II

SUPPLEMENTARY CHAPTER

1. QUICK IMPACT PROJECTS (QIP)

1.1 THE QUICK IMPACT PROJECTS (QIPS)

Background

- QIPs are initial projects to be implemented while the SEDP is being formulated. The project implementation structure and management is defined early to serve as preparatory activity for an effective SEDP implementation. The preparation and implementation of QIPs, will enhanced the institutional capacity by offering experience in every phase of a project cycle, from the feasibility study to construction work. Additional Quick Impact Projects (QIPs), undertaken in the first phase of the SERD-CAAM, will serve as a model for SEDP planning, implementation, monitoring and evaluation. It can also provide lessons learned from past projects, highlight potential challenges and implementation issues and establish mitigation measures early in the implementation process.

Objective of the QIP

- To serve as experimental pilot projects in the initial stage of the SERD-CAAM.
- To demonstrate Japan's able assistance and presence as well as ascertain the readiness of the community for the planned project.
- Assess the capability of BDA as well as local consultants/NGOs/contractors and to identify issues/problems during the implementation of project such as:
  - Project formulation/Planning
  - Design/Preparation of bid documents
  - Bidding
  - Construction, Monitoring and Evaluation
- Pursue the capacity development of BDA and other organizations concerned as well as contractors through implementing QIPs.
- Results and outputs of QIPs will be reflected in the formulation of immediate term plan and SEDP.

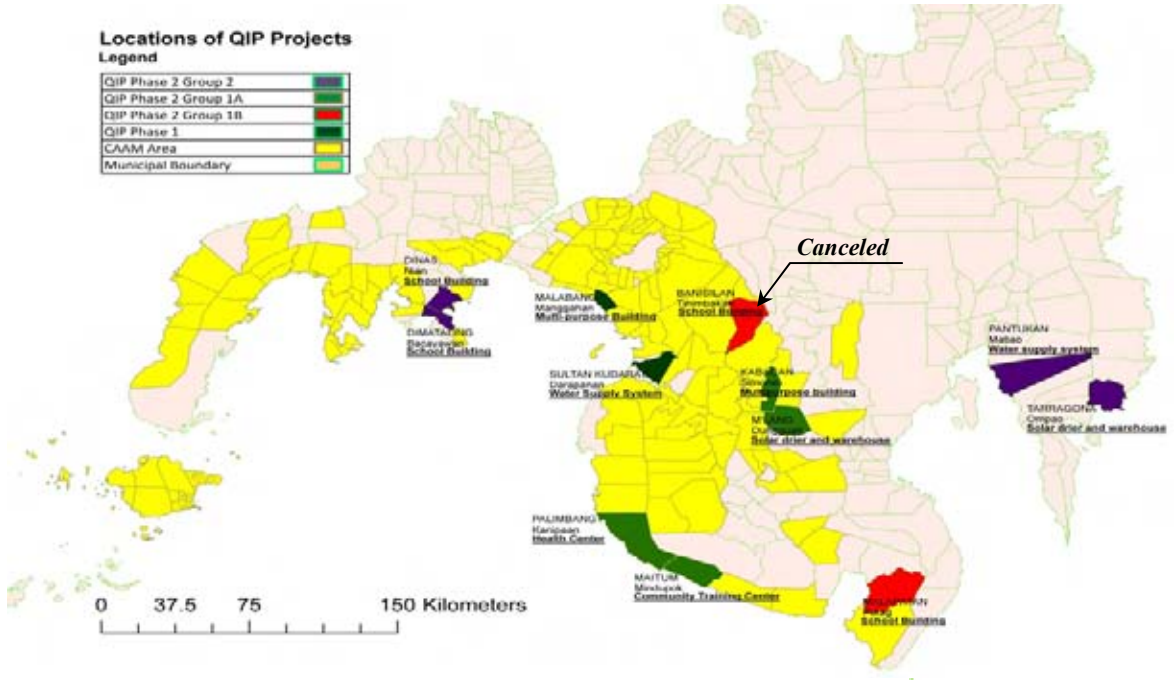
Classification of QIPs

- QIPs are classified into 3 groups:
  - Phase 1: 2 QIPs implemented in 2007 (Near Cotabato city)
  - Phase 2, Group 1: 5 QIPs implemented in 2009 (Near Cotabato city)
  - Phase 2, Group 2: 4 QIPs implemented in 2009 (in Zamboanga and Davao region)

Areas QIPs Implemented

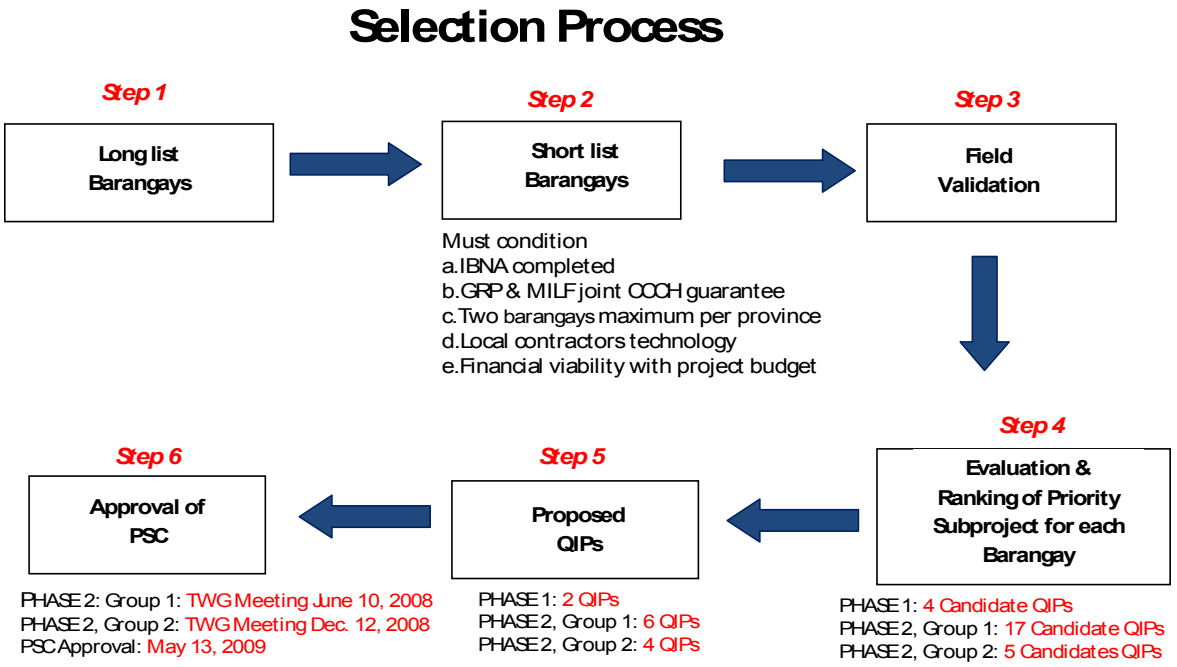
- Municipalities where QIPs located are shown in the Figure below.

Location of 11 QIPs



1.2 SELECTION PROCESS OF QIPS

- Due to the budget constraint of QIPs in the SERD-CAAM, it had been determined to construct 12 QIPs. "The guidelines for QIP Phase II Implementation" was produced in April 2008 to keep the fairness and transparency for the selection of QIPs. This guideline was indorsed by the TWG during its meeting on June 10, 2008 and approved by the PSC on July 14, 2008. Below are the selection process and the detailed procedures:



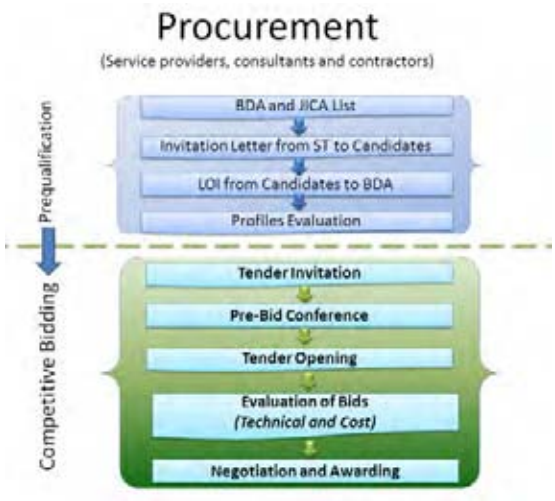
Rating of Barangay Selection Criteria

CRITERIA	SCORING CONSIDERATIONS	WEIGHT (POINTS)
Lack of functioning socio-economic infrastructure	・Socio-economic status of the barangay based on IBNA and barangay profile ・Degree of necessity of priority infrastructure	30
Sustainability of sub-project	・Community counterpart ・Willingness of the community to establish a people's organization ・Support from the community leaders	25
More beneficiaries regardless of administrative boundaries	・Highest number of beneficiaries to be fully scored, and the rest to be computed in proportion	25
Number of available local contractors capable of implementing the project	・The lesser the number of contractors, who can implement the sub-project, the lesser the score.	10
Project cost per head	・Full score to the highest priority sub-project within the cost of the project budget	10

Source: JICA Study Team, 2007

1.3 PROCUREMENT

- Procurement of the Service Providers, the Consultant for the Design and Supervision, and the Contractor follows the standard process given below.



It should be noted that:

- The selection process of QIPs Phase I was slightly different from the above.
- The lowest price bidder has an advantage but must also qualify technically. Technical evaluation takes a longer period and, it was made clear to each participant that the **lowest cost does not guarantee the award**.
- The contract documents are prepared after review and improvement if necessary. The contract signing is undertaken and Notice to Proceed is issued only after issuance of Security Recommendation by the Joint-CCCH.

1.4 SOCIAL PREPARATION (S.P.)

- One of the features of QIP is the Social Preparation. To ensure sustainability of the QIPs, the Study Team introduced Social Preparation after BDA's recommendation.

Main Objectives of Social Preparation

- The main objectives of Social Preparation are as follows:

– To involve the target community in the whole process of the project cycle for them to realize the value of "ownership" and "accountability";

– To organize the community structures and register them at accrediting agencies in order to legitimize their existence, thereby increasing their chances to access development projects.

– To capacitate grassroots organizations with

organizational, enterprise and financial management skills as well as the appropriate technical skills for the operation and maintenance of the sub-project.

- The following tasks are to be done by the implementing service providers (ISPs).

– Documentation of the implementation process from the start of the project until its completion to serve as guidebook to conduct social preparation for succeeding projects
– Preparation of operation and maintenance manual for each infrastructure
– Submission of a report two weeks after the last day of social preparation

Components of Social Preparation

- Social Preparation is conducted according to the following steps.

The procedures of Social Preparation

Steps and Components	Activities/Details
Step 1: Education of Barangay People on project needs	1) Presentation of project to barangay people for their understanding to the project and smooth project operation.
Step 2: Community Organizing	1) Community Coordination – screening of target participants 2) Training on Value Enhancement – three day live in training 3) Establishment of People's Organization (PO)
Steps and Components	**Activities/Details**
Step 3: Registration of PO	1) Registration of PO with Accrediting Body 2) Opening of PO Bank Account 3) Registration with BIR
Step 4:Training on Organization and Management Skills	1) Training on Organization and Management 2) Financial skill/Bookkeeping
Step 5: Seminar for operation and maintenance, and monitor	1) Training on Organization and Management 2) Preparation of Operation and Maintenance Manual 3) Monitor of PO operation

The Results of Social Preparation

- All Social Preparations were well achieved by the NGOs. The names of NGOs, the amount of contract, the duration of contract and the actual duration implemented are summarized as follows.

Summary of Social Preparations

	Place	Type of QIP	NGOs for Social Preparation	Sub-Contract Amount in Pesos	Contracted Duration	Final Payment	Remarks
Phase 1	Manggahan, Malabang, Lanao del Sur	Muliti-Purpose Building	SocialServices for Grassroots Community Development (SSGRCD)	315,060	Aug. 16 - Oct. 16 2007	Dec. 20, 2007	The actual field activities was completed on October 06, 2007 but the monitoring completed Dec.20, 2007, when QIP completed also
	Darapanan, Sultan Kudarat, Maguindanao	Water System Level II			Aug. 16 - Oct. 16 2007	Dec.20, 2007	
Phase 2, Group 1	Simone, Kabacan, Cotabato	Muliti-Purpose Building	United Youth for Prace and Development (UNYPAD)	285,264	May 26 - Aug. 26, 2008	Apil 23, 2009	Activities at the ground was delayed due to August 2008 conlict
	Dunggo-an, M'lang, Cotabato	Solar Dryer & Warehouse		285,264	May 26 - Aug. 26, 2008	Apil 23, 2009	
	Kanipaan, Palimbang, Sultan Kudarat	Health Center	Muslim Youth Reliegious Organization (MYRO)	283,472	May 26 - Aug. 26, 2008	Dec. 18, 2008	
	Mindupok, Maitum, Sarangani	Community Training Center		283,472	May 26 - Aug. 26, 2008	Dec. 18, 2008	
	Patag, Malapatan, Sarangani	Four Classroom School Building		211,100	Nov. 25, 2008 - Feb. 25, 2009	Jun. 5, 2009	Actual field activities was completed in February 25, 2009 but monitoring conitinued up to June 5, 2009
Phase 2, Group 2	Bacayawan, Dimataling, Zamboanga del Sur	Four Classroom School Building	Kapagawid Develop't Services Association Inc. (KDSAI)	245,500	February-May 2009	Oct. 29, 2009	The actual field activities was completed but monitoring continues up to the completion of the QIP
	Nian, Dinas, Zamboanga del Sur	Three Classroom School Building	MYRO	262,950	February-June, 2009	Jun. 26, 2009	
	Ompao, Tarragona, Davao Oriental	Solar Dryer & Warehouse with provision of Corn sheller & Corn Miller	UNYPAD	228,600	March-July 2009	Expected in Nov. 2009, Operation Manual has not submitted yet	
	Matiao, Pantukan, Compostella Valley	Water System Level II	United Youth of the Philippines(UnYPhill)-Women	206,000	February-May 2009	Nov. 05, 2009	

Financial Sustainability

- All People's Organization registered their organization to the accrediting government body such as Cooperative Department Authority (CDA), Department of Labor and Employment (DOLE) and/or Security and Exchange Commission (SEC). And P.O decided the charges to users by themselves.

Financial Sustainability

Phase	Place	Type of Project	Usage of Facilities	PO Gross Income Generated
QIP Phase 1	Manggahan, Malabang	Multi-Purpose Building	School	P100 per enrolment per student. P70 per monthly payment
			Venue for various activities i.e., Wedding, Meeting, etc.	P1,500 per venue rental
	Darapanan, Sultan Kudarat	Water System Level II	Water Supply	P120 monthly payment per house
QIP Phase 2, Group 1	Simone, Kabacan	Multi-Purpose Building	School	P50 per enrolement per student and P20/month
			Venue for various activities i.e., Wedding, Meeting, etc.	P1,500 per venue rental
	Dungguan, M`lang	Solar Dryer & Warehouse	Solar Dryer	P2 per dry sack (rice, corn and coconut)
			Warehouse	Ditto
	Kanipaan, Palimbang	Health Center	Health Center	P5 per patient
	Mindupok, Matium	Community Training Center	Venue for various activities i.e., Wedding, Meeting, etc.	P2,500 per rental
	Patag, Malapatan	4 Classroom School Building	School	P20,000 per anum(200 students@P100 each)
QIP Phase 2, Group 2	Bacayawan, Dimataling	4 Classroom School Building	School	P5/student(130) and, P10/member of PO(30)
	Nian, Dinas	3 Classroom School Building	School	P15,000 per anum (150 students@P100)
	Ompao, Tarragona	Solar Dryer & Warehouse	Solar Dryer	P4 per sack
			Warehouse	P1 per sack per day
			Corn Mill	P1.5 per kg
			Corn Sheller	P20 per sack
	Matiao, Pantukan	Water System Level II	Water Supply	P7 per cum

1.5 CONSTRUCTION OF QIPS

- A Value Transformation Training facilitated over by BDA follows in the two days, after signing the contract but before the commencement of works. Before construction starts the JICA Study Team, BDA and the contractor visit the LGUs to introduce the project as well as themselves.
- One feature of the construction stage is the use of the "Remote Management and Supervision Manual" for project management. This manual is a guide for implementing effective remote management and supervision for the works and the measures to be taken by the SERD-CAAM Study personnel to control the quality of the works, especially in the areas where the Study Team's expatriate engineers and sometimes local QIP engineers may not be able to visit the project site due to security reasons.

Summary of Results of QIP

	Location	QIP Projects	Contractor	Contracted Duration	Actual Completion	Priject Costs	method of Quality Control	Safety (Accident)	Problems Encountered	Employment records		LGU
										From Comm.	From Cntrctr	
1	Manggahan, Malabang, Lanao del Sur	Multi-Purpose Building	Stoneline Construction	Jun. 25, 2007 - Sept. 24, 2007	Oct. 03, 2007	P 1,976,691	On site control by resident engineer/inspector	No serious accident reported.	No serious problem	Not recorded	Not recorded	Favorable
2	Darapanan, Sultan Kudarat, Maguindanao	Water System Level II	MUST Enterprises & construction	Jun. 25, 2007 - Sept. 24, 2007	Oct. 03, 2007	P 2,627,127	On site control by resident engineer/inspector	No serious accident reported.	No serious problem	Not recorded	Not recorded	Favorable
3	Simone, Kabacan, Cotabato	Multi-Purpose Building	MINROCK Multi-Builders	Jan. 26, 2009 - Apr. 25, 2009	May. 29, 2009	P 2,350,073	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	516 man-days	784 man-days	Favorable
4	Dunggo-an, M'lang, Cotabato	Solar Dryer & Werehouse	Central Mindanao Multi-Purpose Cooperative (CMMPC)	Mar. 2, 2009 - Jun. 2, 2009	Sept. 30, 2009	P 2,488,871	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	Harrasment & Rubbery of Construction Equipment	857 man-days	842 man-days	Favorable
5	Kanipaan, Palimbang, Sultan Kudarat	Health Center	558 Builders & Construction Supply	Jan. 26, 2009 - Apr. 25, 2009	Jun. 20, 2009	P 2,636,156	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	640 man-days	592 man-days	Favorable; Committed to sustain the operation
6	Mindupok, Maitum, Sarangani	Communication Training Center	LTB Builders & Construction	Jan. 26, 2009 - Apr. 25, 2009	May. 8, 2009	P 2,487,266	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	423 man-days	598 man-days	Favorable
7	Patag, Malapatan, Sarangani	Four Classroom Building	Stoneline Construction	Mar. 12, 2009 - Jun. 9, 2009	Sep. 01, 2009	P 2,800,000	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	685 man-days	1179 man-days	Favorable
8	Bacayawan, Dimataling, Zamboanga del Sur	Four Classroom Building	MS construction & Marketing	Apr. 20, 2009 - Jul. 18, 2009	Aug. 9, 2009	P 3,200,000	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	257 man-days	1068 man-days	Favorable
9	Nian, Dinas, Zamboanga del Sur	Three Classroom Building	Samal construction & Enterprises	Apr. 20, 2009 - Jul. 18, 2009	Aug. 10, 2009	P 2,672,099	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	983 man-days	295 man-days	Favorable
10	Ompao, Tarragona, Davao Oriental	Solar Dryer & Werehouse with provision of Corn sheller & Corn Miller	Davao Contractor & Development Cooperative (DACODECO)	Apr. 21, 2009 - Jul. 19, 2009	Oct. 07, 2009	P 3,217,989	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	798 man-days	702 man-days	Favorable
11	Matiao, Pantukan, Compostella Valley	Water System Level II	Davao United Builders Cooperative (D.U.B.C)	Jun. 15, 2009 - Oct. 12, 2009	Oct. 12, 2009	P 3,577,523	with Remote Management & Supervision Manual; JICA ST/ BDA/ Consultant Monitoring	No serious accident reported.	No serious problem	934 man-days	327 man-days	Favorable

1.6 SCHEDULE CONTROL

- There are 6 major activities for QIP implementation. The process of each of the activities is described below.

Barangay selection

- Candidate Barangays for QIPs were selected from IBNA barangays by the JICA Study team and BDA and took about **three weeks** as BDA-CMO(Central Management Office) must consult and make consensus with the BDA-RMO (Regional Management Office). The selection process included validation of the priority needs of the barangays through the field survey conducted jointly by the Study Team and BDA.
- After selection of barangays and determining the type of project needed, these results must be approved by the PSC after being agreed by the TWG. It took about **two months** to get approval from TWG and PSC because of the difficulty in setting the schedules due to the availability of their members. This caused some disruption to the proposed schedule of the QIP. Thus, the duration required for the approval by TWG and PSC needs to be improved before the next tranche of similar QIP programs.

Planning and Design for individual QIPs

- The local consultants for planning and design of the QIPs were selected through tender. The tender process for local consultant took **four weeks**. This duration is difficult to shorten because the process included the evaluation of the capabilities of the participating consultants after the tender opening.

Social Preparation

- It took about **four weeks** to decide which NGO would issue the tender for the Social Preparation. The Social Preparations was well-managed by the JICA Study Team and their performance was assessed to be satisfactory. The Social Preparation took about three months for each QIP. This period excluded the monitoring after completion of QIP.

Tender for Construction

- Normally, it takes **four weeks** to complete the process of tendering for construction. In some cases, however, such as in four QIPs under Phase 2, Group 1, the tender process took **three months** to complete due to several postponements caused by the unfavorable security situation at the project sites from August-November 2008. In addition, the election in May 2007 restricted the tender process and disrupted the schedule for tender of two of the QIPs under Phase 1.

Construction of QIPs

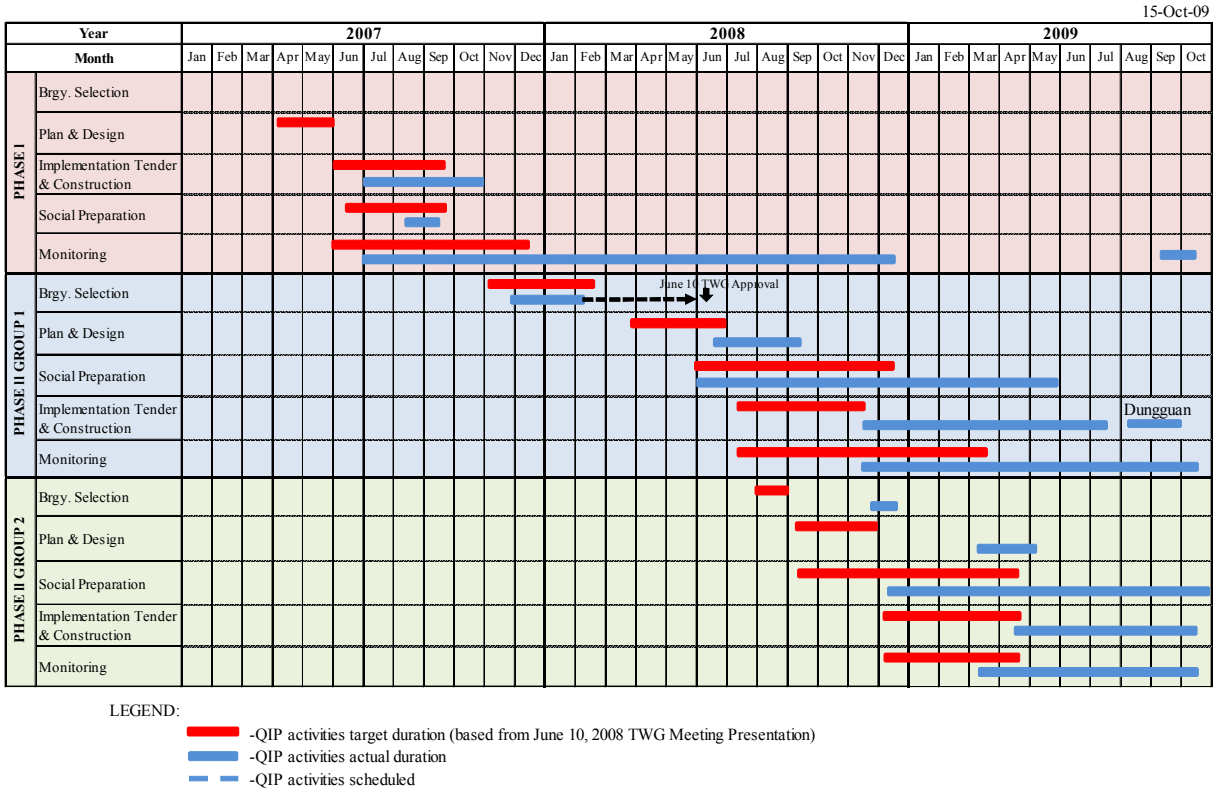
- Except for the Water Supply System in Matiao, all other ten QIPs had three months target construction duration as provided for in the contracts. During the tender, no contractor complained of this **3-month** duration. However, none of these 10 QIPs were completed within the three months periods. The actual construction duration of each QIP varied from **3.5 months to 5.8 months**.
- To control the construction schedule, the Study Team dispatched a supervising engineer and assistant supervising engineer to work full-time on the QIP construction. They supervised the day-to-day activities at

project sites.

Monitoring

- The monitoring of the QIP construction was conducted jointly by the Study Team and BDA. The monitoring duration during construction varied according to the actual construction duration of each QIP (3.5 months to 5.8 months). The site visits were conducted on a regular basis with a schedule of 1 visit to each QIP per month.
- After the study period and completion of all QIPs, BDA shall continue to monitor the sustainability of these QIPs for at least **6 months**.

Progress of QIPs



1.7 MONITORING

Phase I

- The two QIPs in Phase I were completed in September 2007. JICA Study Team members visited the sites frequently from completion in September 2007 up to June 2008 due to the required additional improvements discovered after project completion.
- Visits were conducted to:

– Monitor and help ensure the technical sustainability of the project.

– Monitor organizational management capability of the beneficiaries, especially the PO organized as part of the Social Preparation.

– Monitor the effects of Social Preparation (planning, management and operation system of project by PO introduced by the Social Preparation).

– Monitor if the awareness about ownership for QIP facility increased or not.

– Conduct formal meetings and interviews with the direct beneficiaries and the indirect beneficiaries to collect detailed information.

- JICA Study Team used a standard

post-completion monitoring form (refer to Annex G) to capture critical information from the beneficiaries, assess the project based on its financial and technical sustainability, social impacts, costs and benefits, and inquires on the challenges and improvement the project has posed.

Phase 2

- Constructions of 9 delayed QIPs started in 2009 due to problems with unstable peace and order. Three QIPs were completed by July 2009, two QIPs were completed in August 2009, two were completed in September 2009. The last two QIPs were completed in October 2009. The JICA Study Team and BDA are continuing joint monitoring.

1.8 FINDINGS AND EXPERIENCES OBTAINED IN THE IMPLEMENTATION OF QIPS

Capacity of Non Government Organizations (NGOs) for Social Preparation

＊The inclusion of the Social Preparation as a component of QIP

- The inclusion of the Social Preparation (SP) was considered a plus factor to ensure the proper operation and sustainability of completed QIPs. This SP component has equipped the QIPs beneficiaries with series of trainings and seminars related to organizational management and QIP operational management for sustainability.
- The provision of SP for all QIPs was undertaken through the services of local, qualified (NGOs) with experience in community development. The NGOs were selected following the SERD-CAAM Guidelines for Phase II Implementation.

＊Evaluation of NGO capacity

- After accomplishing the SP activities, the NGO's based on their Terms of Reference (TOR), it may be concluded that their performance may be rated as satisfactory. From the foregoing, there are sufficient number of local NGOs based within CAAM and nearby provinces which are capable of undertaking SP for community infrastructure projects.

＊Recommendation

- The Social Preparation will equip the beneficiaries with the necessary skills for the efficient and effective operation, maintenance and sustainability of every community infrastructure facility. Hence, it is recommended that Social Preparation be considered a part of every proposed community infrastructure project.

Capacity of Consultants for Design and Construction Supervision

- Three engineering consulting firms were engaged by the Study Team for the design and construction supervision of eleven QIPs. One firm based in Manila took charge of Phase 1 (two QIPs) which were implemented in year 2007; a local firm based in Cotabato City was contracted for Phase 2, Group 1 (five QIPs); and another local firm based in Cotabato City was awarded the design and construction supervision of Phase 2, Group 2 (four QIPs).

＊The performance of consultant for Phase 1

- The consultant (PERK Technical Consultants Corp.) engaged in two projects under Phase 1 completed the preparation of designs and drawings and bidding documents as scheduled. Hence, the project construction of the two QIPs

(Multi-Purpose Building in Manggahan, Malabang, Lanao del Sur; Water Supply System in Darapanan, Sultan Kudarat, Maguindanao) were completed almost within the scheduled time frame.

＊The performance of consultants for Phase 2

- The preparation of designs and bidding documents for Phase 2, Group 1 (original six QIPs) should have been completed in one month (as provided under the contract with RAL Engineering and Consultancy Services (RALECS)) but this has not been achieved. The design and tender documents preparation took three months, owing to various reasons, such as, unavailability of some of RALECS staff, revisions to plans and revisions in methodology of cost estimation, etc.
- The contract with the consultant (M2F2 Engineering Consultancy) for Phase 2, Group 2 (four QIPs) was signed on March 13, 2009. The contract provided that the designs/drawings and preparation of bidding documents must be completed within one month. But the design and estimates for the water supply system in Matiao took one month and three weeks. Even, after this period, some errors in the design and quantities were still noticed.
- The performance of the two local engineering consultancy firms contracted by the Study Team to undertake the preparation of designs, bidding documents and construction supervision of QIPs under Phase 2, Groups 1 and 2, was considered not remarkable. Designs, drawings, bidding documents and other necessary requirements for the tender were not completed within the target schedules. Hence, it took more time to finalize the bidding documents and other necessary requirements for the tender.

＊ Assessment of local consulting firm's capacity

- An assessment of the availability and capacity of the local engineering consultancy firms would suggest that at present there are a very limited number of engineering consulting firms that operate within CAAM and nearby areas. Most of these firms do not have available suitably qualified and experienced personnel to undertake design works for some engineering projects. Also, these firms lack sufficient work experience in doing engineering works as organizations.

＊Recommendation

- A prequalification was undertaken to assess the minimum capacity of the consulting firms in the area. However, due to the inexperience of RMO in evaluating the documents submitted for prequalification a proper assessment was not carried-out. However, after gaining more experiences, the RMO are now producing viable assessments of capability and capacity of the local consultants as evidenced by the process for the selection of Phase II-Group I contractors.
- It is recommended that consulting firms which are capable to undertake the preparation of basic designs and drawings of typical small community infrastructure facilities, even if these consultants come from areas outside CAAM, such as Davao City, Cagayan de Oro City, and other areas, be appointed. Local engineers from CAAM and the nearby areas will be employed to select the best designs from the standard designs and supervise the projects. Minor

modifications of designs and drawings to suit the requirements and requests of the beneficiary-communities will be included in the contract with local consulting firms.

Capacity of Contractors for QIP Construction

- The construction of QIPs was undertaken through private contractors with a bonafide contractors license. The contractors invited to participate in the tender for the construction of QIPs must be endorsed by the BDA Regional Management Office (RMO) of the region where the particular QIP is located. Hence, the contractor's eligibility to participate must come within the region where the QIP shall be constructed.
- The BDA RMOs and CMO did not conduct the contractors prequalification, particularly for QIPs under Phase 2, Group 1. But under Phase 2, Group 2, the RMOs and CMO were able to assist the Study Team in the preparation of the contractor's prequalification checklist.

Contractor Pre-qualification Checklist

CHECKLIST FOR CONTRACTORS IN ZAMBOANGA PENINSULA						
	CONTRACTOR	VALID CONTRACTOR LICENSE	YEARS OF EXPERIENCE IN CONSTRUCTION (Minimum of 2 yrs)	PREVIOUS & ONGOING PROJECT (SIMILAR & 2 M above)	CONTRACTOR OFFICE IF POSSIBLE	REMARKS
1	SAMAL CONSTRUCTION & ENTERPRISES TelexFax (062) 214-4563)	✓	✓	✓	Confirmed by BDA RMO as of March 28, 2009 through CMO.	Signify in two subprojects (Bacayawan & Nian).
2	MS CONSTRUCTION & MARKETING CP No. 0917-5684025	✓	✓	✓	Confirmed by BDA RMO as of March 28, 2009 through CMO.	Signify in two subprojects (Bacayawan & Nian).
3	PINS CONSTRUCTION CP No. 0917-5684025	✓	✓	✓	Confirmed by BDA RMO as of March 28, 2009 through CMO.	Signify in two subprojects (Bacayawan & Nian).
4	ASAP GENERAL TRADING CONSTRUCTION & MAINTENANCE CP No. 0926-5998219 TeleFax (062) 985-0676	✓	✓	✓	Confirmed by BDA RMO as of March 28, 2009 through CMO.	Signify in two subprojects (Bacayawan & Nian).

＊Duration of Construction

- Except for the water supply system in Matiao which had a four-month construction duration, all other ten QIPs had three-month target construction durations, but none were completed within three months. The reasons put forward by the contractors in their applications for time extension were: continuous rainy days at the project site, double and triple handling of materials, repair of access roads and bridges on routes to the project sites. Although these reasons are not contractual grounds to grant an extension of time, the contractors still proceed with their claims. However, the requests for extensions of time were granted by the JICA Study Team as this is a common practice in CAAM if the delays do not adversely affect the projects.

＊Quality of Construction

- During the construction of every QIP, a supervising engineer from a consulting firm employed by the Study Team supervised the day to day work of the contractor. The supervising engineer was assisted by an

assistant supervising engineer who was recommended by BDA RMO. In addition, the Study Team QIP Engineers together with BDA QIP supervisors conducted regular project sites visits to all QIPs whilst they were under construction.

- A QIP Remote Management and Supervision Manual was prepared and followed by the contractors and supervising engineers so the Study Team (QIP Overall In-charge and Staff Engineers) could manage the project even without frequent site visits. In view of the foregoing strategies, the quality of the completed QIPs was generally satisfactory.

＊Safety at site

- The site safety was reasonably good for all QIPs. The contracts between the Study Team and QIPs contractors contain provisions for security, safety and health measures for the workers and other persons involved during project construction. It was also provided in the contract that the security control system to be established by the contractor at the project site should conform to the SERD-CAAM Safety Operations Manual. Thus, no reported untoward incident happened during the construction period of all QIPs that caused harm, injuries or death to contractors workers and other persons involved in QIP implementation.
- One security-related incident did happen during the construction at QIP site in Dungguan, M'lang, Cotabato. It was reported that a group of armed men forcibly took two units of engines being used in the on-going construction of a QIP (Solar Dryer and Warehouse). In view of this incident, the work was suspended for about three months. (The work resumed after the PO and Barangay officials committed to help secure the site while the project is ongoing construction.)

＊Hiring of local workers for QIPs

- One objective of the QIP was to provide local employment during its construction. Thus, it was provided in the contract agreement that contractors must hire workers from the barangay where the project is located. Under QIPs Phase 2 (nine projects) about 6,093 man-days were achieved by local employment against the overall total of 12,480 man-days. Thus about 49% of the total labor generated came from the beneficiary-communities.

Employment Generated

Employment Generated		
Project Location	**From Local Residents**	**Total (local + outside)**
* Simone	516 man-days	1300 man-days
* Dungguan	857 man-days	1699 man-days
* Kanipaan	640 man-days	1232 man-days
* Mindupok	423 man-days	1021 man-days
* Patag	685 man-days	1864 man-days
* Bacayawan	257 man-days	1325 man-days
* Nian	983 man-days	1278 man-days
* Ompao	798 man-days	1500 man-days
* Matiao	934 man-days	1261 man-days
TOTAL	**6,093** man-days	**12,480** man-days
Local labor generated represents 49% of the total labor generated from QIP construction (PHASE 2)		

Payment schedule for Progress Payment

- Payment to contractors was made at the following rates: 40% of the contract amount after signing of the contract as an advance payment; 30% as progress payment; and 30% at the completion of QIP.
- Given the foregoing mode of payments, the contractors demonstrated efficient and sound financial management. No contractor ever complained that he had encountered any financial difficulties in finishing the construction of a QIP. All contractors were able to complete their projects under such a payment schedule.

＊Conclusion

- The contractor's management in the implementation of QIPs was assessed to be generally *satisfactory*. They all demonstrated full cooperation with the Study Team engineers, BDA, supervisors and assistant supervisors, and PO officials.

1.9 CONDITIONS OF CONTRACTS

Liquidated Damages (L.D.)

- The JICA Study Team intentionally did not include the clause of L.D. in the QIP Group 1 contract. The reason is that the JICA Study Team received advices from local engineers and DPWH and NEDA in Cotabato that it was not common practice to impose L.D. against contractors of small infrastructure contracts.
- For QIP Phase 2- Group 2, the JICA Study Team inserted the clause of L.D. in the contracts. The contracts provide that if the contractors fail to complete the projects within the contract period without justifiable reasons, they are obliged to pay L.D. to the Study Team. However, the Study Team did not claim any L.D. from the contractors who completed their projects beyond the construction period as stipulated in the contracts. One lesson learned through the construction of QIPs is that contractors in CAAM are not familiar with the L.D. Therefore it is better not to impose the L.D. for some period until such time that the imposition of L.D. becomes a common practice even in small infrastructure projects.

Effect of rainy weather

- The construction of QIPs, particularly under Phase 2, Group 2 (four QIPs) was carried-out during the rainy season in the months of May till August. Thus, there were times when works were suspended. Normally, the effect of the rainy season is not a valid ground to justify a request for a time extension of project construction. However, if the occurrence of rains in a particular area become very frequent and it significantly disrupts the work schedule then it may be considered as reasonable grounds for delay. This was the case in the construction of a solar dryer and warehouse in Ompao, Tarragona, Davao Oriental.

Insurance and Professional Indemnity

- Under the guidelines of the International Federation of Consulting Engineers or (FIDIC), the contractors engaged in the construction of infrastructure facilities should guarantee their work by procuring insurance such as "Insurance for Work and Contractor's Equipment" and "Insurance for Contractor's Personnel" on the work they have performed. Though such Insurance Clauses are written in the "Conditions of Contract" of QIPs, the JICA Study Team intentionally did not check the existence of contract document of insurance to assure the contractor's contracts. It was advised by local engineers and some authorities not to be strict on insurances to avoid delays.
- Also the professional indemnity for design was not compelled to the local consultants who were involved in design works of QIPs. Because the idea of professional indemnity is not common in CAA and all consultants engaged for this project did not know the meaning of "Professional indemnity".

1.10 QIP PROGRESS PHOTOS

QIP Progress Photos

No.	Project Title	Location	Progress Photos	Date Completed
1	Muliti-Purpose Building	Manggahan, Malabang, Lanao del Sur		Oct. 03, 2007
2	Water System Level II	Darapanan, Sultan Kudarat, Maguindanao		Oct. 03, 2007
3	Muliti-Purpose Building	Simone, Kabacan, Cotabato		May. 29, 2009
4	Solar Dryer & Warehouse	Dungguan, M'lang, Cotabato		Sept. 30, 2009
5	Health Center	Kanipaan, Palimbang, Sultan Kudarat		Jun.20, 2009
6	Community Training Center	Mindupok, Maitum, Sarangani		May. 8, 2009
7	Four Classroom School Building	Patag, Malapatan, Sarangani		Sept. 1, 2009
8	Four Classroom School Building	Bacayawan, Dimataling, Zamboanga del Sur		Aug. 9, 2009
9	Three Classroom School Building	Nian, Dinas, Zamboanga del Sur		Aug. 10,2009
10	Solar Dryer & Warehouse with provision of Corn sheller & Corn Mill	Ompao, Tarragona, Davao Oriental		Oct. 7, 2009
11	Water System Level II	Matiao, Pantukan, Compostella Valley		Oct. 12, 2009

2. ON-THE-SPOT ASSISTANCE

2.1 BACKGROUND OF ON-THE-SPOT ASSISTANCE

- On-the-Spot Assistance (OSA) is provided for small but critical development needs identified during the course of IBNA. OSA was implemented in 12 barangays in Phase 1, and 11 in Phase 2.
- The Study Team and BDA jointly selected target barangays fully based on results of IBNA, in collaboration with other parties concerned. In Phase 2, seven sub-projects originally planned were canceled due to security reason and replaced with the new projects which aimed to assist the residents of the IBNA barangays who evacuated their villages due to the intensified conflict.

2.2 SELECTION AND IMPLEMENTATION PROCESS OF OSA IN PHASE 1

- In Phase 1, the following conditions were considered at selection.
  - The scale of assistance should be very small, requiring less than 140,000 peso.
  - The support should be absent from major donors.
  - The assistance should benefit a wide range of barangay population.
  - Maximum two sub-projects per province and one per municipality
  - The impact of the assistance should become visible in a relatively short time.
  - Commitment and contribution from the target barangay should be visible.
  - No serious objection should be raised within the barangay or the municipal.
- Summary of the OSA implementation process is as follows:
  - Identification of OSA Needs
  - Examination of the report by the Study Team
  - Visit to the target barangay
  - Approval of the Study Team and BDA
  - Implementation of OSA
  - Handover
  - Monitoring

2.3 RESULT OF ON-THE SPOT ASSISTANCE

- Table and Figure below are the summary of the 12 OSA projects in Phase 1.

Summary of OSA project in Phase 1

	Target barangay	Components of Assistance	Date of IBNA	JICA Grant (OSA Budget)	Local Counterpart Contribution (In-kind)	Total Project Cost
1	Lusain Kapatagan Lanao Del Sur	Provision of Four (4) Units Power Generator	18-Jul-07	102,970	40,000	142,970
2	Lower Taviran Kabuntalan Sharif Kanunsuan	Construction of School Pathway	16-Jul-07	102,075	24,000	126,075
3	Penansaran Datu Blah Sinsuat Shariff Kabunsuan	Provision of Medicine Kit with Medicine Supply	16-Aug-07	130,000	5,000	135,000
4	Kalipapa, Datu Piang, Maguindanao	Provision of Farm Equipment with Accessories	16-Jul-07	145,000	15,000	160,000
5	Sampao, Guindolongan, Maguindanao	Construction of 1 Unit Public Toilet with Hand Pump	17-Sep-07	136,000	17,080	153,080
6	Taculen , Matalam North Cotabato	Improvement of Day Care Center	22-Aug-07	129,434	18,480	137,914
7	Bual, Isulan Sultan Kudarat	Improvement of Room for Birthing Clinic with Basic Facilities	26-Jul-07	139,653	14,560	154,213
8	Sadsalan, Lambayong, Sultan Kudarat	Establishment of Barangay Pharmacy	6-Sep-07	129,434	3,800	133,234
9	Bentung Plomolok South. Cotabato	Improvement of Day Care Center	18-Jul-07	91,812	24,000	115,812
10	Palian Tupi South Cotabato	Improvement of Day Care Center	30-Jul-07	128,646	18,480	147,126
11	Nalus , Kiamba Sarangani	Improvement of School Building	28-Aug-07	130,140	18,480	148,620
12	Tuanadatu , Maitum Sarangani	Provision of Rice Mill	12-Sep-07	110,270	40,000	150,270

2.4 MONITORING OF OSA PHASE 1

In the beginning of Phase 2, the Study Team and the BDA monitored the status of the 12 OSA projects implemented in Phase 1.

2.5 OSA IN PHASE 2

A brief description of these OSA projects in Phase 2 is shown in Table below.

New OSA Projects in Phase 2

	Target Barangay	Project Title	Budget (Approx.)	Components of Assistance
1	Poblacion, Datu Piang, Maguindanao	Mini multi-purpose center and public toilet construction	265,000	1. Construction of mini multi-purpose center 2. Construction of 1 unit public toilet with three rooms 3. Construction of dug well and installation of water hand pump
2	Poblacion, Datu Piang, Maguindanao	Two units construction of pubic toilet	154,000	1. Construction of two units of public toilet with 3 rooms each
3	Public Market Site, Talayan, Maguindanao	Mini multi-purpose center and public toilet construction	277,000	1. Construction of mini multi-purpose center 2. Construction of 1 unit public toilet with three rooms
4	Municipal compound, Poblacion, Talayan, Maguindanao	Two units public toilet construction	131,000	1. Construction of two units of Public toilet with 3 rooms each
5	Meta, Datu Unsay, Maguindanao	Mini multi-purpose center construction	265,000	1. Construction of mini multi-purpose center 2. Renovation of bathroom 3. Replacement of water hand pump
6	MSU compound, Pendaliday, Datu Odin Sinsuat, Shariff Kabunsuan	Mini multi-purpose center and public toilet construction	282,000	1. Construction of mini multi-purpose center 2. Construction of 1 unit public toilet with three rooms
7	Makr, Datu Odin Sinsuat, Shariff Kabunsuan	Mini multi-purpose center and public toilet construction	282,000	1. Construction of mini multi-purpose center 2. Construction of 1 unit public toilet with three rooms
8	Batulawan, Pikit, North Cotabato	Two units public toilet construction	178,000	1. Construction of two units public toilet 2. Renovation of dug well and installation of water hand pump
9	Bago Ingud, Saguiaran, Lanao del Sur	Mini multi-purpose center and public toilet construction	238,000	1. Construction of mini multi-purpose center 2. Construction of 1 unit public toilet with three rooms 3. Construction of dug well and installation of water hand pump
10	Lilod Madaya, Malawi City	One unit public toilet construction	87,000	1. Construction of one unit public toilet
11	Cadayanan II, Marawi City	One unit public toilet construction	87,000	1. Construction of one unit public toilet

2.6 LESSONS LEARNED

Contribution of OSA to Peace Process

- Even small projects could have a positive impact on peace-building, promoting community cohesion. However, it should also be noted that the project could produce a negative impact.

BDA involvement

- Active involvement of BDA was important. There was, however, still room for improvement in terms of communication.

Community Participation

- Generally, community residents indicated strong commitment in preparatory meetings, but fewer people actually cooperated when it came to the implementation stage in some barangays, which resulted in delays or less sustainability.

Impact Assessment and Sustainability

- Although the OSA projects were basically simple, their precise impacts are unknown at present as they cannot be measured immediately

2.7 RECOMMENDATIONS FOR FUTURE OSA

- Recommendations for the future and actual measures in line with these recommendations are shown in the Table.

Recommendations and Actual Measures

1	**Recommendation**
	Projects should be designed to strengthen anchoring assets in the community, aiming to contribute to peace-building in the community.
	Actual measures
	BDA catalysts become the mediator to mitigate possible conflict/adverse effects within the barangays.
2	**Recommendation**
	The number of projects should be limited to enable detailed discussions among parties concerned.
	Actual measures
	The donor should limit the number of projects to secure sufficient time for detailed discussions between the donor and BDA.
3	**Recommendation**
	The budget should be adequate to cover necessary expenses, including the cost of longer preparation time, especially on social aspects.
	Actual measures
	At least 300,000 Peso per barangay is considered the target budget.
4	**Recommendation**
	BDA involvement is recommended to be enhanced in every step of the process, namely planning, implementation, monitoring, and evaluation.
	Preventive measure
	The understanding and commitment of BDA about the development project should be enhanced through a series of workshop with BDA.
5	**Recommendation**
	Post-project monitoring mechanism should be established.
	Actual measures
	Involvement of the BDA catalysts and RMO in the monitoring mechanism should be secured and enhanced.

3. BARANGAY PROFILING

3.1 METHODOLOGY AND PROCEDURES

- The Barangay Profiling aimed to collect basic socio-economic data/profile at the barangay level, whose results was compiled into the Barangay Database with MS-ACCESS. It targeted at more than 3,800 barangays in the conflict-affected areas in Mindanao (CAAM).
- The profiling includes: Geographical access and road conditions, Population, Socio-economic conditions, Infrastructure, Financial resources, Incidence of armed conflict, Internally Displaced Persons (IDPs), Development projects, Community organizations, and Barangay Development Plan.
- Each Field Team and the Database Team consisted of mixed members from service providers and the BDA. The subject and contents of the Barangay Profiling were carefully determined also in consultation with the BDA and other relevant organizations.
- The process of the field survey for the Barangay Profiling is summarized below.

Coordination with target municipality / barangay

- The Field Teams visit the target municipality/barangay for necessary coordination at least one week prior to fieldwork.

Data collection at municipality

- The Field Teams examine related documents together with Municipal Planning and Development Coordinator (MPDC) to extract secondary data/information and codify them on a format prepared by the Study Team.

Municipal Orientation

- The Field Teams brief barangay chairpersons and secretaries (barangay officials) at municipal office about the objectives and the process of the Barangay Profiling.

Interview with Barangay Officials

- After a few days, the Field Teams revisit the municipal office to interview (40-50 minutes) the same barangay officials.

Visit to Barangays

- When barangay officials were not avail and when it was deemed to be necessary, the Field Teams had to visit such barangays to collect needed information.

3.2 SUPPLEMENT SURVEY AND ACCOMPLISHMENTS

- Judging from the survey results in Phase 1, the Study Team decided to conduct a supplement survey on the subjects of "development project in barangay", and "development needs in barangay."
- In Phase 1, primary data were collected from 1,673 barangays, or 101.5% of 1,648 target barangays (including 25 newly created barangays following the compilation of the OPAPP list), as shown in Table.

Progress of Barangay Profiling in Phase 1

Cluster	Number of Target Municipalities	Number of Target Barangays	Number of Completed Barangays	Progress in %	Local consultants
Lanao del Sur 1	8	219	220	100.4%	CMYS
Lanao del Sur 2	7	197	197	100.0%	PPRD
Maguindanao	22	260	279	107.3%	MERN
Shariff Kabunsuan	11	205	210	102.4%	MERN
North Cotabato	13	404	404	100.0%	MERN
South Cotabato	2	38	38	100.0%	MERN
Sarangani	5	97	97	100.0%	MERN
Sultan Kudarat	11	228	228	100.0%	CMYS
TOTAL	**79**	**1,648**	**1,673**	**101.5%**	

CMYS: Center for Muslim Youth Study, Inc. / PPRD: PPRD Consultants / MERN: Mindanao Emergency Response Network / IBS: Institute of Bangsamoro Studies

- In Phase 2, data from 1,859 barangays or 85.2% of 2,183 barangays targeted in Phase 2 were collected, as shown in Table 1.2-2.
- In total, 3,532 barangays, or 91.6% of 3,856 barangays in CAAM (3,831 plus 25 newly created barangays in Phase 1), were covered in Phases 1 and 2.

Achievement of Barangay Profiling in Phase 2

Cluster	Number of Target Municipalities	Number of Target Barangays	Number of Completed Barangays	Progress in %	Local consultants
Lanao del Sur 3	8	312	312	100.0%	CMYS
Lanao del Sur 4	12	315	229	72.7%	PPRD
Lanao del Norte	13	253	233	92.1%	PPRD
Zamboanga del Sur	9	267	195	73.0%	CMYS
Zamboanga del Norte	7	162	162	100.0%	IBS
Zamboanga Sibugay	10	262	262	100.0%	IBS
Basilan	8	216	171	79.7%	IBS
Mobile Lanao	9	180	133	73.9%	CMYS
Mobile Zamboanga	11	203	149	73.4%	PPRD
Field Demo	1	13	13	100.0%	-
TOTAL	**88**	**2,183**	**1,859**	**85.2%**	-

3.3 RESULTS OF BARANGAY PROFILING

Facilitating factors

- During the course of the Barangay Profiling, the following facilitating factors led to smooth and successful field activities.

＊Support from LGUs

- The broad support from Municipal Local Government Units (MLGUs), including municipal mayors, vice mayors, municipal councils, and their municipal administrators, greatly facilitated interviews with barangay officials and data collection from MPDCs. Barangay Local Government Units (BLGUs) were also very cooperative.

＊Willingness of respondents

- In general, barangay officials were very positive to the survey. They were fairly willing to express their honest opinions concerning the development of their barangays.

Lessons Learned

＊Need for more careful coordination with LGUs

- Increased involvement from the OPAPP, MLGUs, BLGUs should lead to improved coordination and field activities. To address these problems, a one-day workshop (with a Q&A session) may be needed to enhance the municipal orientation.

＊Location of municipal orientation and interview sessions

- Some barangay officials faced difficulties in attending the municipal orientation and their interview session at municipal halls due to long travel distances. The Field Teams met with these officials at other locations, sometimes walking long distances to interior barangays. Extra time and expenses were incurred as a result.

＊Unavailability and inconsistencies in data

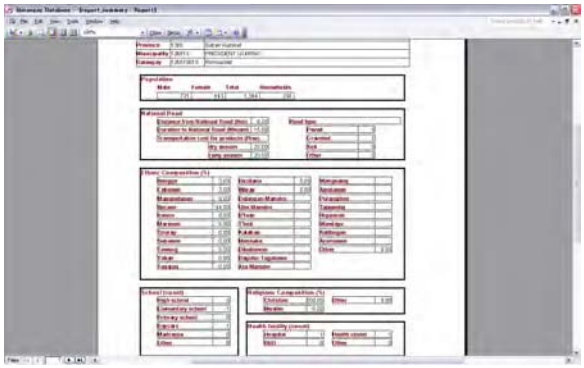
- The unavailability and inconsistencies in secondary data from the MPDC led to incomplete data sets and to delays in data gathering. Some data were simply unavailable in certain municipalities, especially in Lanao del Sur. Also, information from some barangay officials sometimes appeared inaccurate and unreliable due to lack of systematic record keeping.

＊Team Members

- In Phase 1, some BDA team members were neither good enough in the local language nor familiar with the assigned areas. In order to ensure efficiency, at least one member should belong to the same ethnicity as the people in the target barangay.

3.4 BARANGAY DATABASE

- The Study Team designed and constructed the Barangay Database (the Database) format to encode the collected primary and secondary data of each barangay. The Database provides objective information about each barangay surveyed under the Barangay Profiling.



- Functions of the database are as below.

＊Summarization

- The Database can summarize the collected/encoded data and produce data files to be utilized for analysis. Summarized results can be sorted into specific categories such as Region, Province, and Municipality.

＊Chart

- The Database can create charts displaying data on a time-scale axis.

＊Filtering

- The Database can filter information to produce a list of barangays meeting certain criteria or conditions.

3.5 BDA INVOLVEMENT

- Regarding BDA's involvement in the Barangay Profiling, the Study Team encouraged BDA to take an active role in their fieldwork. At the municipal and barangay levels, a number of BDA catalysts were involved in the Barangay Profiling, in addition to Field Team members mentioned earlier. At the central level, BDA was involved in the overall management of fieldwork, including monitoring BDA members' performance.

4. IN-DEPTH BARANGAY NEEDS ANALYSIS (IBNA)

4.1 METHODOLOGY AND PROCEDURES

IBNA Selection (Phase 1)

- The objective of the In-Depth Barangay Need Analysis (IBNA) was to carefully assess development needs at the barangay level in the CAAM, which could be utilized in designing the further development assistance. Since an in-depth study of 3,800 plus barangays was impractical, if not impossible, within the timeframe of the SERD-CAAM, only 150 barangays were targeted for IBNA, out of which 140 barangays were completed after all.

＊Step 1

- The Study Team requested that BDA recommend barangays for IBNA, indicating its concern over security and the need for fair geographical distribution of development benefits among the local population.

＊Step 2

- Based on the BDA long list, the Study Team further reduced the number of barangays, eliminating barangays which had been supported by plural donors or received a project of a considerable size.

＊Step 3

- In order to prepare a shortlist for IBNA, The Study Team and the leaders of the Field Teams examined the barangays one by one based on the following criteria: Security, Absence of Assistance, Accessibility, Negative impact of Conflict, Presence of Diversified Population, Topographical Representation, and Fair Geographical Distribution.
- The degree of poverty is not listed as the top selection criterion, because there is no consistent poverty data available at the barangay level.

＊Step 4

- The Study Team presented the results of the above screening to BDA for their opinion. Both parties examined every individual barangay and eventually come up with a list of 91 barangays with some minor adjustments.

IBNA Selection (Phase 2)

- The steps began with a long list of barangays recommended by each RMO, but the subsequent procedures remained more or less the same in Phase 2.
- The result of IBNA will no doubt be critical for planning development assistance based on genuine, as opposed to perceived, community needs. Yet, a word of caution may be necessary here. IBNA does not statistically represent all barangays in the CAAM, nor is the adopted methodology rigorous enough to justify a highly qualitative examination given the lack of verifiable information; strictly speaking, they are rather a collection of case studies.

Focus Group Discussion (FGD)

- At first, the Field Teams organized three sessions of Focus Group Discussions (FGD) with community leaders, women, and youth. Ten to fifteen participants in each of these sessions discussed development needs, their priorities, possible beneficiaries, the kind and degree of people's contributions for future development projects, the operation and

maintenance of suggested projects, and any other matters associated with the projects.

- After these three sessions are completed, a few (usually three or four) representatives of every group travelled to participate in a unified group discussion called the Consolidated Final Session.
- In addition to the facilitation of FGD, the Field Teams made field observations on the conditions of target barangays to verify the development needs FGD specified and to obtain supplemental information.

4.2 ACCOMPLISHMENT OF IBNA

Overview

- In Phase 1, as Table indicates, the Field Teams completed surveys in 92 barangays in total, or 101% of the total 91 barangays targeted for Phase 1. In Phase 2, on the other hand, 48 barangays or only 83% of the total 58 targeted barangays were surveyed owing to cases in which fieldwork was partially or fully suspended due to security reason.

Number of barangays that completed IBNA for Phase 1

Field Teams	Number of Total Barangays in Phase 1	Target in %	Number of Targeted Barangays as of 31 Dec	Number of Barangays Surveyed as of 31 Dec	Progress in %
CMYS	22	100%	22	23	101%
PPRD	11	100%	11	11	100%
MERN	58	100%	58	58	100%
Total	**91**	**100%**	**91**	**92**	**101%**

Number of barangays that completed IBNA for Phase 2

Field Teams	Number of Total Barangays in Phase 2	Target in %	Number of Targeted Barangays as of 31 Oct	Number of Completed Barangays as of 31 Oct	Progress in %
CMYS	15	100%	15	14	94%
PPRD	23	100%	23	16	70%
IBS	19	100%	19	17	89%
Demo	1	100%	1	1	100%
Total	**58**	**100%**	**58**	**48**	**83%**

Facilitating Factors

- During the course of IBNA, the following facilitating factors led to smooth and successful field activities.

＊Support from LGU

- LGU (Mayors, Vice Mayors, municipal councils, and municipal administrators) were generally cooperative and helped Field Teams coordinate with target barangays.

＊Enthusiasm of Barangays

- The enthusiastic and active attitude of people participating in FGD also made the IBNA successful, even though they fully understood that an IBNA itself did not guarantee that any projects would be carried out. It can also be said that IBNA contributed to dialogue and peace among villagers.

＊Support from BDA catalysts

- The active involvement of local BDA workers (Provincial, Municipal and Barangay Development Catalysts) also contributed to the smooth conduct of IBNA.

Lessons Learned

＊ Logistic and administrative challenges at LGU and BDA

- The Field Teams encountered several logistical and administrative challenges in IBNA, even more than in the case of Barangay Profiling.

＊Selection of target barangays

- Some LGUs asked the Field Teams about the process for selecting target barangays for IBNA, and insisted that they should have been given a chance to participate in the selection process. In response to such inquiries, the Field Teams tried to thoroughly explain the selection process.

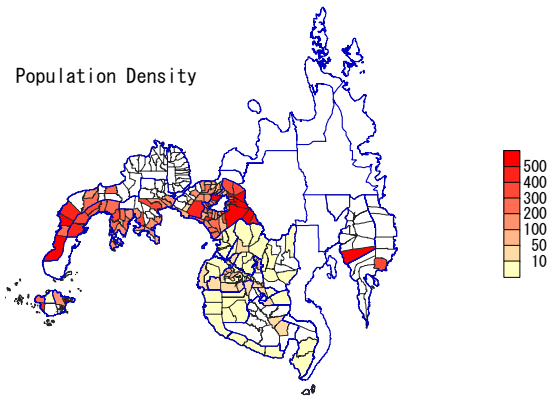
＊Difficulty in Fair Representation

- In principle, the selection of participants in FGD was supposed to reflect the population composition of a barangay in terms of religion, ethnicity, and geography, which turned out to be sometimes difficult to comply with.

5. COMMUNITY ACTION PLAN

5.1 INTRODUCTION TO THIS CHAPTER

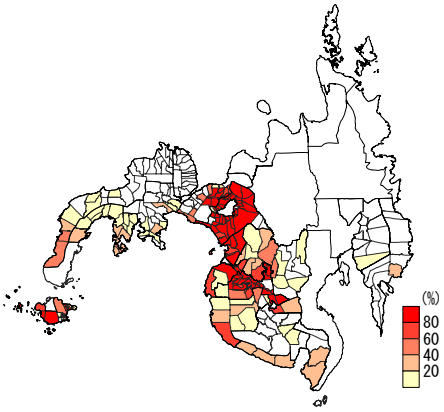
- This chapter consists of the major analytical work derived from the results of the social surveys, and introduction of the Community Action Plan (CAP). The CAP is intended to provide concrete project options of various types that are ready for implementation in the immediate future. It is therefore somewhat self-contained and quasi-independent from the entire structure of the SEDP.



Population Density per km² by Municipality

5.2 ANALYSIS OF BARANGAY PROFILING

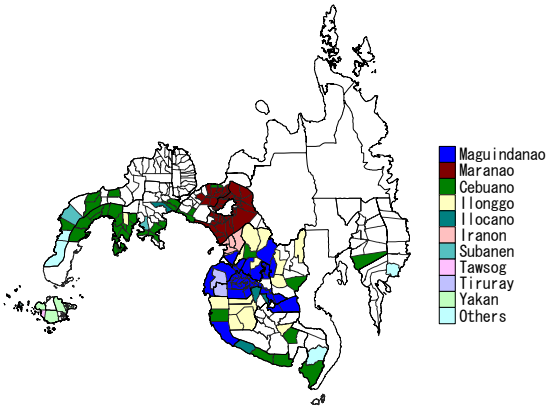
- In order to clarify the socio-economics of the CAAs, the data gathered through the Barangay Profiling is summed up and analyzed on different layers, which are 1) the statistical universe of the entire CAA area; 2) The provinces, 3) the areas comprising the three different topographical types (Coastal, Highland and Planes), and 4) the ARMM and non-ARMM areas.



Proportion of the Muslim population by Municipality (%)

Population

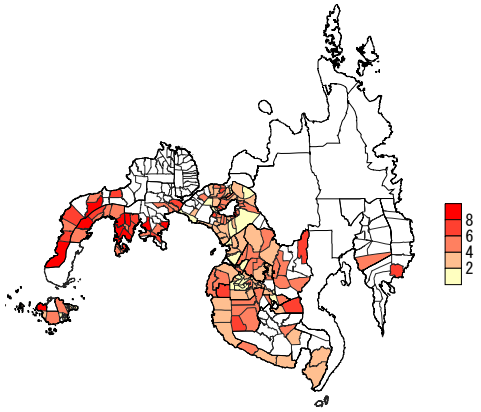
- According to the survey, the total population of the CAAs is 5,573,487, with the average population of a barangay being 1,625. The population density of the area is 224 people per Km2. The population density of the southern CAAs is lower relative to that of the northern areas as reflected in Figure below.



Major Ethnic Groups by Municipality

Education

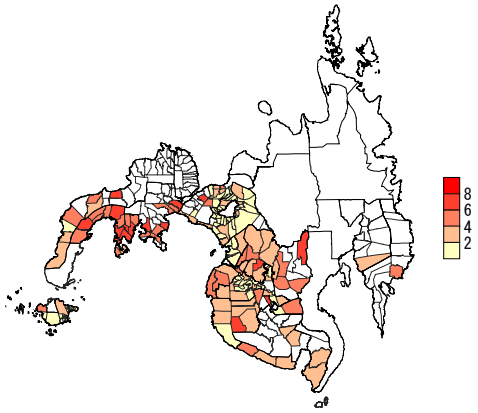
- The numbers of school facilities for every 10,000 people per population is higher in the Zamboanga area and lower in the provinces of Lanao del Norte, Maguindanao and Shariff Kabunsuan (see Figure, Table).



The Number of Elementary Schools by Municipality per 10, 000 people

Health

- Only half of the barangays surveyed had a health center. The Zamboanga peninsula had relatively more health centers in terms of the number per 10,000 people, while Lanao del Sur, Maguindanao and Basilan had smaller numbers (See Figure). ARMM areas registered lower figures than non-ARMM areas.

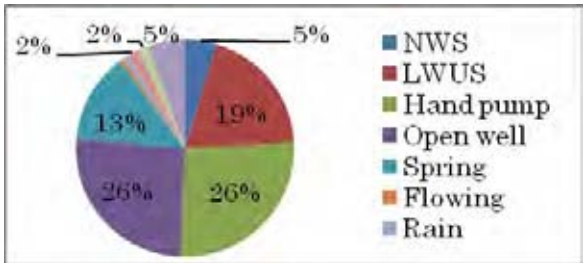


The Number of Health Centers by Municipality per 10, 000 People

Water

- Public water service provided by the National Water Service (NWS) and Local Water Utility Service (LWUS) is extended to only 24% of the total population in CAAs (See Chart 4.2-17). Three natural sources of water; (Wells with) Hand pump, Open Well, and Spring; collectively account for 70% of the total water supply in the region.

Water Sources in CAAs (%)



5.3 NEEDS ANALYSIS

- Various development needs were converged into the four broad need categories of: Basic Social Services, Public Facilities, Economic Infrastructure, and Livelihood.

The Distribution of Primary Needs by Municipality

Province	1	2	3	4	5
Lanao del Norte	Roads	Water Systems	Farm Equipment/ Facilities	Multi-Purpose Centers	School Buildings
Lanao del Sur	Water Systems	Farm Equipment/ Facilities	Roads	Health Centers	Multi-Purpose Centers
Compostela Valley	Roads	Water Systems	Small Business	Disaster Control	Farm Equipment/ Facilities
Davao Oriental	Roads	Water Systems	Bridges	Barangay Pharmacies	Electrification
Maguindanao	Roads	School Buildings	Health Centers	Farm Equipment/ Facilities	Water Systems
North Cotabato	Roads	Water Systems	Farm Equipment/ Facilities	School Buildings	Electrification
South Cotabato	Roads	Water Systems	Small Business	Sports Facilities	Irrigation
Sarangani	Roads	Water Systems	School Buildings	Small Businesses	Sports Facilities
Shariff Kabunsuan	Roads	Water Systems	Health Centers	Farm Equipment/ Facilities	Small Businesses
Sultan Kudarat	Roads	Water Systems	Health Centers	Small Businesses	Farm Equipment/ Facilities
Zamboanga del Norte	Roads	Water Systems	School Buildings	Health Centers	Electrification
Zamboanga del Sur	Roads	Water Systems	Farm Livelihood	Electrification	Farm Equipment/ Facilities
Zamboanga Sibugay	Roads	Water Systems	School Buildings	Electrification	Farm Equipment/ Facilities
Basilan	Roads	Water Systems	Fishing Equipment/ Facilities	Health Centers	Small Businesses

Basic Social Services
Economic Infrastructure
Livelihood
Public Facilities

5.4 ANALYSIS OF THE IBNA

- Needs expressed through the consolidated final session is as below:
  - Roads (construction and rehabilitation)
  - Farm Equipment/Facilities
  - Water Systems.
  - Multi-purpose Center
  - School Building
  - Health Centers
  - Madrasahs
  - Bridges
  - Fishing Equipment/Facilities
  - Disaster Control
- Prominent differences are not observed between the Barangay Profiling and IBNA.

Five Priority Needs of the Consolidated Final Sessions in Five Provinces

Province	1	2	3
Lanao del Norte	Water Systems	Roads	Farm Equipment/ Facilities
Lanao del Sur	Multi-Purpose Centers	Roads	Water Systems
Compostela Valley	Water Systems	Barangay Pharmacies	Irrigation
Davao Oriental	Farm Equipment/Facilities	Barangay Pharmacies	Madrasahs
Maguindanao	Farm Equipment/Facilities	School Buildings	Roads
North Cotabato	Farm Equipment/Facilities	Multi-Purpose Centers	Water Systems
South Cotabato	Madrasahs	Farm Livelihood	Day Care Centers
Sarangani	Water Systems	Roads	Madrasahs
Shariff Kabunsuan	Health Centers	School Buildings	Farm Equipment/Facilities
Sultan Kudarat	Roads	Disaster Control	Farm Equipment/Facilities
Zamboanga del Sur	Roads	Water Systems	School Building
Zamboanga del Norte	Roads	Health Centers	School Buildings
Zamboanga Sibugay	Roads	Water Systems	Madrasahs
Basilan	Roads	Water Systems	School Buildings

Basic Social Services
Economic Infrastructure
Livelihood
Public Facilities

5.5 COMMUNITY ACTION PLAN (CAP)

Recommended Need Categories

- It is concluded that the categories of Basic Utilities, Health, Education, Agriculture/Fisheries, and Non-Firm Livelihood should be the focus of CAP.
- Recommendation in area is shown below. The colored columns in the table indicate provinces whose development indicators remain below average for the entire CAA in each sector. A ✓ mark represents a highly prioritized sector in the social survey. The colored column with the mark, thus, would be the first long list of CAP for the target area.

Recommended Area of CAP

Prioritized sector	Roads	Education	Basic utilities		Health	Agriculture
Indicator	Paved Roads	Elementary schools	Public Water Service	Electricity	Health centers	Irrigation
Lanao del Norte	✓	✓	✓			✓
Lanao del Sur	✓		✓		✓	✓
Compostela Valley	✓		✓			✓
Davao Oriental	✓		✓	✓	✓	
Maguindanao	✓	✓	✓		✓	✓
North Cotabato	✓	✓	✓	✓		✓
South Cotabato	✓		✓			✓
Sarangani	✓	✓	✓			
Shariff Kabunsuan	✓		✓		✓	✓
Sultan Kudarat	✓		✓		✓	✓
Zamboanga del Norte	✓	✓	✓	✓		✓
Zamboanga de Sur	✓		✓	✓		✓
Zamboanga Sibugay	✓	✓	✓	✓		✓
Basilan	✓		✓		✓	✓

5.6 REVIEW OF DONORS' WORK ON NEEDS

- The spectrum of priority needs demonstrates a remarkable consistency among the donors.

Summary of the Priority Needs of Donor Projects

Prioritized Sector by the CAP analysis	WB1	WB2	UNICEF	USAID	JBIC
Health and Nutrition	○	○	○		○
Education	○	○	○	○	○
Basic Utilities	○	○	○	○	○
Roads	○	○	○	○	○
Agriculture		○	○	○	○
Fisheries		○		○	
Livelihood	○	○	○	○	○
Other highly prioritized needs	Institutional arrangement	Improve peace environment			

WB1: World Bank , Social Assessment of Conflict-Affected Areas in Mindanao, 2003 / WB2: World Bank , Joint Needs Assessment for Reconstruction and Development of Conflict- Affected Areas in Mindanao, 2005 / UNICEF: Uncounted lives: Children, Women, and conflict in the Philippines, 2006 / USAID: Complete Barangay Infrastructure Program, USAID Web site (http://www.mindanao.org/components/cip-completed.htm, as of 31 January, 2007) / JBIC: Rapid Rural Appraisal of Barangays in Malitubog-Maridagao Irrigation Program Communities, 2007

5.7 FEASIBILITY STUDY

- The Study Team conducted pre-feasibility studies in sampling sites The Internal Return of Return (IRR) and Present Value (PV) were calculated with the assumption of a 10 % social discount rate and a project life of 6 to 10 years. However, it is obvious that these projects shouldn't be judged on their feasibility only from an economic point of view when the communities highly prioritize them. Thus support from donors and the upper layers of government units are vital in order to support such projects.

5.8 POTENTIAL PROJECT LIST FOR COMMUNITY ACTION PLAN

- The CAP is expected to be implemented in the very near futureThe project list of the first priority needs in IBNA is, at least presently, the best reliable long list for CAP projects.

6. SERD-CAAM GIS

6.1 GIS DATABASE PREPARATION FOR SERD-CAAM PROJECT

- The GIS Database development task under the Study is in support of the other tasks and activities to use geographic data and information combined with mapping and analysis. The objectives of the GIS database development component of the Study are:

– To develop a GIS database that will be utilized for the formulation of the Action Plan and Socio-Economic Development Plan for the Conflict Affected Areas in Mindanao (SEDP-CAAM),

– To integrate any existing GIS database with those which are to be developed based on data obtained by the Study. The product GIS database will be utilized by BDA and other related agencies for future planning, and

– To provide technical support and training to the staff of BDA and other related agencies on the application of GIS to maintain and update the developed SERD-CAAM GIS Database.

Study Tasks and GIS Database

- The Study involves collection of information from various sources to analyze the existing condition of the study area, which includes:

– geographic information and boundary conditions,

– natural condition,

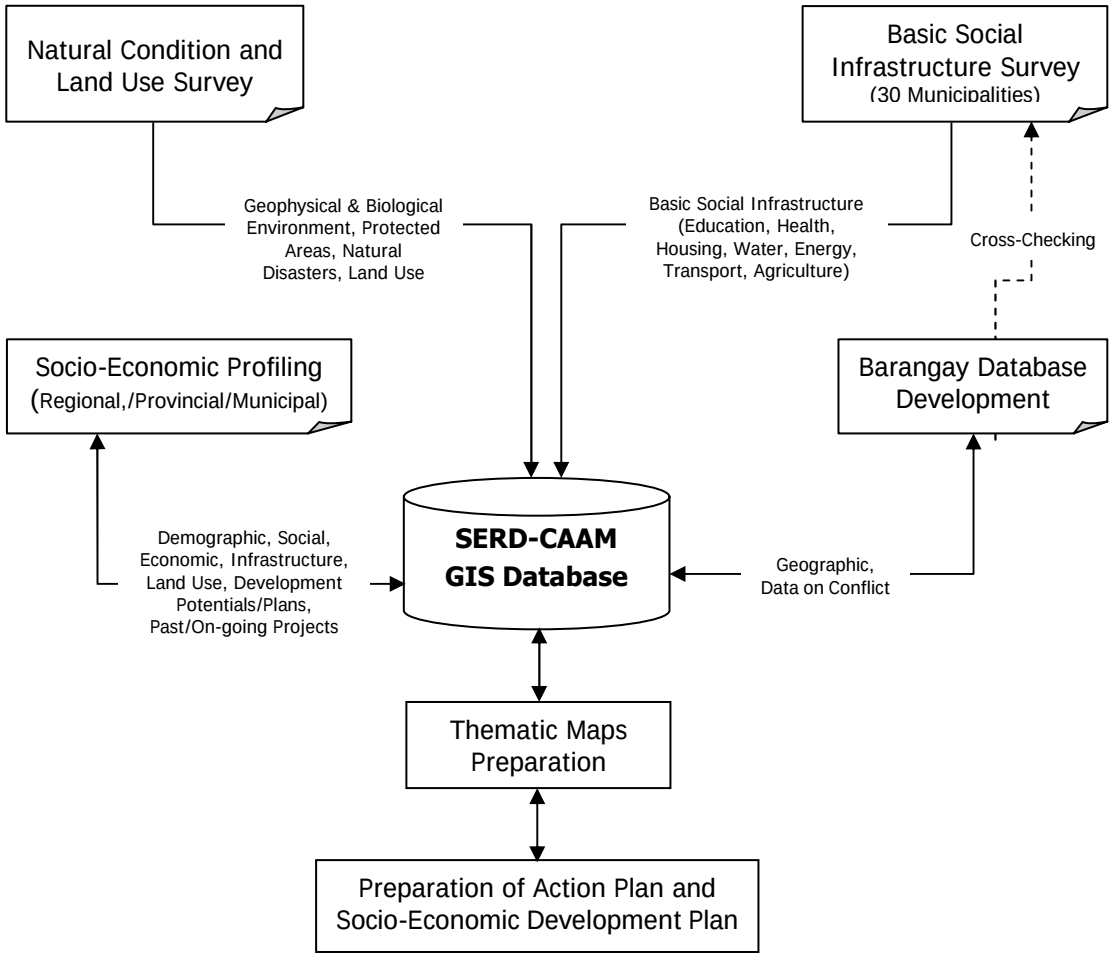
– regional, provincial and municipal socio-economic profiles,

– barangay profiles and needs survey,

– basic social infrastructures at selected municipalities, and

– socio-economic programs and projects for the conflict-affected areas in Mindanao.

- The data and information obtained from the different Study Tasks and Activities through secondary data collection and actual ground surveys conducted by the Study Team are developed into a database for the SERD-CAAM project, as illustrated in Figure.
- To effectively utilize the GIS database, thematic maps will be prepared based on the results of the different surveys and data gathering activities and will be used to analyze the present condition of the study area and assess the necessary action plans for urgent rehabilitation at the community level and the socio-economic development interventions for a larger scale impact.
- Data were collected at different line agencies to populate the GIS database. At the same time, the Study Team conducted different surveys illustrated in Figure 8.1-1 which were used as additional data that supplemented or cross-checked the data obtained from different line agencies. Theme maps were prepared from the geo-database and were utilized to support the analysis for action plan and socio-economic development plan.



Interrelationships Among Study Tasks and GIS Database Development

Components of the GIS Database Development

- The GIS database development task has two components:

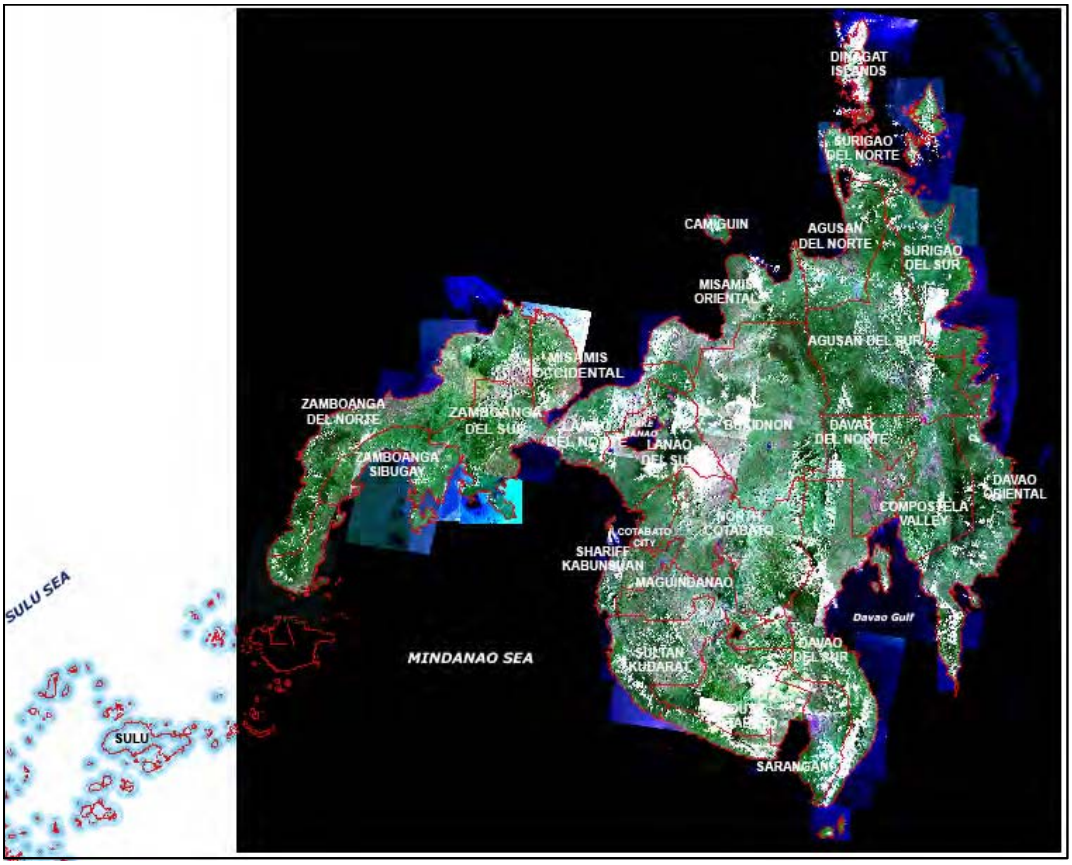
∗ Satellite Image Acquisition and Data Processing

- The first task of the GIS Database Development was the acquisition of satellite images covering the entire Mindanao area with a resolution of 20m or higher and a cloud cover ratio of less than 20%. 61 Satellite images were procured covering the Study area in Mindanao from year 2000 to 2007. These images were analyzed and processed to develop the landcover map of Mindanao. The landcover map processed from the satellite images were compared to NAMRIA's landcover map based on Landsat Images. Table presents the satellite image acquisition and data processing. The satellite images were digitally geo-rectified and enhanced to produce satellite image mosaics of the entire area. The resulting images were then analyzed and interpreted using remote sensing techniques to generate the land cover map for Mindanao. These images were used to prepare the base map for the entire Mindanao including administrative boundary maps, land cover and land classification and natural environment condition.

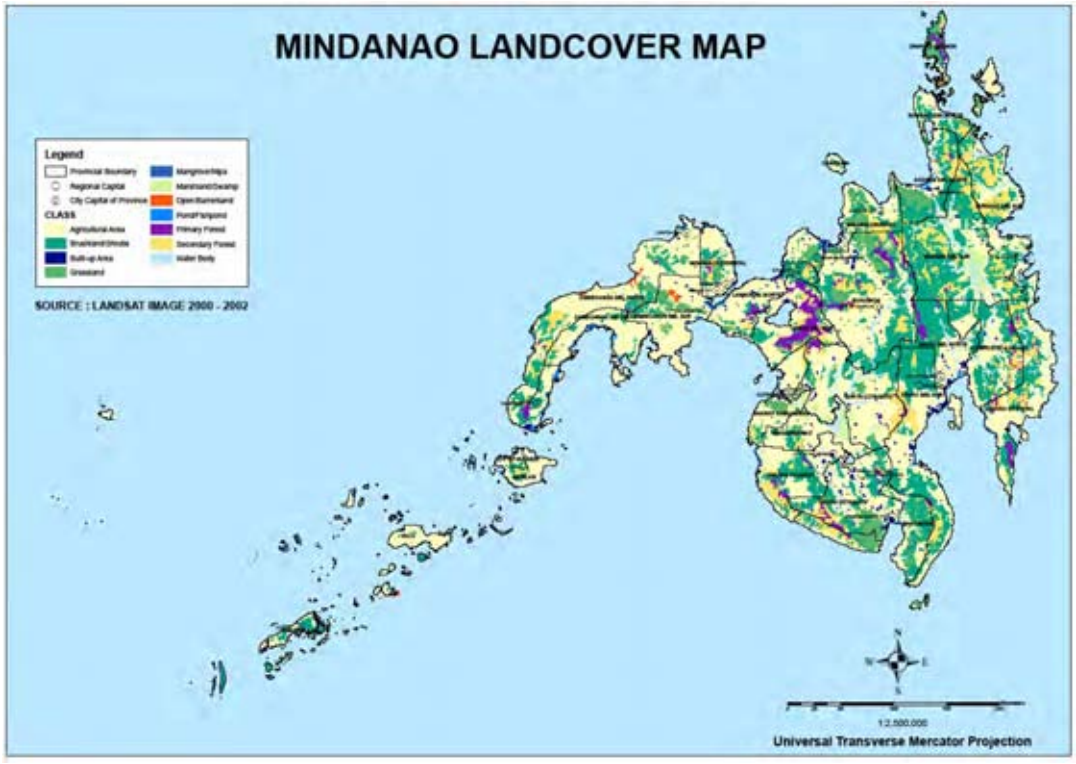
Satellite Image Acquisition and Data Processing

Activities	Accomplishment	Remarks
1. Satellite Image Acquisition	• 61 Aster Satellite Images Acquired • Resolution : 20m or better • Cloud Cover: < 20% • Year Coverage: 2003 - 2007	• 12 Archived Landsat ETM+ scenes were initially used to prepare Mindanao provincial maps • The 61 Aster Satellite Images were used to analyze land cover
2. Satellite Image Processing and Analysis	• Images were checked for quality, date and coverage • Images geo-rectified and enhanced • Satellite images processed to generate Landcover Map	The resulting land cover map is being reviewed and compared with previous land cover map produced by NAMRIA

Figure shows the Satellite Image mosaic of Mindanao while Figure illustrates the land cover maps generated from the Landsat and Aster Satellite Images.



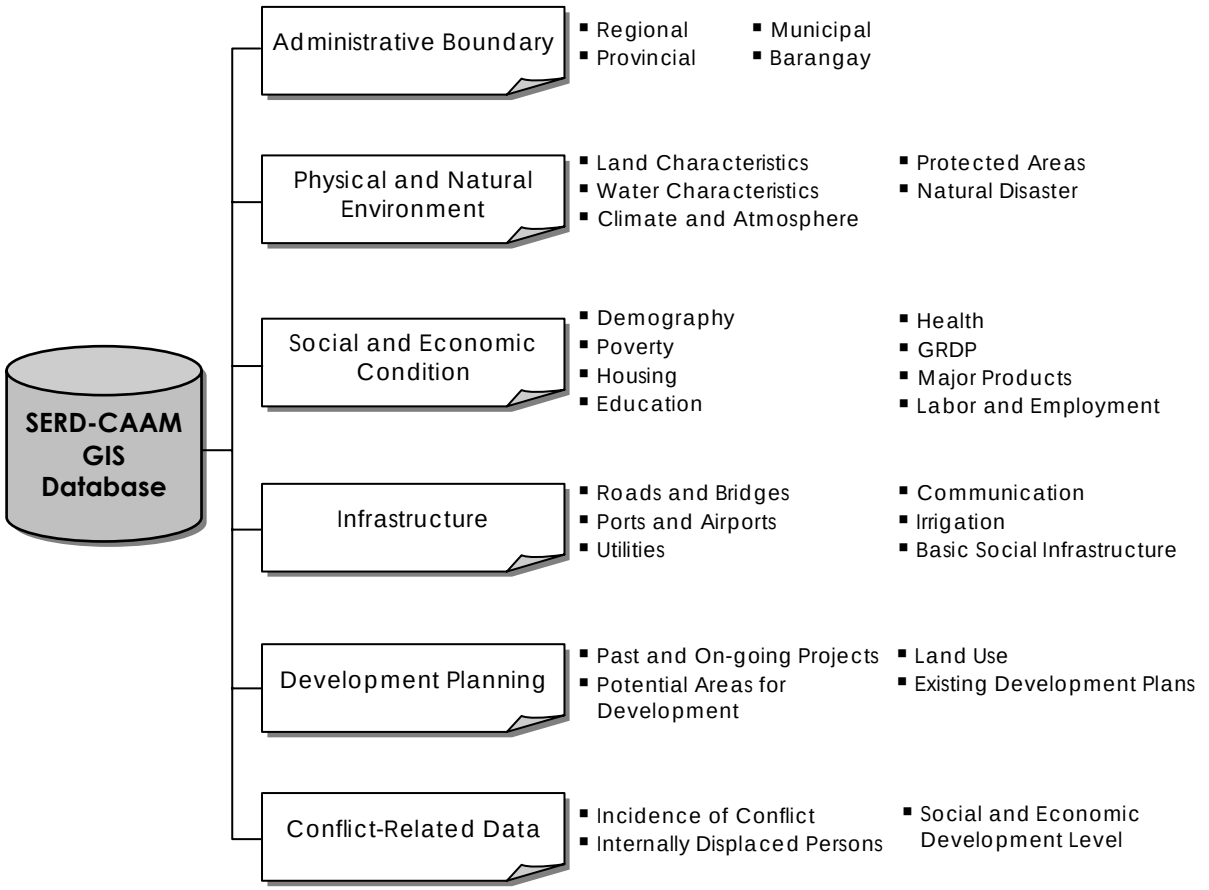
SERD-CAAM GIS Database



Land cover Map for Mindanao Based on Aster 2003-2007 satellite Image

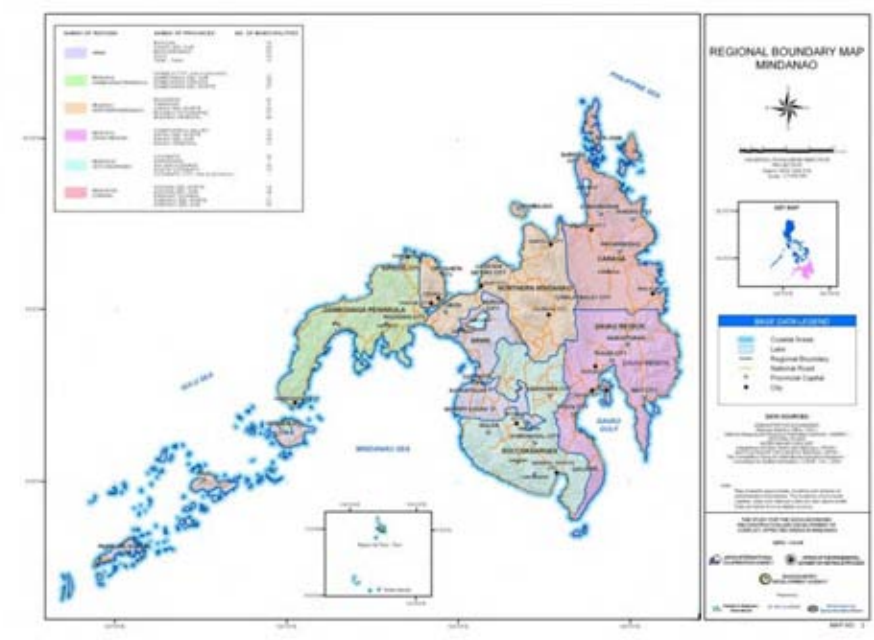
＊GIS Database Development

- The GIS database development activities include:
  - Surveys and data gathering,
  - data encoding,
  - database build-up, and
  - theme maps preparation.
- Surveys and data gathering, encoding and database build-up has been completed. The source is shown in Table. Secondary data were collected from different agencies (including NEDA, DENR, DPWH, DSWD, etc.) and funding institutions to determine the existing condition in Mindanao. The Study Team also collected additional data through profiling surveys (regional, provincial, municipal, and barangay levels) and basic social infrastructure surveys which were used as input to the database.
- Figure illustrates the details of the basic contents of the database. The SERD-CAAM GIS database was developed to provide a baseline socio-economic condition of Mindanao in general and the project area, in particular. The initial database contained the results of the surveys and data gathering conducted by the Study Team considering its geographic relationships. In this case, the GIS database is limited in range to the scope of the Study.



SERD-CAAM GIS Database

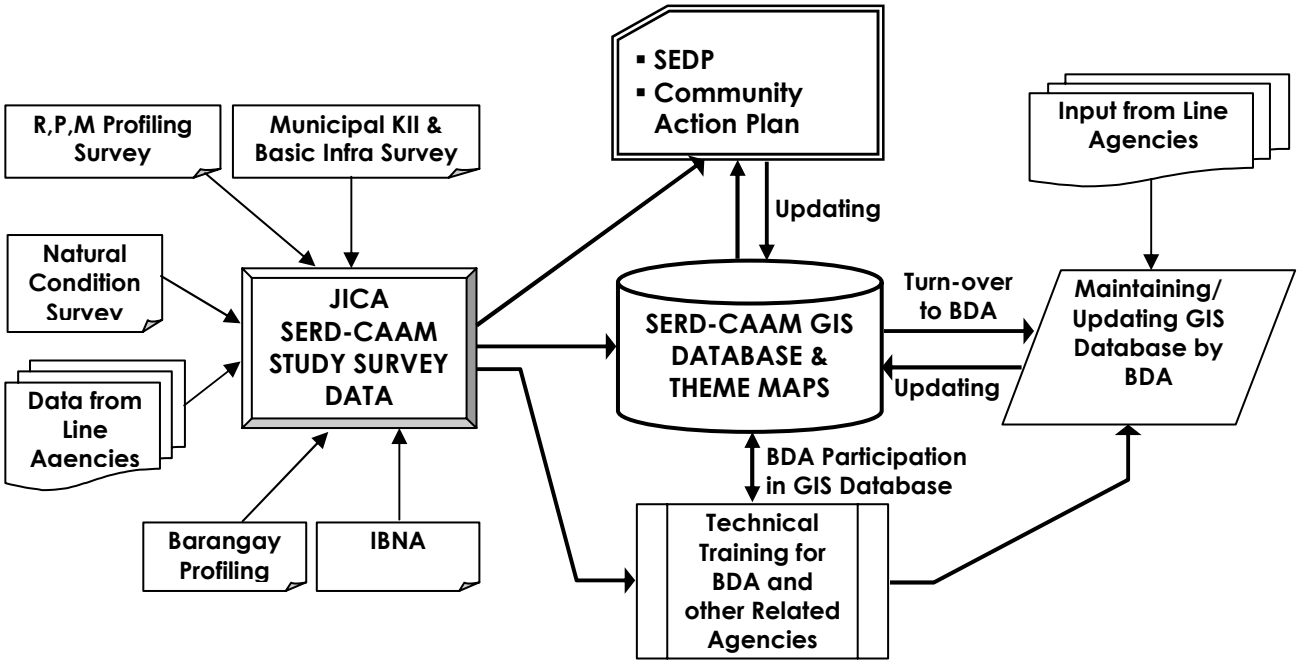
- Under this task, theme maps were prepared to illustrate the geographic and spatial distribution of the data collected under different surveys. The theme maps were finalized with the contents presented in Table. A Sample of theme maps prepared is shown in Figure.



Sample of Theme Map

6.2 CAPACITY BUILDING FOR BDA AND OTHER RELATED AGENCIES

- The GIS Training Program, which forms part of the Capacity Building and Technical Transfer for BDA staff and related agencies, was aimed at providing sufficient knowledge and skills to manage, maintain and upgrade the GIS database that was developed during the course of the Study. Data collected was stored in GIS database format and presented as GIS thematic maps which will be made available to BDA and related agencies for their application to socio-economic development planning and policy decision making and evaluation. It was expected that with sufficient training, BDA and other related agencies would be able to fully utilize the database and make it sustainable.
- In Figure, the SERD-CAAM GIS Database was developed from the different Study surveys conducted and utilized to formulate the Action Plan and Socio-Economic Development Plan. The GIS Database, together with the other databases of the Study, is supposed to be managed by proper organization/agency(s) among the stakeholders after the completion of the Study. Since BDA is deemed to take an important role, it was necessary to capacitate BDA in maintaining the GIS Database.



Maintenance and Update of SERD-CAAM Database

GIS Training

- There were seven Training Modules successfully completed by the trainees from BDA and other agencies. Summary of the training is as below:

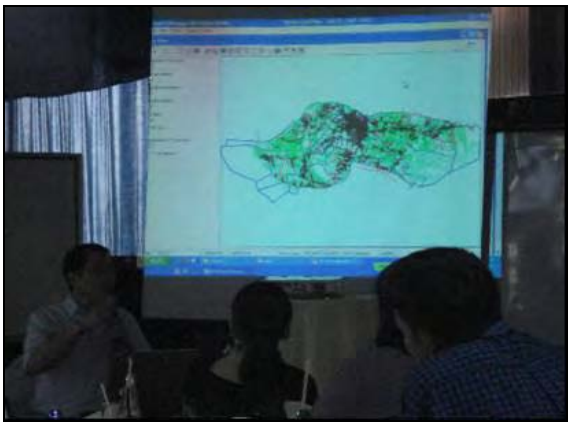
Result of GIS Training

Training Component	Contents/Topics	Date Conducted
GIS Awareness Training	• Application of GIS to Development Planning	• July 19, 2007 (Cotabato City)
GIS Technical Training	• Module 1: Map Appreciation and Basic Cartography • Module 2: Introduction to Global Positioning System (GPS) and Geographic Information System (GIS) • Module 3: Introduction to Land Use Planning and Remote Sensing • Modules 4: Introduction to ArcGIS • Module 5: GIS On-the-job Training • Module 6: GIS On-the-job Training	• July 23-26, 2007 (Quezon City) • August 21-23, 2007 (Cotabato City) • Sept 10-13, 2007 (Cotabato City) • Oct 15-18, 2007 (Cotabato City) • Nov 19-22, 2007 (Cotabato City) • Dec 17-18, 2007 (Cotabato City)

Training Participants

- Representatives from the different project beneficiary organizations and government agencies attended the training modules. For the GIS Awareness Seminar, participants included representatives from the OPAPP and the Bangsamoro Development Agency (BDA), Executives and Managers of the different government line agencies (NEDA, ARMM-RPDO, DAR, GRP/MILF CCCH and JBIC-ASF) as well as staff members of these agencies. For the next 6 training modules, selected participants from the BDA and other government agencies in Mindanao were chosen to attend all the training modules conducted. Every training module was also attended by representatives from the training organizers.
- There are thirteen (13) participants for the GIS Technical Training Modules from the different agencies including:

– Bangsamoro Development Agency (BDA) : 4 participants
– OPAPP : 1 participant
– GRP-CCCH : 1 participant
– MILF-CCCH : 1 participant
– RPDO-ARMM : 1 participant
– NEDA Region IX : 1 participant
– NEDA Region XII : 2 participants
– DENR-EMB Region XII : 1 participant
– Zamboanga del Sur Prov'l Gov. Office : 1 participant



GIS Awareness Seminar

6.3 NEXT STEPS

- The SERD-CAAM GIS Database will be the baseline geo-database not only for the Study, but also for those involved with the SEDP implementation and other developmental work in Mindanao. It is expected that a proper organization / agency(s) will maintain and update the GIS Database in collaboration with related stakeholders. In this regard, a guideline for managing the database has been prepared by the TWG.