Philippines–Australia Land Administration and Management Project

Prototype Implementation Office 2
Quezon City

PIO2 Final Evaluation Report

March 2004

Report D36

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A. Introduction

1. This report covers the activities carried out by Prototype Implementation Office 2 (PIO2) up until the 31st March 2004. It contains an evaluation of the activities undertaken, the methods tested, lessons learnt and makes final recommendations.

Background

2. This document doesn't contain a review of how LAMP came about or the main objectives, this is covered in the document "Introducing Innovations in Land Administration and Management: Lessons and Experiences from LAMP" produced by the Monitoring and Evaluation Unit, this is a review of the activities of Project Implementation Office 2 (PIO2).

Objectives of Project Implementation Office 2

3. The project area for PIO2 was requested by the Land Registration Authority (LRA). The original project design was more on Land Titling and from the start PIO2 has suffered with lack of support from its main agency the Land Registration Authority (LRA) and the Project Management Office PMO. LRA have never taken responsibility for the PIO2 operations this is probably best demonstrated in the assigning of 4 different prototype managers over two and a half years. PMO have never had a full time deputy assigned to assist PIO2, which is a joint arrangement with LRA and have always made sure that budget allocations cover PMO expenses before allocating any money to PIO2. For example the PIO2 phones have been cut off several times yet we have never heard of PMO's phones being cut off. Also contract staff payments are very spasmodic and there are periods were contractors are forced to wait two to three months before they are paid. PIO2's main objective was to work with the Land Title Computerisation Project (LTCP) an objective which to date has not been realised. It was also charged with trying to improve the land records management system an area where it has had greater success.

4. The output of PIO2 is to produce proven new procedures and demonstrate successful cooperation between land related agencies for the improvement in quality and completeness of land title records. PIO2 is largely concerned with increasing public confidence in the existing land registration system.

   The prototype is involved in the following activities:

   - Creation of Cadastral Index Maps (CIM) and development of cross indexes to control duplicate land titles and for other administrative purposes;
   - Validating existing titles held in the Register of Deeds (ROD) against the records of the Quezon City Local Government Unit (LGU) records;
   - Going into the community to try to locate missing records in the field.
   - Reconstitution of certificates of title, for the prototype area, which are missing from the Registry of Deeds and facilitating the process of providing land owners with new titles as replacement to their missing titles;
   - Integration of the CIM and Cross Index into the ROD, streamlining of land registry operations to maintain quality of land register documents and exchange of land information between related agencies of government.

- Setting up a One Stop Shop to incorporate the services offered by the ROD, LGU Treasurers, LGU Assessor's, Bureau of Internal Revenue (BIR), Land Registration Authority (LRA) and the Department of Environment and Natural Resources (DENR), in a single location.
- Community Relations Services (CRS) educating the communities about the objectives and services being offered by the project, as well as advising them of their rights to use and transact in land.

5. In addition, there is a strategic process of developing a national plan for improved management of land ownership related records, based on the lessons learnt from this Prototype, and also from the rural activities in Leyte in Prototype 1. Where possible this strategic planning will also link with the implementation of the BOO Project.

6. The project followed a Bridging Loan that instigated the procedures that are in place, these procedures have been modified and tested. The aim is to obtain standard tested procedures that will be suitable to implement throughout the Philippines in urban situations.

7. The lead agency for managing the prototype is the Land Registration Authority (LRA), while the Department of Environment and Natural Resources (DENR) and Tax Assessor's Office also are stakeholders who will be sharing the facilities of the One Stop Shop (OSS). The initial composition of prototype personnel was from LRA, DENR and Quezon City Local Government Unit (LGU) Tax Assessor's Office; the remaining staff were employed on a contractual basis by the prototype. The Bureau of Internal Revenue (BIR) will also be involved in the OSS, but will only supply staff to the OSS not the prototype office. Since moving to the LRA compound the LGU Tax Assessor's Office ceased supplying prototype staff, but they will be supplying staff to the OSS.

B. Background on the Pilot Project in Quezon City

8. PIO2 was originally set up in Quezon City Hall finally operating from the 9th Floor. At the time the Registry of Deeds was in the building next to City Hall. However with the completion of the new building within the LRA compound the Registry moved to its new location. In August 2002 after negotiations had been completed, PIO2 were also able to move to the 2nd Floor LRA building in East Avenue. LRA then cleared out a small area near the ROD which the project has since extended and renovated for the One Stop Shop (OSS). Late in September 2003 the PIO2 office space was renovated with the works being completed in early October. At the same time the extensions to the OSS were completed and partitioning was installed mid October 2003, ready for the OSS to begin operations. To date the hold up has been the final fittings for the OSS, some of which will be funded by the Quezon City Mayor's office, the rest is part of the initial funding requested in January 2002 but still not released by PMO/GOP. The funding from the Mayor's office could not be applied for until all parties had signed the MOA, this happened in mid October, as of March 2004 funding had still failed to be provided from any sources. In late May 2004 fax machines were finally provided by PMO and two servers delivered, although they lacked cables to allow them to be made operational.

9. PIO2 has been involved in testing different methods for the validation of records using both office and field verification of records, CIM production and identification of fake, duplicate and missing titles. Manuals have been produced in all areas and as new procedures are tested and agreed to they are added to the documentation. The prototype has worked towards introducing worlds best practices to develop a Land Information System linking CIMs to a database of land record information. Trials have also been carried out on creating a Graphic Information System (GIS) that would hold the CIM data and the cross index.

10. All these systems have been developed independently with each unit following a work plan that defined the activities for that unit in context with the project log frame. However the focus of the prototype needed to shift towards a more harmonised approach. Originally Community Relations Services (CRS) would go into the field and hold community assemblies. These were held all over the prototype area and the concept of the Land Administration and Management Program (LAMP), the OSS, and other PIO2 activities like CIM, office validation and field validation were explained. This campaign caused several problems as the prototype took two years to get the OSS completed, over one year to complete a preliminary field validation of Holy Spirit and two years to begin the field validation in the other four barangays. The feeling in the community towards government programs was never favourable, the prototype has not delivered on many of the CRS promises and LAMP has been in danger of being seen in as just another waste of government money, increasing taxation, etc.

11. To try remedying this perception PIO2 has put a lot of time and effort into securing the respect and the assistance of the local community. In Holy Spirit where most of the work has been concentrated there is great anticipation surrounding the actual opening of the OSS. A Barangay Advocacy group (BAG) was created to assist the prototype in getting its message to the community. Many syndicates have been removed from the area, either through the public being educated about their rights or the fear that they will be detected. Many community concerns have been clarified right through the prototype area, eg the various government departments involved

have come up with a clear resolution on the Forest Land dispute declaring that all land in the prototype area is already alienated and disposable. A united effort has been negotiated by the prototype on the court decisions regards Original Certificate of Title (OCT) 333, with the departments, Barangay Captains and local congressmen all united to ensure the land owners do not lose their rights. These have all been positives for the project and its acceptance by the community and agencies alike. In early March 2004 the Barangay Integrated Land Information System (BILIS) was launched at Holy Spirit giving the local Barangay their own copy of the CIMs and Cross Index.

12. Initially processing units like CIM, CRS, and OV concentrated on their own activities ignoring the full processing cycle within the prototype. This was a major problem for the co-ordination of activities and efforts were focused on getting internal processing management operating efficiently. Each unit within the prototype was charged with getting a certain job done and testing different methods to come up with the best method to carry out that activity. The units loosely work together and have had several training sessions and presentations on what each other do. The next phase was to take the step up and turn the prototype into a strong cohesive unit with each section working together. There is more detail on this in the evaluation section of the report.

13. The Prototype activities were set out in the project design documents created by the World Bank and AusAID. The requirements of both organisations do not always match and a consolidated log frame was developed covering both, which the project planning has followed. The activities and reports have been broken up into 6 monthly periods as per the project inception report.

14. The start dates for the commencement of the World Bank and AusAID components did not match, the World Bank agreement ended in September 2003, and the AusAID component was continuing until early 2004. After the Government of the Philippines extended the project until the next phase in 2005, both the World Bank and AusAID have agreed to extended their activities until the World Bank until December 2004 and AusAID until September 2004 to allow a smooth implementation of the subsequent phase.

15. The tasks for the final six months of 2003 are set out in the following table. These activities have been continued into the first quarter of 2004, until the amended design document has been agreed to and adopted.

Table 1: Deliverable 36 tasks

Deliverable 36 task	PIO2 Activity	Status
Identification of methods that have potential to detect fake, duplicate and missing titles, and to resolve the title anomalies;	Workshops, Manual, Formation of the Fake Title TWG	Completed. All current procedures are documented and a manual prepared with recommendations for improvements that the TWG can explore. However the TWG did not met with great success to begin with. The main problem was the lack of ownership by the agencies. It was not until early December 2003 that some improvements occurred with the LRA taking a positive roll to chair the meeting All current procedures are

Deliverable 36 task	PIO2 Activity	Status
		documented and a manual prepared that will be updated with any resolutions from further meetings. These will be reviewed by the TWG, which has been developing an action plan for the future directions of their operations and meetings.
Facilitating wide consultation to ensure that the views of all stakeholders including direct customers and the wider community, are considered and integrated in the process	Field Validation, Workshops, Community Relations Services	On-going. While a Barangay Advocacy Group (BAG) has been set up in Holy Spirit and meets regularly it is not clear what benefit it is supplying the project other than public relations. Community members and NGO's have been included in all OSS simulation workshops as well as the National Land Records Strategy and Land Laws workshops. Even though PhilSSA (the NGO commissioned for the remaining barangays) was to look at new and innovative methods they have also formed BAGs in the 4 remaining barangays and the results of the community consultations will not be known until later in 2004.
Technical assistance to develop a range of objective criteria (i.e. time, budget, equipment, human resources and skills, costs, affordability, agency capacity and capability, stakeholder and community acceptance, regulatory changes required before adopting, suitability, sustainability) by which the proposed methods could be compared.	All activities within the prototype.	Completed. The technical assistants have been working with the different PIO2 units and the Monitoring and evaluation staff to develop the criteria. These results have been used to determine the costing for each method undertaken in all areas that PIO2 have been working in. Where possible the measurements have used the current system as a base to allow comparison with the trialled methods. Also the comparisons have been carried out between the methods trialled.

Deliverable 36 task	PIO2 Activity	Status
Obtaining all necessary material, including the results from Output 3.1, and conduct an evaluation, including opportunities and constraints that would need to be overcome before adopting the methods	Evaluation workshops for each unit.	Completed. All activities carried out in 3.1 have been evaluated. For new methods trialled in this period the PIO2 production units have been carrying out evaluation workshops at the end of each activity. In these workshops they evaluate the strengths, weaknesses, constraints, issues and lessons learnt from the activity. The workshop output also includes updates required to produce new versions of operational manuals. The evaluation reports for the PIO2 activities form part of this report.
Assisting to conduct workshops on the results and gain consensus for recommended improvements	Workshops	Various workshops have been held with all the stakeholders, PMO and PIO1 to gain consensus. However PIO2 and the PIO2 TA's were largely ignored in the consensus building process carried out by PMO.
Providing technical assistance to drafting any required modifications to laws/regulations and seeking approval	Assisting the Land Law TA & the National Land Records Strategy TA in their investigations.	Completed. Two strategy documents have been prepared one by the Land Registration Law Adviser, the other by the National Land Records Strategy Adviser. PIO2 have been pursuing the stand of the agencies regarding these proposals, but have little commitment from LRA or DENR, both seem to be waiting for the LAA to be formed and carry out the changes. However the prototype managers continue to push for the adoption of these recommendations.
Documenting the selected methods and procedures;	Production of Operational manuals for all PIO2 activities	Completed. Operational manuals have been developed through workshops and consultations with the operational teams. As new methods are adopted or activities modified the manuals have been updated and reviewed by the operation teams. The Manuals produced are: • Fake Title Investigation • One Stop Shop operations • CIM production • Field Validation

Deliverable 36 task	PIO2 Activity	Status
		• Office Validation • Tracking/Cross Index User manual • PIO2 manual of operations • Manual for Densification PIO2 • Field Validation Data Capture User Manual • Cross Index Specification • Tracking System Specification • Cross Index User Manual • GIS User Manual
Assist to develop and operationalise the One-Stop-Shop.	Workshops, training, meetings with agency heads, TWG meetings.	The development phase has been completed, however the OSS is still not operation due to lack of equipment and as at March 2004 it is only used by the ROD to supply certified copies of title. PIO2 have worked with the agencies involved to get agreement on the functions to be carried out within the OSS and have been able to facilitate agreement between the agencies to work together for a common goal. The OSS activities have been agreed to and a Memorandum of Agreement signed off by all agencies involved. Staff to be employed in the OSS have been identified and trained ready to start OSS operations. The funding for the procurement of the rest of the equipment required for the OSS is the only thing holding up the start. PMO have promised to prioritise the request, the Mayor's Office has pledged funds and LEI has added some equipment to the extension budget, but to date funds have not been forthcoming.

PIO2 initial office at Quezon City Hall

PIO2 office at LRA

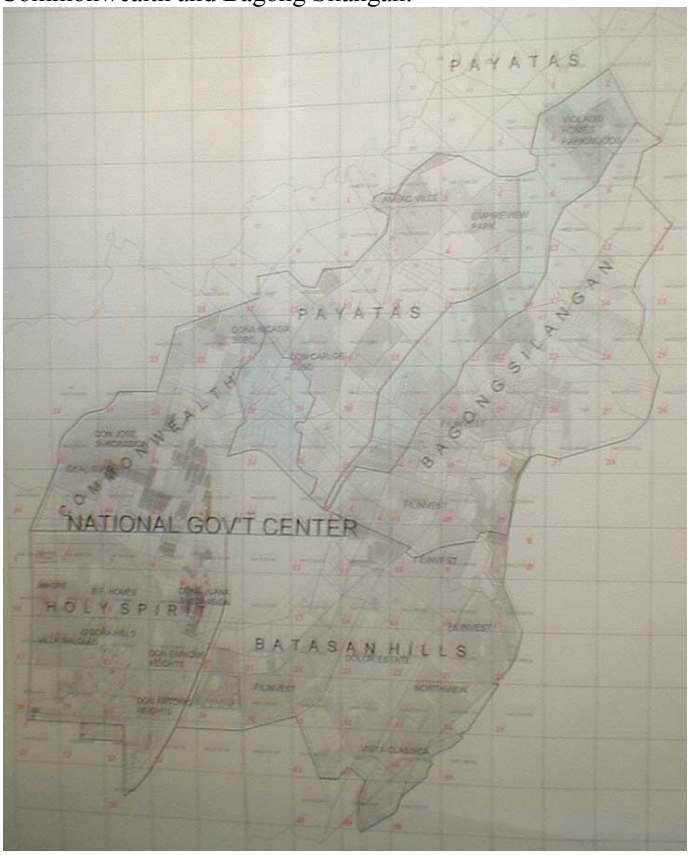
C. Pilot Study Location

16. Various sites were considered for the 2nd Prototype to be carried out and although a Rural Site was preferred, Quezon City was selected after insistence from the Land Registration Authority (LRA). After the burning of the Quezon City Registry of Deeds in late 1988, a title reconstitution program was carried out. Before the beginning of the project 90-95% of the reconstitution had been carried out; the area which had the majority of the titles not reconstituted was the Barangays selected. The break up of parcels in these Barangays is displayed in the table below:

Table 2: Break up of the Barangays

Barangay	Land Area (ha)	Population	No of Parcels (Cross Index)
Bagong Silangan	507	35,385	8,163
Batasan Hills	576	86,037	5,707*
Commonwealth	471	129,354	7,931*
Holy Spirit	329	87,615	8,189
Payatas	494	87,253	7,376*
TOTAL	**2377**	**425,644**	**37,395**

* The figures for Bagong Silangan, Commonwealth and Payatas are approximations based on the Barangay boundaries investigated by PIO2. To date the records have not been updated and parcels for Payatas still are held in Commonwealth and Bagong Silangan.



D. Overall Performance of PIO2

17. The overall performance of PIO2 is difficult to rate as it has failed to met many of its objectives as set out in the log frame. This has been the result of many difficulties the major one being the slow release of funds to the prototype. For example the computer equipment needed to operate the project did not arrive until September 2003, the funding for OSS extension did not get approved until July 2003 and only part of the equipment to operate the OSS has arrived by June 2004. This lack of funds has resulted in problems in acquiring equipment, employing staff and renovating the OSS.

    The prototype was involved in the following activities:

18. Creation of Cadastral Index Maps (CIM) and development of cross indexes to control duplicate land titles and for other administrative purposes.

    The CIM group have created preliminary CIMs and have final CIM ready for Holy Spirit. The cross index is developed but still 5700 records have not been attached to CIMs. On these figures the conclusion would be that PIO2 has failed to complete these activities. However if you look at it from the view of achievements versus equipment/staff/etc provided, then PIO2 have produced a great deal with very limited resources. For example while the majority of computers were not supplied until September 2003 yet the prototype area has been fully digitised and all titles that could be located from the Assessor's data have been captured.

19. Validating existing titles held in the Register of Deeds (ROD) against the records of the Quezon City Local Government Unit (LGU) records.

    All TCTs identified in the Assessor's data have been located and keyed. Also any new TCTs created from transfers, land consolidation and or subdivision have been captured; 75% of record's had some data mismatched with the TCT data and around 50% of these mismatches having the potential to increase LGU revenue. Based on these figures the process was very successful, however the prototype is still unsure how many records the LGU still possess which are not yet converted. Accordingly, the full benefits to the LGU are not yet identified.

20. Going into the community to try to locate missing records in the field.

    In Holy Spirit 1472 records were located in the field, 900 of which updated records from the Assessor's or filled in gaps in their records. However 26% or 2000 parcels in Holy Spirit still have no TCT records and other methods will be needed to locate the owners of these properties. From these figures locating records in the field has limited success and other methods like using the tax payment records need to be trialled.

21. Reconstitution of current certificates of title which are missing from the Land Register and facilitating the process of providing land owners with new titles as replacement to their missing titles.

    LRA do not want the prototype to take over any reconstitution process and are only interested in the project informing the users of the process for reconstitution. PIO2 has had limited success in this area only advising a handful of people in the process and failing to capitalise on the feedback from field validation. Although some agreements have been made and in early 2004 the LRA did agree to allow PIO2

access to the reconstitution paper files in the prototype area, as well as create a database of this information.

22. Integration of the new records into the ROD, streamlining of land registry operations to maintain quality of land register documents and exchange of land information between related agencies of government.

    None of the new records in the form of CIM's or the cross Index have been integrated into the OSS. On this point PIO2 would have to be judged as failing, however the delayed construction of the OSS, the delay in releasing the budget to operate and equip the OSS, has stopped PIO2 from being able to incorporate the CIM into ROD operations, making it impossible for PIO2 to complete this requirement.

    Some compensation has occurred at the Barangay with the introduction of BILIS in Holy Spirit. Now people from that area can arrive and the ROD/LGU/etc. with the correct information and this should assist in making the process quicker, easier and hopefully less costly.

23. Setting up a One Stop Shop to incorporate the services offered by the ROD, LGU Treasurers, LGU Assessor's, Bureau of Internal Revenue (BIR), Land Registration Authority (LRA) and the Department of Environment and Natural Resources (DENR), in a single location.

    This was impossible to accomplish without funding. A site was supplied in June 2002, however funding for the renovations was only approved in mid July 2003, funding for the computer equipment September 2003 and when funding to supply the rest of the equipment need to operate the OSS will be approved/supplied is unknown. Yet PIO2 has complete agreement on the processing to be carried out, staff to be detailed by the agencies have been identified and trained and a Memorandum of Agreement between the agencies has been signed. Also the Mayor of Quezon City has pledged 1.5 million pesos to help with OSS operations and to help finalise the set up. Community support and anticipation has been tremendous and they also eagerly await the opening. Making all the activities surrounding the OSS a huge success, but with no way to operate it.

24. Community Relations Services (CRS) is educating the communities about the objectives and services being offered by the project, as well as advising them of their rights to use and transact in land.

    In Holy Spirit the statistics indicate that just over 50% of the community are benefiting. The rest had not heard of LAMP before the field enumerators arrived at the door. For the other Barangays the responsibility lies with PhilSSA to provide the education. The results from PhilSSA will not be available until second Quarter 2004.

E. Evaluation of the Management of the Prototype

25. The full history of the setting up of the project and the management structure outside of the prototype has been documented by the PMO and this document will not go back over that detail. The focus here is PIO2 management and organisation, the organisational chart for 2003 is set out in Annex 1. PIO2 is organised into 7 units, with the exception of the OSS each unit has a unit head or chief. At the top of the structure there was to be a Prototype manager and two deputies, one deputy for technical operations and one for administration. The Prototype manager was to be supplied by the lead agency the Land Registration Authority (LRA), then the other major agencies DENR and Quezon City LGU Assessor's would supply the deputies. This structure was amended in early 2004 after a restructure was required following the replacement of the prototype manager by one of the unit heads. This chart also appears in Annex 1.

Land Registration Authority management of PIO2

26. A major problem facing PIO2 has been the disinterest of the LRA in its activities. The original agreement was signed by the LRA administrator who was keen for PIO2 to work in Quezon City with the Land Title Capture Project (LTCP). Unfortunately before the project commenced the LRA Administrator died and his replacement had no interest in the prototype or its activities. The original arrangement was for the LRA to detail a full time prototype manager and three staff to act as unit heads and cartographers. Under this arrangement the detailed staff would gain new skills and be exposed to international advisers, introducing worlds best practices. The skills and training that they received would then be kept within LRA when these people returned to their units at the end of the project. However only one of the three detailed staff provided has stayed with the project, the two that left were never replaced. The prototype manager has been a separate problem. The original prototype manager was required by the incoming LRA Administrator as an adviser on plan registration. LRA Administrators are Supreme Court judges who are appointed to the position, they have no formal training in plan approval, however as the LRA Administrator they are required to sign all plans that are approved. As such most appoint a senior LRA officer as an adviser who carries out a final check on their behalf, they then sign the plan when the adviser is satisfied the plan is registrable. The first PIO2 prototype manager was therefore kept very busy and had little time to devote to the prototype. Finally after being pressed, by the PMO in a workshop in January 2002, to make an effort to work full time at the prototype he resigned his position on the project. However it was not until the second LRA Administrator also died in office and was replaced that any action was taken by the LRA to replace him. The next prototype manager was extremely inconsistent switching between spending a large amount of time at the prototype and spending little time there. As the time he spent working with the prototype dwindled away to almost non existent it was agreed with the LRA Administrator and his Deputy, who had been assigned to assist PIO2, that he would be replaced.

27. The third prototype manager also held the position as Registrar of Deeds in Mandaulong and initially his registry had no deputy. This required him to fill in half his day at the Registry and half at PIO2, on top of this it can take 45-60 minutes to get from his registry to LRA so the amount of time allocated to PIO2 was suffering. Mid 2003 a deputy was appointed to the Registry to free up his time but as full time

Registrar of Deeds he was unable to supply more than half a day to the prototype and on many occasions could not be present at all. This was compounded by the fact that there is a Registrars meeting every Monday afternoon which eats into PIO2 time and he is required to appear in court cases for his Registry. However of the three prototype managers he was the most useful to the project. Having connections within LRA and with other Registries he was able to negotiate more affectively than the previous managers and was involved in some of the major changes in the project. However this may have only been a matter of timing as most budgets and procurements were approved during that time, but he was still able to contribute and to make some decisions that smoothed the process.

28. In early 2004 the prototype manager was assigned to a second registry making it impossible for him to devote any time to the prototype. LRA then decided to promote the remaining staff member in the project from Unit Head to be the fourth Prototype Manager. If this will work out remains to be seen, however there are several advantages to the appointment. The new Prototype Manager knows the project very well, spends most of his time in the prototype, is keen and willing to fill the role and he has a good understanding of LRA processing. The main disadvantage is his lack of experience and training as a manager. However with the support of his deputy, staff and the TAs this is developing into a workable situation.

What are the lessons

29. Part time management at the top of the prototype does not work. Projects need strong managers who are working full time within the project.

30. LRA has a larger commitment to LTCP and is not prepared to give a large commitment to LAMP at the same time.

Issues

31. If the prototype manager does not come from the lead agency what will be the effect on the project and it's relationship with the LRA. Will this also have a longer term affect with the LAA.

32. While the prototype is located within the LRA building it has not been accepted as part of LRA.

Recommendations

33. The current prototype manager needs to be supported and assisted. If he fails to perform the job then a manager should be appointed from outside government and the current prototype manager retained as a deputy/adviser.

34. The relationship between LRA and the project needs to be strengthened. LRA have a preference towards the LTCP project and while there is some support for LAMP at the top levels, it is not universal in the organisation.

Local Government Unit management of PIO2

35. There have been similar problems with the deputy prototype manager from the LGU Assessor's. When the prototype was in Quezon City Hall he was able to spend at least half a day a week and be present for meetings. However once the prototype was moved to LRA his attendance diminished appreciably, the prototype has been lucky to get half a day per month, although lately he has not been present at all,

except for the occasional workshop. At one stage it was negotiated with his managers that he would spend one day a week at the prototype but this has not occurred and the LGU Assessor's are reluctant to remove him from the post and replace him

What are the lessons

36. The project needs to ensure that when a partner has committed staff that they can maintain the commitment.

Issues

37. Whether LGUs are prepared to work with LAMP and can commit the necessary staff and equipment.

Recommendations

38. In Phase II lamp needs to secure commitment from LGUs before they begin operations in their areas. Part of this commitment should include supplying some management support for the process and taking a major role in sustaining the OSS in their region.

Department of Environment and Natural Resources management of PIO2

39. The only constant has been the Deputy Prototype Manager from DENR, who has made a commitment from the beginning to maximise his time in the project. As part of the original team assigned to the project he has been the unofficial prototype manager (although he refuses to except the role). Someone had to Champion the role of PIO2 and make sure that the activities were carried out with very little support (other than TA assistance). He has taken on the full time running of the prototype managers role, his role and the other deputies role. Also because of the poor training and under skilling of the unit heads he has also been forced to take on many of their roles as well. Because the structure has ended up so lop sided an Organisational Development TA was added to the prototype to assist the Deputy in training the unit heads and in trying to maximise the use of the Prototype managers. This makeshift management team have been responsible for driving the prototype and helping it achieve the results that it has risen to, with occasional assistance from the international TAs. However the Deputy receives little compensation, unlike the LRA backed prototype manager who was awarded a government vehicle to transport him around and the contractual unit leaders who receive a higher pay, he must share any honorarium with the other detailed staff and any agency staff who assist the project, often receiving no reward.

What are the lessons

40. A committed management team is required to run and project activities, there is too much pressure placing all the emphasis onto one person.

Issues

41. How the project can suitably reward good managers and retain them.

Recommendations

42. A more balanced management structure is required in the next phase with the workload shared amongst the managers.

PIO2 Unit Heads

43. There were originally 6 unit heads, 4 were detailed staff and the other two contractual staff. The original intention was to have all unit heads as detailed staff, however as M&E and CRS are specialised fields the unit heads have been supplied from outside the government sphere. The problem with the unit heads has been their inability/unwillingness to take responsibility. Most do not understand that a project structure varies from the normal organisational structure found in Government and are ill prepared for the added responsibilities they must take on. There is a tendency for them to push all problems towards "Senior Management" rather than to deal with the problems themselves. The organisational development manager has spent a lot of effort in training these people in management skills and introducing systems within the prototype to make the process smoother. The problem is most of these programs have been abandoned, for example a system of weekly reporting that relates the weekly output to the work plan is no longer used, weekly meetings have ceased, etc. This lack of discipline is one of the hardest skills to teach the unit heads and as a result does not filter down to the staff. For example the detailed staff, being poorly paid next to the contractual staff, supplement their incomes by doing private work. An agreement was made that they would carry out this work in their own time rather than office time, however this is no longer the case and many are seen with customers sitting at their desks during office hours. Instead of managing their unit's operations they often become involved at the operational level only, not recognising problems until they are pointed out by other units or the TAs.

44. The staff are required to produce weekly plans with the unit heads and should report back on these plans every week, bringing up issues and problems for the unit heads to deal with or to pass on to the unit heads meeting. However this type of management is seen as too time consuming and difficult to implement, instead staff run around gathering statistics for their unit heads when a meeting is to be held. Thus the units are run by responding to problems rather than by anticipating problems and having a strategy ready.

What are the lessons

45. The role of the unit heads needs to be carried out by staff undertaking prepared to use leadership/commitment/discipline/authority understand their role, as well as being committed to it.

Issues

46. Finding, training and retaining good unit heads who can take the responsibility for their units production and managing their staffs outputs.

47. Staff Selection, monitoring staff performance, reporting on unit activities and planning are very weak within the prototype, especially at the unit levels.

Recommendations

48. There is a lot of knowledge in the current unit heads, each one should be assessed and if suitable they should be trained. Where any are not suitable they should be retained in a deputy role taking on other duties.

Project Management Offices role in the management of PIO2

49. The relationship with PMO management has also been an area of contention. PMO have not had a great focus on PIO2, the role of the deputy director at PMO who deals with PIO2 has never been filled full time (this has also been an LRA responsibility). PMO have mainly focussed on the policy studies and PIO1 having left PIO2 to try and run its own operations. PMO only taking interest when a quarterly review takes place or if PIO2 get desperate enough to ask for assistance. At one stage there was a push to close PIO2, as the LRA had not wanted to talk to the prototype or assist it in any way. The prototype was saved as a result of a new LRA Administrator taking over, who was interested in the Land Administration and Management program and a favourable report from the QAP who reviewed the work carried out by PIO2. The role definition between PMO and PIO2 at the management level has been unclear to PIO2 for sometime, confusion starts when the prototype is told to take responsibility for themselves, but are then pulled up for doing something that PMO should have approved. PMO's cause is not helped by the lack of a full time deputy who should be working with the prototype.

50. A Project Management Team (PMT) was introduced in mid 2003. The team consists of the PMO executive director and the deputies, PIO managers and their deputies, the TA team leader and the lead TA's from PIO1 and PIO2. The PMT was formed to try and assist the managers by giving them a forum for presenting their achievements and issues. In this forum the PIOs can be kept informed of the project developments, while reporting progress back to the PMO.

What are the lessons

51. There needs to be a clear definition of the roles of the implementation office managers and where they need to defer to the PMO.

Issues

52. The amount of support that PMO can reasonably supply to the prototype. There needs to be a balance between showing interest and interfering in the prototypes activities. PMO seem to lean towards not interfering as much as possible but this has been to the point that the prototypes feel they are being ignored. While the PMT has been dealing with some of these issues there is a tendency to rely on the OPMT and not follow up between meetings. In this way the prototypes do not always carry out the agreed actions and get away with reporting that they are working on it. This is especially the case where the PMT have requested they do additional tasks or the prototype had hoped the PMT would take a more active role but it has been decided that they must follow it up themselves. For example the NLRMS, PMO were to follow up with DENR and PIO2 with LRA, one meeting has been reported between PIO2, LRA, BIR, LGU and DENR. Since it was reported to the PMT, PMO and PIO2 have done nothing more on the matter.

Recommendations

53. The person(s) in PMO who will look after any implementation activities must be working in the project full time and need to work closely with the implementation offices to ensure they are properly managed.

What worked?

54. Having a fulltime deputy prototype manager, if all managers had been part time the prototype would not have succeeded.

55. Having an organisational development TA who could help guide the prototype and document the procedures.

56. The PMT meetings have allowed the prototypes to bring up issues and improve their relationships with each other and PMO. Also the PMO has been able to present the major issues affecting the project and keep the PIOs informed on the progress of these issues.

What didn't work?

57. Part time management. Projects need strong managers who are working full time within the project.

58. The current unit head structure. It has recently been reviewed again and a new structure put into place but unit heads still don't take responsibility for day to day management. If the project managers have to constantly deal with unit problems they cannot focus on the project concerns.

59. Working within a structure that does not supply management support. The prototype management office needs to be able to work on multi levels prototypes and their needs cannot be abandoned because the PMO are more interested in the policy studies and building relationships to get legislation through. Additional managers need to be available to support the other operational units. Initially the Quarterly assessments were the only time that PMO looked at issues in the units, however with its introduction late in 2003, the PMT has gone a long way to fixing this problem. In future projects this needs to be in place at the start of the project.

60. Identifying the rules of operation for the prototype and having them followed by the staff. There is a lack of discipline, brought about by two factors. Clear rules have not been defined for the working environment, for example when computers were introduced into the office no rules were introduced for their operations, as a result the staff play music on separate machines making the office noisy and difficult to concentrate in. The second factor being lack of monitoring, when the computers were networked the networking software contains the ability to send messages, this is now the preferred method of communications with staff sending hundreds of messages across the network every day, clogging the network and wasting work time.

61. High staff turnover many due to the inability of the project to pay wages at regular intervals.

62. Limited capacity of the M&E unit to be able to objectively evaluate the performance of the unit heads, instead focusing on the problems of having a part time prototype manager.

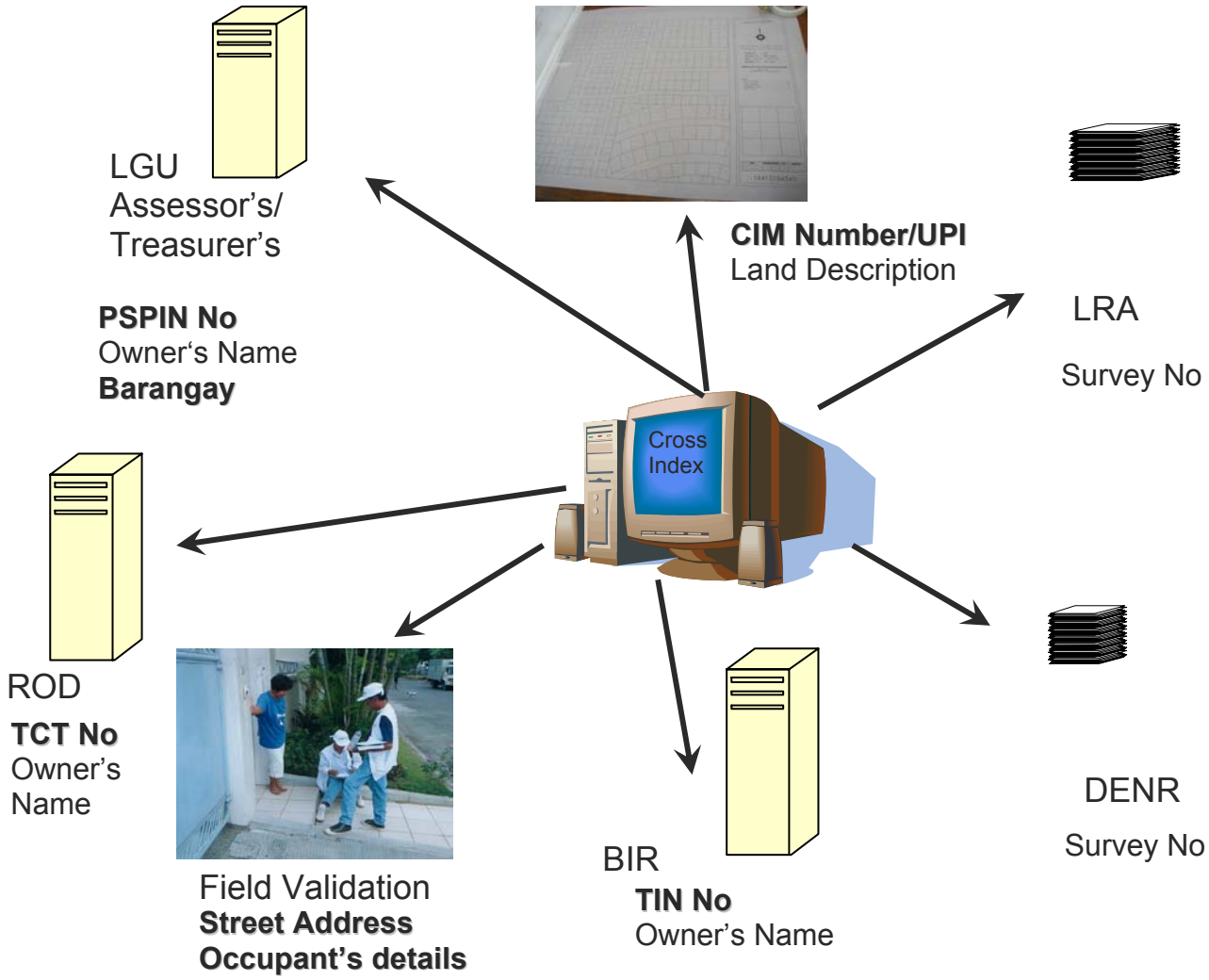
What was planned but didn't happen?

63. Not really applicable here however it would have been good to have tried using an external project manager to see how government works with the private sector running a project.

F. Evaluation of the PIO2 units operations

64. This section of the report is concerned with evaluation of the PIO2 operational units and is the final evaluation that will be delivered under activity 36. While CRS, M&E, CIM, Survey Mapping, Orthophoto and Survey Control have separate reports developed for their activities this is a broader look at all activities. In all instances these reports, compiled by the TA responsible should be referenced as they will contain far more details. There are also separate reports from the Land Law Adviser and on the National Land Records Strategy. Both these reports were current at the time of production and where this report covers them it will only report any progress made since their creation.

65. The PIO2 operational units are working together to create a cross index of the different agencies records which is linked to the spatial reference held on the Cadastral Index Map (CIM). This linkage is shown below:



Key records from each agency are held in the index as shown in the diagram, the only exception being the BIR information which PIO2 are still trying to negotiate.

The different units within PIO2 have worked towards building this system, which is being placed into the OSS.

Cadastral Index Mapping

66. Cadastral Index Mapping (CIM) production started during the Bridging TA period, with very limited equipment and staff. The CIM was based on the information provided by the Local Government Unit (LGU). Lists of plans in Holy Spirit were created from the LGU data and when the plans were retrieved they were reduced/enlarged on the photocopier to get them to the same scale (1:10,000). Tracing paper was then placed over the Photocopied plan and the CIM was traced using a pencil. This photocopying introduces errors into the parcels as the image is stretched at both ends and this was never intended to be the final method, it was more an introductory method to demonstrate that CIMs could be produced. Given the availability of resources this was quite a clever method and helped set the team on the path of working together. As the staff was a mixture of DENR, LRA and contractors it allowed them to learn how each other worked and to see if they could work together as a team. Sadly the commitment of the LRA staff wasn't there and over time both representatives disappeared from the project, never to be replaced by their organisation.

67. After the Bridging Period a Survey and Mapping International TA was introduced to the project. Prior to the TA's arrival a digitising board was acquired from DENR and after some additional software and cables were located it was setup and attached to a PC. Some basic training was supplied by the Land Parcels Records International Adviser and this was enhanced by one of the LRA staff who had been formally trained in the use of the equipment at LRA. When the Survey and Mapping International TA arrived he was required to work equally between PIO2 and at PIO1 in Leyte. The first steps he undertook was to develop a standard that could be applied to both prototypes. The International Adviser introduced a more structured approach to CIM production and introduced the use of Pantographs to enlarge/reduce the plans, thus eliminating the stretch and distortion introduced by photocopying. CIMs were also converted to the national standard PRS92 and once the survey control had been completed and was ready a block adjustment was made to get the CIMs orientated correctly and to get the best fit with the control.[1]

68. The introduction of the Survey control allowed for a more accurate production of digitized CIMs and all plans located from DENR and LRA for the five Barangays have been digitised. In December 2002 the International TA for Survey and Mapping ended his assignment and was not replaced. This left several methods untested including the use of Orthophotos, which had not been delivered prior to his departure, due to delays at NAMRIA.

69. Orthophotos were finally produced and delivered in early 2003. The International Orthophoto TA was then mobilised and work carried out testing the production of CIMs using Orthophotos[2]. The overall conclusion being that it takes 2 and a half times longer to use the orthophotos in urban areas compared to the semi-digitised method.

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[1] See the Procedure Manual for Urban and Rural Cadastral Index Map report C25 for more details

[2] See TA Report Orthophoto Mapping Second Assignment November 2003 report D29 for more details

70. A flatbed scanner has been purchased and a trial of scanning of plans was carried out. Two plans were scanned and they were used for heads up digitising. However the staff encountered difficulties and the process was not completed.

71. The national GIS TA devised a way to take the digitised data of the CIMs and place it into the MapInfo GIS. This data has been geocoded with data from the cross index for parcels in Holy Spirit. The results were fairly encouraging with a 75% success rate of locating parcels in both the cross index and the GIS, and a 96% success rate in linking those parcels.

72. PIO2 worked with the DENR to locate the boundaries of Barangay Payatas, including areas that are in dispute with Barangays Commonwealth and Bagong Silangan. This information was added to the overall location map for the prototype area; however this was not translated to the CIMs or the GIS. As a result the information could not be encoded into the Cross Index either. This was presented to the LAG and a sub-committee has been formed to resolve the boundary dispute.

73. Some plans have been found which are within the Municipality of San Mateo not Quezon City and the TCTs for those plans are held in Rizal Registry of Deeds when they should be in QC ROD. To date this information has not been presented to the other agencies.

74. PIO2 will release the completed CIMs to the OSS, at this stage Barangay Holy Spirit is finished completely and the other Barangays are being finalised. The use of hard copy CIMs will be trialled then the GIS will be introduced and trialled. Then both methods will be evaluated.

What worked?

75. The process used by the CIM unit is effective. The survey control is captured, then the survey plan(s) are digitised using the control. The CIM is finished off by having the Unique Parcel Identification (UPI) Numbers added by hand. Where the CIM is a preliminary CIM the Lot and Block numbers are also entered to allow the office validation team to capture the CIM/UPI against the parcel record.

76. Borrowing a digitising board from the DENR. Although LRA has one they do not use the prototype was unable to borrow it, but the one we obtained has proven to be invaluable. If it had been ordered through the project it would not have arrived until September 2003 with the computers.

What didn't work?

77. Hand drawing of CIMs from a copy of the plan that had been resized to the required scale using a photocopier. Photocopies distort when enlarge and this causes all sorts of problems when the plan is traced onto the CIM.

78. Quality Assurance. There is such a large number of duplicated CIM/UPI numbers that the CIM production and the quality assurance procedures need to be overhauled.

79. Using the Procedure Manual. The manual sets out the procedures for ensuring that UPI allocation is controlled. Also basic requirements such as putting the next UPI number to be used and noting who created the CIM and when have not been followed. This caused downstream problems for Office and Field validation.

80. Heads up digitising was not fully evaluated.

81. Using the information gathered for the boundaries of Payatas. PIO2s role is to improve the records within the prototype area and a lot of work went into discovering the boundaries for Payatas but this is not reflected in the CIM, cross index or the GIS.

What was planned but didn't happen?

82. Using the projection Maps from LRA and DENR to determine if they are a better source for CIM production.

Office Validation

83. The Office Validation team forms part of the Titles Reconstitution and Validation Unit under the control of one unit head. In early 2004 this unit was restructured and placed under the CIM units to form the Mapping and Records Validation Unit (MRVU). Office Validation was not very well defined in the design of the initial documented PIO2 processes. The initial focus in the bridging period was on the Assessor's records provided by the Local Government Units (LGU) of Quezon City. Little thought or planning went into how the TCT data would be used or captured. When the project started there was a major problem in identifying what was contained in the 5 barangays. The ROD cannot provide data about barangays, TCTs are stored in the order that they are registered, and while the districts are mentioned on a TCT there is no reference to the Barangay they belong to. This left the identification of records to be carried out using the data held in the LGU of Quezon City. While the LGU's data was helpful and a great starting point, the Assessor's and Treasurer's data is in a variety of loosely related systems. At the LGU a conversion program was underway converting the data to digital format and PIO2 was able to secure a copy of this information. However the program is still ongoing and in 2001, when the data was obtained, there were many gaps. Also the LGU's data was held in two databases, the main Assessor's database and what appeared to be a secondary Treasurer's database. It has been assumed that there was a separate database for Treasurer's data as anytime a record was not among the data supplied from the Assessor's the deputy prototype manager (from the LGU) was usually able to locate the record required on the other database. In other instances a search was carried out from the Assessor's tax maps and the information located in the paper records.

84. In initial office validation the data was placed into 4 separate Microsoft Excel spreadsheets. Microsoft Excel was chosen as the bridging international TA was familiar with that program and felt comfortable developing in it. PIO2's scope is 5 Barangays, however the LGU Assessor's and Treasurers do not recognise Payatas as a Barangay, even though there is an established Barangay hall and the Barangay elected captain is invited to Quezon City committees and functions. As a result the four separate spreadsheets where developed for Holy Spirit, Bagong Silangan, Commonwealth and Batasan Hills; parcels within Payatas being held within the records of Commonwealth and Bagong Silangan. A lot of time and effort went into the development and updating of the records from the LGUs, due to the fact that it was early days in computerisation of the Assessor's records. Also, our assumption was flawed. LGU records are only updated after the owner goes to the LGU and registers as the new land owner, if this does not happen then the LGU record is out of date; also there is no legal requirement for owners to register updates at the LGU. The intention was to hold a field in the spreadsheet and indicate if the LGU's record

matched the TCT record, there was no clear direction on what to do next, except that all mismatches would be subject to field validation. The intention was to fix the LGU's record in the spreadsheet and have an up to date cross index. Any problems in the LGU records would be identified and a report sent to them.

85. Pulling lists were produced from the LGU data spreadsheets and sent to the ROD. Again this process was not thought through and had many difficulties. The first problem was the ROD itself. The ROD was originally located in the building next to the LGU, however even before the project had been designed and started LARES had planned to build a new ROD building in the LRA compound, with the intension of moving all the staff and records. PIO2 was not made aware of this and had even planned to build the One Stop Shop at City Hall. This made access to the records difficult as they were being boxed up to transport to the new ROD. Also when the ROD records were burnt in late 1988, a decision was made to renumber from 1, rather than continuing the numbering from the point were the records were burnt. This meant that the majority of the TCT numbers held in the LGU records were referring to different land parcels, but more unfortunately meant that many TCTs initially pulled from the ROD, were not within the prototype area, wasting time and resources. Of the hundreds of TCTs retrieved only a handful were the correct TCT, but the effort to sort through the lists compare land descriptions and determine which ones were needed was taking one full time person away from production and they would have wasted weeks on the effort.

86. At the same time the CIM group had produced a set of CIMs based on the tax maps, not on the national standard PRS92 co-ordinate reference system. The CIM sheets were individually numbered and a lot of time and effort was used in locating records in the Excel spreadsheets and adding this CIM sheet number to the record.

87. The entire approach and design was analysed by the International Land Title Records Adviser. The data was transferred from the Excel spreadsheets into a Microsoft Access database. Pulling lists were then created using on the date of registration of the TCT, being split into:

    - those that were registered before the fire;
    - those registered after the fire; and
    - those which the LGU records had no date of registration.

    The pulling lists were also produced and printed on a CIM basis, using the sheet number which had previously been captured. By using this method the title retrievers could employ appropriate techniques for pulling the separate lists. All TCTs registered after the fire are accepted and copied, all TCTS registered before the fire or with no registration date, are not removed and copied unless the land description matches the land description on the pulling list. TCT data is government guaranteed making it the logical basis for the cross index. Other agencies need to know how their records match with the land title information. Therefore the data was also restructured, with the main break up of the data being a parcel containing the land description, that would be linked to the CIM, and separate tables for TCT and LGU data. An input screen was designed that allowed the linking of these three components and by displaying the TCT data against the LGU data matches or mismatches can be reported. More importantly the reason for the mismatch is recorded to enable the generation of a report to the LGU on the differences between their data and the TCTs. This also significantly changed the approach for field

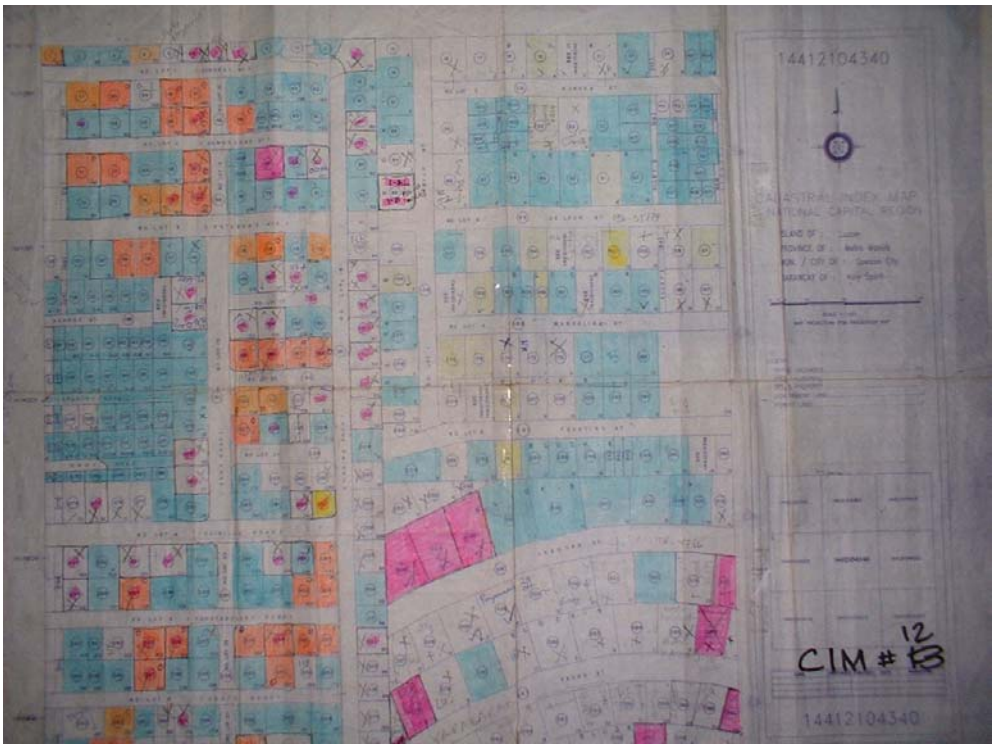
validation as 75% of LGU records have some form of mismatch. The emphasis of field validation was switched to locating the owners of properties that no longer had a TCT in the ROD. Although where a large discrepancy, such as large parcel area differences, is noticed between the TCT and LGU records this would be investigated in the field

88. The initial database was held on one PC and the data entry operators captured the information into copies of the database on their own PCs. Each morning the systems analyst would load up the TCTs captured, then as each was loaded the records in the Owner and New TCT title tables (which are linked by an internal system number) had to be changed to match the new number before that data could be loaded. The TA provided a network hub and cabling to join the stand alone PCs together and have the data captured directly to the main database. This enhanced the capture, storage and integrity of the data, while freeing up the time of the systems analyst to get onto more important tasks.

89. When the CIM procedures were finalised and the new set of preliminary CIMs produced a different method was adopted by the office validation team. The new CIMs were created in PRS92 which caused the a shift in the positioning of the CIM boundaries. When the first set of CIMs had been produced titles had been captured and stored in folders under that CIM number. When the new preliminary CIMs were produced the sheet numbers no longer matched the pulling sheets and the whole storage system had to be remodelled. TCTs were removed from the current storage and after being located on the new CIM the record was called up and the preliminary CIM number added. This new process allowed the ROD and LGU records to be linked to the CIM giving the records a spatial reference which was a new concept.

    A new procedure manual was developed[3] and the TCTs when linked were highlighted on a copy of the CIM, then the TCT copies were placed in folders referenced to the preliminary CIM. The TCTs where then linked to the CIM/UPI on the database. While this process was followed for parcels with TCTs, the task was not completed for any parcel on the CIM which didn't have a TCT. For example using the CIM below only the parcels highlighted blue would be linked in the cross index, all other parcels would not contain a parcel record and could not be linked to their CIM/UPI number.

[3] See the "Office Validation Procedure Manual" report D14 for more details.



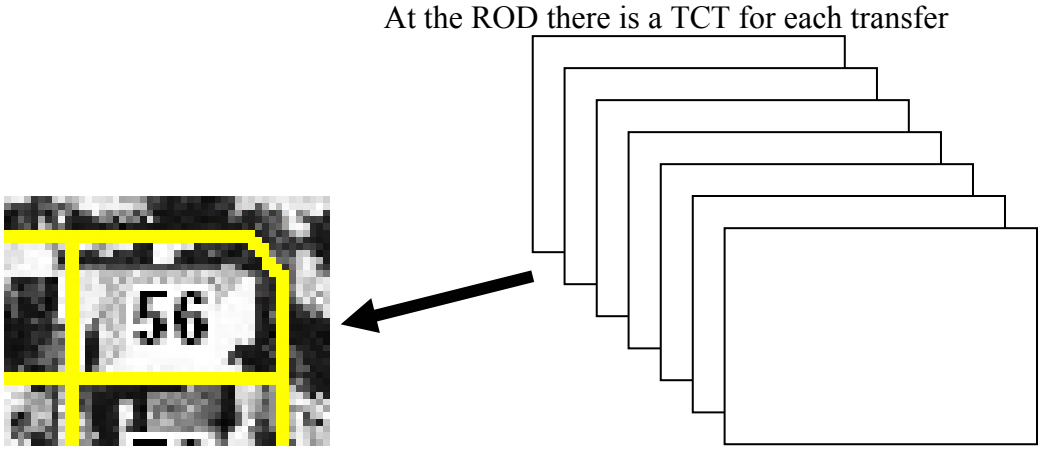
As a result analysis of the work carried out in field validation could only be carried out manually. Also the field validation effort required for a CIM was unclear and where the number of parcels requiring field validation was not physically counted and recorded it was difficult to determine if all work was carried out.

90. A review of the Office Validation procedures was carried out and the process was changed to ensure that all parcels on a CIM were captured for the remaining Barangays. The Holy Spirit CIMs were re examined and parcel records captured from CIM for those parcels that did not have TCTs. This reworking of the CIMs caused delays in other processes and put pressure on the Office Validation team when trying to get the work ready for the NGO to carry out field validation in the other Barangays. The result was that PIO2 was not ready to supply fully validated CIMs for the field validation by the NGO and the linking of Parcels/TCTs to the CIMs is far from complete. With over 5700 parcels and 4700 TCTs still to be linked this delay will also be carried through into the OSS.

91. Other problems were also associated with storing lists and copies of TCTs. PIO2 does not have a lot of storage capacity. Originally copies were scanned, but this process is slow and a duplication of the effort already carried out on the original TCT file by LARES. Ideally the TCTs should be destroyed after QA, but PIO2 has adopted a policy of retaining them, ever mindful of the fact that under the LARES/LRA contract access to the registry can be removed from other sources unless a fee is paid. Also when the TCTs are searched the first time they may not be available, being in a dealing/court case/etc, in many cases these TCTs were never re-searched and thus the cross index contains parcels that do have records in the ROD but not held in the index. Where the Assessor's record displayed a TCT and there is not a corresponding TCT record a pulling list can now be created and sent to the registry to locate these TCTs. This process will be on-going until all TCTs have been located.

92. The original assessor's data was supplied in November 2001, and as it contained the Barangay code the TCT pulling lists could be made for each Barangay. However updates were not received until over 12 months later, although now updates are supplied, from the Assessor's database, to the prototype at more regular intervals the process is not without problems. The main problem is concerned with linking records within the cross index. Each agency has their own unique reference for their records (primary key). Some do hold the primary key for another system, eg where it is known the TCT number is held in the assessor's records, but others only contain their own records eg TCT has no reference to LGU etc. Also some systems hold multiple records for the same parcel of land, for example a TCT is cancelled and a new one issued each time the parcel of land is transferred, thus the primary key (the TCT number) changes. To overcome this problem PIO2 adopted the system used in Australia where the unique identifier for the parcel of land is its land description and this information is held in all systems that deal with the land parcel.

93. The Standard Parcel Identifier or SPI was adopted because all systems which deal with land have the land description in their data. Most agencies use an agency specific indicator eg TCT number for the ROD the PS-PIN and tax Declaration numbers for the LGU etc. but these are not always known by the other agencies. Also the agency document reference number is not unique for a land parcel, for example a TCT can have many TCT reference numbers over the same land parcel as a new TCT is created each time the land is transferred.



The same is true for tax declarations at the LGU. However unless a survey plan reshapes the parcels the Land description remains the same. When the land is re-shaped by subdivision or consolidation the old parcel is no longer valid and new land parcels are created with new land descriptions. The CIM is updated with this information and the parcel gets a new SPI and CIM/UPI.

94. The SPI is calculated from the land description displayed and is a combination of the lot, block, plan type, plan number and plan suffix, separated by a dash (-). For example the SPI for lot 123 on PSD21997 would be 123-PSD-21997. For lot 34A Block 3 PSD-00-0704-133667-D the SPI would be 34A-3-PSD-00-0704-133667-D. It should be noted that in the earlier part of the data capture a dash was not added between the plan number and the plan suffix, thus the number was captured as PSD-00-0704-133667D. Both cases create a unique number however to maintain consistency a dash should be added between the plan number and the plan suffix. If (LRC) or (LRA) are shown they are captured as part of the SPI; for a plan from LRA

would be as follows, Lot 28 Block 17 (LRC) PSD 133767, the SPI would be 28-17-(LRC)PSD-133767. Once the SPI has been entered click on close form and the parcel capture screen will be displayed.

What worked?

95. The relationship between the project the LGU and the ROD. The LGU, mainly the Assessor's office, has gone out of their way to supply information to the Project. The ROD has also made large adjustments to help the project collect information from their records.

96. The use of a Standard Parcel Identifier (SPI) to link the database records between the agencies. With a further link to the CIM/UPI number giving the parcel a spatial relationship.

97. Removing the data from the excel spreadsheet, putting it into a Microsoft Access database and creating data capture formats. Linking the data entry operators in a network that captured all the data into a single database.

98. Highlighting the parcels that have been office validated on the copy of the CIM to be used for field validation. This saves the field validators having to visit properties that the project has already validated.

99. Quality assurance of the keying, as the confidence of the data entry operators increases there is less need to have a full check of all keying and random checks are sufficient.

What didn't work?

100. Using a Microsoft excel spreadsheet as the cross index and focusing on the Assessor's data as the main information to be held in the cross index.

101. Not having an update system in place for the LGU assessor's records. It was twelve months before the first updates were received. As a result many of the mismatch reasons between the TCT data and the Assessor's data were no longer relevant. The overall problem was that the project was unable to deliver any results back to the Quezon City LGU.

102. Completing the data entry based on the CIMs for Holy Spirit. Originally only the parcels that had TCTs attached were captured, leaving gaps in the database. The structure in the database has all records connected to a parcel, without this base structure it is impossible to determine which parcels have an Assessor's record, but no TCT. This made the analysis of the field validation results too difficult and they were not properly analysed for over 6 months.

103. Following the procedure manual. The office validation staff often added new procedures or stopped carrying out existing procedures in reaction to a problem. However they ignored updating the procedure manual. These new procedures were not discovered until the manuals were reviewed, usually at half yearly reviews. Also no one was assigned the task of keeping the manuals current and this role was left to the TA's to ensure that the manuals stayed relevant.

104. Having the entire prototype area ready for field validation by the NGO. The capture fell short of being completed and in the future the results should be taken into account before trying to estimate when the field validation can begin.

105. Using the information gathered for the boundaries of Payatas. PIO2s role is to improve the records within the prototype area and a lot of work went into discovering the boundaries for Payatas but this is not reflected in the cross index or the GIS.

What was planned but didn't happen?

106. Using the LARES data instead of keying TCT records, the LARES data has been promised but is yet to be delivered.

107. Keying from the books held in the registry rather than by barangays, a sample keying should be arranged and trialled as this method is proposed for the future.

Field Validation

108. The field validation function was in the Titles Reconstitution and Validation Unit then was later restructured into the Field Activities Unit together with the Community Service Relations Group. The field validation process was meant to locate records that were no longer available in the agencies. With the burning of the Registry of Deeds many TCTs were destroyed and the only record was the owner's copy. For 95% of Quezon City the deeds have been reconstituted, however the majority of the remaining 5% is within the five Barangays covered by the prototype.

109. Three pilots were carried out to help determine the best method to carry out field validation of the records. From these activities it was determined that field validation (FV) needed to include some CRS activities, and that there needs to be some mechanism to measure the effectiveness of any CRS program carried out. By the end of the third pilot a field validation manual had been completed and the approach agreed upon. However the FV unit had a serious lack of manpower and the staff was unable to fully analyse the results of the three pilot activities.

110. The main finding from the pilots was that there needs to be a separate approach for formal and informal areas. The community needs of the informal sector are more on education of their rights where they can go to find the registered owner or to determine if the person asking for rental etc. is the owner. The formal sector are secure in the knowledge they have the title to their property and are not as interested in the project or in providing records.

111. After the pilots had been completed it was arranged for PIO2 to take advantage of the trained enumerators in Holy Spirit and to complete the field validation for that Barangay. When the activity commenced the CIMs for Holy Spirit were ready and the majority of office validation had been completed. This validation was managed by PIO2 with all training, supplies and monitoring being carried out by its staff. In the field only the forms which contained TCT data were captured the others were left bundled in groups per CIM. The TA secretary captured some additional forms but the rest were lost when the Barangay refurnished the room used as the field office. The results captured are displayed below.

112. The full results for Holy Spirit can not be fully analysed and the cost per return can not be fully calculated. No analysis has been carried out on whether all the properties that need to be field validated have been visited. The only work that was completed was the pulling of TCTs found in the field and adding them to the cross index.

113. For the other Barangays a Non Government Organisation (NGO) was employed after lengthy contract negations. The NGO, PhilSSA, consists of the head NGO which employs the services of NGOs from the four Barangays (Batasan Hills, Bagong Silangan, Commonwealth and Payatas). PhilSSA were asked to follow the methodology in the PIO2 Field Validation manual for their operations. Under the agreement PIO2 created the CIMs and carried out the data entry for the office validation. Completed CIMs for the areas would contain highlighted parcels that the NGO would not have to validate. The work effort for a CIM would be agreed between the NGO and PIO2 prior to any work being carried out in the field, using the copy of CIM and the orthophotos. Where situations are not clear field inspection would be carried out by PhilSSA and where applicable PIO2. Once the area was agreed the details would be added to the database and as the area was validated, when keyed the properties to be validated could be matched to the data captured. At the same time PIO2 would produce the field validation sheets for all properties to be validated, these sheets would be pre-filled with details known about the property from the Assessor's database. As soon as the returns had been sent to the PhilSSA base camp the information would be captured and pre designed reports could be generated for each CIM. This methodology was not followed. The PhilSSA data capture team had not seen a field inspection report so these have not been captured. The promised assistance from PIO2 to create the forms did not occur, so they were only able to produce the pre-filled field validation sheets for 7 CIMs. PhilSSA obtained laptops with operating systems which did not support the field capture database. The systems analyst produced a new version of the database and capture screens to fit the operating system but it was not documented. This left the user manuals and pre-defined reports unused. Although the operating systems were upgraded the undocumented system was used. PIO2 also changed the format of the capture forms at the last minute, removing the ability of the interviewee to express any community concerns other than the 5 main concerns from Holy Spirit. The results from PhilSSA are not yet available, although under the original plan they would have been available after each CIM was completed. This will make it difficult for the project to have any rework carried out or to have a consistency checks on the returns. It was planned that this would have happened with the PIO2 support team in the field.

114. While PIO2 was unable to complete the office validation of all the CIMs this was not a major problem. Part of the strategy was to have every parcel on certain CIMs field validated to test if the records located in the ROD matched the records held by the land owners. When the results are delivered from PhilSSA they will be compared to what has since been captured to determine any variance.

115. Over the last two years much debate was held over the name of the activity, field validation implies that records are validated in the field, where in reality this only occurs in a small number of cases. The field activity is primarily to locate records in the field that cannot be found in the registry of deeds and where applicable advise the owner of the need to reconstitute. The reality is that field validation does not locate all records, even in formal subdivisions, and is only one strategy that can be employed, to date no other strategy has been attempted but these can be pursued in the extension phase, such as chasing up the last know local government tax payer

What worked?

116. Collection of additional Land Records from the field. PIO2 were able to locate additional records at the ROD based on the Field Validation Results.

117. Improving the education of the public in their rights as well as educating them on where to locate/check land records. Reports have come back of land dwellers being able to find the correct owner and finally negotiate the purchase of the land; and reduction of syndicate activities.

What didn't work?

118. Finding all the land records in the field. The original design assumed that all records not held in the registry could be located in the field, however this did not take into consideration that people buy properties for investment and reside overseas, or do not live in the area and informal areas where owners have given up trying to locate their properties, etc.

119. Analysis of the additional data; PIO2 did not have the resources to analyse the additional data gathered in the field for CRS or M&E. The only analysis was the land records. A sample was captured but these results are only now being analysed.

120. Following the operations manual. The field validation teams in Holy Spirit especially often missed many sections of the field validation report, field inspections were hardly ever carried out.

121. Reconstitution advice. This has been a failure in the Holy Spirit full scale field validation and PhilSSA also failed to train the enumerators to give the correct advice. Instead of concentrating on owners with titles registered before the fire advice was given to all groups, including people who became confused as their title had already been reconstituted and informal settlers.

122. Using the tools the TA created for support. The TA secretary was creating forms for the field enumeration pre filled with data from the cross index. PIO2 didn't support the process by supplying staff to assist and removed the secretaries access to the cross index so the process ceased after 7 CIMs.

What was planned but didn't happen?

123. The following are yet to be tested:

- Using the name and address of the owner from the Assessor's data to contact potential owners.
- Follow up on owners identified by people renting their properties.
- Sourcing data from other sources such as power utilities, water boards. PLDT, etc.

One Stop Shop

124. The PIO2 activities also include the establishment of an office known as the "One-Stop-Shop" (OSS). The OSS is a primary part of the institutional objectives of the Project and the need for an OSS has been accepted and endorsed by the agencies concerned. The OSS will be established through the co-location of staff from the relevant agencies – the Land Registration Authority (LRA), the Department of Environment and Natural Resources– National Capital Region (DENR-NCR), the

Registry of Deeds (ROD), Bureau of Internal Revenue (BIR) and Quezon City Local Government Group (LGU) Assessor's and Treasurer's offices. The OSS will contain combined activities from these agencies, starting with basic transactions, i.e. Transfer of Ownership, preliminary examination of plans and acceptance of documents for title reconstitution. Once the OSS is operational more activities will be analysed and where possible added to the functions of the OSS.

125. The initial OSS workshop was held in December 2001 to get agreement in principle to the process that the agencies would trial in the OSS. In June 2002 symposiums where held with, LRA, DENR-NCR, BIR and LGU Assessor's and Treasurer's offices. The symposiums where to educate senior staff, of the agencies, about LAMP and the role their agency will be performing in the OSS. Since that time the agency heads have been regularly updated with the progress of the OSS development.

126. The technical working group for the One Stop Shop (OSS-TWG) was formed in November 2001. The TWG is made up of representatives from the BIR, DENR-NCR, LGU Assessor's and Treasurer's offices, ROD and LRA. Regular monthly meetings have been held with the TWG and numerous meetings with the agency heads to get agreement on the services to be provided in the One Stop Shop. The TWG were able to finalise the operations for the OSS and agreement has been reached with the agencies involved. A memorandum of agreement has been sign between the agencies.

127. As PIO1 had been operating their OSS since early 2002 there was then a Cross visit study tour by the OSS-TWG to Leyte to look at its operations. The TWG looked at the lessons learnt in PIO1 and how it operated. After evaluating these they were able to come up with a set of recommendations not only for the OSS in Quezon City, but for a national strategy for setting up OSS. In Late March - early April 2003 a study tour to Australia and Thailand, attended by Managers and OSS TWG members. A study tour report was prepared with recommendations for long and short term that could be adopted.

128. Staff from the agencies were identified and have been undergoing an intensive training program in readiness for the opening of the OSS. The first workshop, for the staff who will work within the OSS, covered the expectations of the OSS from the public and the expectations of the staff. This was held in September 2002 and this was followed up by a Change Management workshop in November of that year. A change management consultant was hired to facilitate the 2 day workshop and at the end of the process the staff had made a commitment to work towards making the OSS successful.

129. In January 2003 the staff to be detailed to the OSS held their first simulation workshop. The workshop included all agency staff involved in the OSS, PIO2 staff and members from the NGOs involved in the prototype area. The processes were modified as a result of this workshop and a second simulation workshop was held in May 2003. This workshop trialled the amended procedures and was attended by the same participants as the first workshop plus the managers of the agencies who had supplied the staff for the OSS. In February 2003 a basic computer skills workshop was held for the staff detailed to the OSS to give them skills to use the Cross Index to locate the record within their agency.

130. The OSS has been plagued by problems with funding over the past two plus years. In August 2001 when the concept was ratified by the Local Advisory Group (LAG) there was a belief that the One Stop Shop would be started early in 2002. Unfortunately at the time of writing this report only some very basic functions that do not need any equipment, ie computers, faxes, photocopiers, have been introduced to the OSS; with the official start was not until April 2004. The first OSS TWG meeting was held in October 2001 and a workshop with the department heads was held in December 2001. Resulting from the agreements in the workshop a budget was prepared in January 2002. This budget was held up in PMO and the government approval process and was not approved until December 2002. Funds were even slower to be released the construction funds being made available in August 2003 and the first round of equipment, in the form of computers, was not provided until the end of September 2003. The budget for cabling, telephones, faxes, photocopiers, etc. has only just been approved, but has not been supplied.

131. In second half of 2003 the Quezon City Mayor pledged funds to the project to help get the OSS operational and to realise some of the benefits. The BIR delayed the signing of the final MOA to agree upon the services to be provided in the OSS, as a result the funds were transferred to other LGU process for the final quarter. PIO2 have tried to have the application processed in the first quarter of 2004, but have not been able to get the funds released from the LGU financial department, even though they had a letter signed by the Mayor requesting the funds be expedited. The AusAID budget for the extension also contained some assistance to the OSS in the form of equipment but the slow approval process for the TA contract extension has seen these procurements delayed.

132. In an attempt to return some results to the communities that have helped PIO2 locate and validate records the prototype created the Barangay Integrated Land Information System (BILIS). BILIS has been created to supply the Cross Index information to the Barangays and is supplied with a set of Cadastral Index Maps for that Barangay. Unfortunately the system is not documented and lacks a user manual or training material, there is also a lack of a clear update strategy or proposal for sustaining the system after PIO2 closes in December 2004. It has been released to Barangay Holy Spirit and the other Barangays are keen to have it released to them, the problem being that the parcels for Payatas are yet to be separated from Commonwealth and Bagong Silangan.

What worked?

133. Getting agreement between the agencies and having them work towards a common goal of opening a One Stop Shop where the public has access to all their representatives.

134. Working through the current practices and having the agencies select which functions could be streamlined and added to the OSS operations.

135. Early reports are that BILIS has proven to be successful and is well accepted at Holy Spirit.

What didn't work?

136. Getting the funding for the OSS from the budget. Also getting assistance from the Mayor's office that promised funds but did not deliver and assistance from the AusAID budget.

137. The project has been unable to deliver an OSS where government could display government organisations working together in an effort to improve the service delivery to the public.

What was planned but didn't happen?

138. Full opening the OSS and having the staff man the operations. Only Plan lodgement for DENR, the issuance of certified true copies of title and tax declarations have been trialled.

Fake Titles, missing and lost titles

139. This is not the first project that has attempted to formulate a working party for the detection and prevention of Fake, spurious and missing titles. Other agencies have attempted to form these working parties with limited success. With so many agencies involved it is difficult to get agreement on an action plan. It was into this environment that PIO2 has entered in an attempt to look at what had happened before and attempt to consolidate the results into a workable strategy. However PIO2 are not merely working with the agencies to identify how these problems can be remedied they are also active in the community trying to educate the public to assist in these endeavours.

140. A problem in the prototype area has been the ability of syndicates and unscrupulous individuals to take advantage of the confusion. With multiple agencies approving plans, many lost or burnt records and the ability to use the court system in their favour, they have been able to make large profits and sell properties that do not belong to them. PIO2 has used multiple strategies to try to protect the interest of the people in the area and help stamp out this problem. Some are deliberate strategies others have been the results of other prototype activities.

141. The first strategy was a public awareness campaign using CRS and field validation. The CRS approach was to educate the public and answer their concerns. The field validation was not originally intended as a vehicle for this process, but this evolved over time as one of the methods that the project could employ to educate the public. CRS has used community dialogues, Barangay Assemblies and Area Based Community Dialogues (ABCD) not only to get across the LAMP message, but to educate the public on what their rights are and where they can check the ownership of the land. It has also been able to identify community concerns on other matters and help the community identify the true situation in their area. Through this campaign people are now checking the validity of land owner's claims, especially where land is informally settled, before paying out for settlement rights. Field Validation started as a campaign to locate missing records, but as it has progressed it has now become a major method of educating the public, especially in areas where the CRS campaign has not been able to reach all community members. Field validation has also been able to locate properties that have been double titled, with over 100 cases identified.

142. The CIM and office validation have also played a major role in locating lost and missing title records within the Registry of Deeds (ROD) that were not known to the assessor's tax records. The CIM has also been used to locate records that are held within the neighbouring LGU and ROD that really belong within Quezon City. For the first time a comprehensive map of the cadastre has been prepared, that is linked

to the LGU Assessor's and the TCTs. From these records the gaps in the registry easily can be identified.

143. A major task of the prototype was also to bring together the various agencies involved in land and determine the procedures that they use in dealing with patently fake or spurious certificates of title. This process has been very slow moving, partly because of the large number of agencies involved and partly because of difficulties in getting a person from LRA to take charge of the process. The first workshop was not held until the start of the third quarter of 2002, seven months into the time that had been allocated. Two other workshops have since been held with government and the private sector involved in identifying and investigating fake and spurious titles. The first workshop in July 2002 was held with the government agencies involved and included the Land Registration Authority, the Registry of Deeds, the Land Management Bureau, the Philippines National Police; and the Solicitor Generals Office. The second workshop was held with the private sector and included Banks, NGO's, Estate Agents and members of the community. The third workshop was held in Tagaytay in April 2003 to review the documentation of the current procedures and to look at recommendations for improving the detection of fake and spurious titles.

144. From the first two workshops information was gathered to put together a discussion document covering the existing procedures, which formed the basis of the third workshop. This third workshop was used as the basis for documenting existing procedures by the national land title records adviser.

145. It wasn't until mid 2003 that a Technical Working Group (TWG) was formed and work commenced reviewing the procedures and developing the requirements for a national approach. This committee is still in its early stages and after some initial difficulties is beginning to make progress. The LRA deputy administrator Atty. Feliciano has taken over the chairman and has an active interest in the operations of the TWG. The TWG has started drafting a MOA for sustaining its activities after the project ends in December 2004, which includes identifying rules and agreed terms of reference for the members.

146. The TWG has also agreed to develop a list of fraudulent titles that will be made available to all agencies and updated as more are discovered.

What worked?

147. Using CRS and field validation to improving the education of the public in their rights as well as educating them on where to locate/check land records.

What didn't work?

148. Having PIO2 only running the process, the TWG is made up of senior members of government and require a strong chair person.

What was planned but didn't happen?

149. Developing a national strategy on fake and fraudulent title and testing its application, however the TWG is working towards this goal.

Monitoring and Evaluation

150. Monitoring and Evaluation (M&E) didn't start until late in the project. There was no M&E in the bridging period, although one of the detailed staff had been assigned as the M&E unit head. The first M&E work occurred early in 2002 when the international M&E adviser carried out the first of his assignments with the project. The unit head assigned to M&E had been transferred to Office/Field Validation and no one had really replaced him in PIO2. The international adviser worked with each unit to determine the indicators required. He then prepared a report and having completed his assignment returned to Australia. The plan was to have a national M&E adviser assigned to the project to give M&E some continuality to the process. Due to 4 months delay in obtaining approval within the DENR, the national M&E adviser commenced work in July 2002. In the mean time PIO2 had a large turnover of M&E staff with none staying long enough to put any programs into place.

151. Late in 2002 the CRS transferred one of their staff to the M&E team, although other staff were still being hired and resigning this first stable M&E officer was able to provide the continuity required. With a full time National TA and a more stable M&E team at PMO, the PIO2 M&E team have been able to establish their objects and build a stable team. The International M&E adviser returned in November 2002 and work with the new team to develop performance indicators for PIO2. The structure of the PIO2 M&E team has been reasonably stable since and they have assigned members of the team to monitor and evaluate the separate units within PIO2.

152. The reporting of the results has been more consistent and the team has developed formats that facilitate the evaluation of the methods tested by the other units. However the earlier work was never fully monitored and a lot of the evaluation is mainly from people's memories and assumptions rather than from facts gathered at the time of the process being carried out. This was compounded by the lack of appreciation of the need to monitor the work by the unit heads and the problem of TA's moving between prototypes or working on multiple areas at the same time, therefore not being able to devote the required effort to thoroughly monitor the activities. This created a result driven evaluation, often missing the important processing issues and not getting a comprehensive measurement of the effort undertaken.

153. M and E have been tasked with developing a baseline for the operations of the OSS and providing community based M and E. Both activities have taken up a lot of time and resources. The results of these processes can be seen in the M&E report "Introducing Innovations in Land Administration and Management: Lessons and Experiences from LAMP".

154. For some time there was confusion over the role of M&E and the amount of documentation that they should produce. One group felt that M&E should be responsible for all documenting, meetings, user manuals, training modules, evaluation reports, etc. While the senior management, particularly at PMO, felt that they should only facilitate most of these processes and that the unit heads should take the responsibility for these roles. This now appears to have been sorted out but M & E find that they are still documenting the evaluation meetings and lessons learnt, as the unit heads are not taking the responsibility for their own documentation. There is still staff turnover, the National TA resigned and was replaced by the National TA for organisational development. Recently the unit head resigned and was replaced

by a member of the PMO M and E team, the longest serving team member was promoted to the head of planning and two new staff have been added. The reporting has become more structured and consistent, enabling the M&E team to produce informative evaluations of the methods tested.

What worked?

155. A more stable M&E team was able to introduce the necessary tools for a monitoring and evaluation system.

What didn't work?

156. Retaining a stable M&E team early in the project, the large staff turnover and the inability of the project to make available M&E counterparts when technical assistance was provided left the M&E function inefficient.

157. Unit heads placing a strong emphasis on the M&E team to monitor and evaluate their teams operations rather than taking on the responsibility themselves.

What was planned but didn't happen?

158. The baseline studies for the OSS are still being carried out.

Community Relations Services

159. The Community Relations Services unit was initially to be part of the M&E team as a subsection of its activities. However problems within the M&E unit started as an autonomous group linked to the field activities of PIO2. As the activities continued it became evident that the two should merge into a single unit; the Field Activity Unit. One of the outcomes of the prototype was to produce refined, proven CRS procedures and materials that would assist the project in interfacing with the community and locating records in the field. CRS was to be a continuous activity that was closely coordinated with the field validation activity. The initial CRS procedures and materials were developed to support the field validation, GPS and the One Stop Shop. The plan was to put into place an effective and open communication between the project and the community in an effort to resolve issues before and during field validation. It was recognised that there are a number of disparate groups with interests in the outcome of the activities. It was seen as important to keep these groups informed of project activities and gain their participation during Field validation.

160. The CRS program initially started in all Barangays with community dialogues. However it soon became obvious that the prototype could not start field validation until it had tested the procedures and formulated a synchronised approach. The CRS program was then scaled down as the expectations in the community were not matched by the progress of the other activities. The activities were then confined to providing support for the pilot project in Holy Spirit and supporting the setting up of Global Position System (GPS) survey points for the control of the orthophotos.

161. The first pilot was held in a formal subdivision in Holy Spirit. The subdivision was surrounded by a wall with guards on the roads leading into the subdivision and the land parcels in the subdivision were consistent with the registered plans of subdivision. However the number of interview returns was very low and the CRS campaign needed to be assessed to determine if it was ineffective or if the low

number of respondents was due to other reasons. A second pilot was held in the same area and the CRS survey found that the reasons for the low response were mainly the result of the person living on the property not being the owner. Also, many owners were not interested in participating in the project, due to mistrust and/or complacency. The survey found it was difficult to convince a property owner that they had to get their TCT validated when they lived on the property and had a copy of the TCT in their possession. Even knowing that the Registry of Deeds had burnt down did not sway them to participate.

162. The third pilot was held in an informal settlement and the CRS campaign was more openly embraced by the community. An informal area being an area where the residents or squatters have taken over the vacant land and the properties do not match the registered parcels held by the ROD. These areas actually can contain a mixture of formal and informal parcels but the general area has been informally settled. While there was a very low return of land records in the area, the CRS campaign was able to reach a much higher percentage of the community as people took more of an interest in the project and how it could benefit them.

163. The CRS program was fully tested in the first full scale field validation in Holy Spirit, however the results showed that less than 50% of the community was being reached by the program and that the field validation process was more effective in reaching the community. There were several reasons for this and the lessons learned from this should have been put into the CRS campaign for the other Barangays using the NGO, PHILSSA. But it is unclear if this was the case with first indications being it did not. A major problem with the campaign was that community assemblies were not highly attended. This could be from several factors poor advertising, bad timing, eg holding the meeting during the day when people work or at times when people are shopping etc., or complacency of the owners (especially in formal subdivisions). Another problem was the distribution of pamphlets prior to field validation, in many cases the NGO/HOA assigned to the task did not distribute the information ahead of the field validation.

164. Since the field validation pilots in Holy Spirit the focus of the CRS has changed from supporting those activities to a more social development role. Those enumerators employed in the field validation became involved in the Barangay Advocacy Group (BAG). The BAG serves as the local networks for CRS, composed of leaders and presidents of various homeowners associations (HOA) and relevant People's Organizations (PO) in the Barangays and has grown to 63 members. However the composition of the BAG is wholly informal groups and there are no representatives from formal subdivisions. This typifies the new approach of the CRS unit which has ignored the formal areas and concentrated on informal areas. A real indication of this is in the contract with the NGO where the number of parcels visited was dropped by 2/3rd and the budget for collecting CRS data from informal areas was increased by this amount. However it is hard to justify this increase as the CRS data obtained from Holy Spirit has never been captured into the database or analysed. Also what is yet to be provided is proof that the BAG is effective in anyway there has been no evaluation carried out on the terms of reference of the BAG verses the actual accomplishments. For example, on face value, if the main purpose was to assist the project in finding the best method for locating records in the field then the BAG has failed in formal areas and may have only had minimal success in informal areas.

165. In September 2002 the unwieldiness of this group was realised and a different approach of Community Organizing-Community Development (CO-CD) was adopted. Under CO-CD a BAG steering committee of 9 members was formed. This committee was then trained to help implement CO-CD. The main output of CO-CD will be the taking over of the running of the BAG by the community. The BAG was reliant on PIO2 for funding and the CO-CD is seen as a way to assist the community to take full responsibility including the funding. The way this will occur is still being formulated and is not yet clear.

166. Part of the CRS activity was to set up a CRS Technical Working Group (TWG) with the agencies involved in land administration. Since September 2001, when the PIO2-CRS component was set up, until the period under review, the CRS-TWG has only met 7 times. Discussions mostly evolved on the issues generated from the conduct of the community dialogues and how the CRS team could improve the succeeding dialogues by providing improved information. Despite the meetings and consultations conducted the TWG members are failing to take an interest in the process. Some of the members are "incentive-driven", motivated only with the prospect that an honoraria is given for their membership in the Group.

167. The other method used by the CRS unit is Area Based Community Dialogue (ABCD) which was first conceptualized during the Strategic Planning Workshop on CRS for LAMP PIO2 held in Baguio City in 2002. It was first introduced during the conduct of the second field validation in BF Homes in Barangay Holy Spirit. The need was identified after the poor returns in the first field validation where it was identified that; communicating with the Barangay captain and the homeowner president is not sufficient to gather support from the community. It was also used to help develop the Information and Education Campaign (IEC) materials that have been distributed to help educate the public about LAMP and PIO2 activities. While these have been carried out the statistics do not prove them to be successful in promoting LAMP as only 153 people out of 2123 returns from Holy Spirit had attended community dialogues. Despite numerous requests from the TA the data for the rest of the Barangay was not captured and the results of the CRS campaign can only be judged on this sample.

168. With the departure of the National TA in October 2003, there was little TA support to the CRS unit. The International Social Dynamics TA was assigned to assist in Leyte and with the PMO social dynamic programs. This has been address since March 2004 with the national adviser for Gender taking an active role in guiding the unit[4]. However the lack of assistance, and the timing of the field activities when the International Land Records adviser was awaiting AusAID approval to return, lead to poor quality testing of the methods used by PHILSSA. While the performance of PhilSSA is not a TA responsibility it highlights the dependency of the prototype on TA assistance. Instead of trying new methods or testing the effectiveness of the Holy Spirit campaign by using a mixture of approaches the NGO contractor has merely copied the approach of Holy Spirit. This has robbed PIO2 of the opportunity to thoroughly test the procedures and select the most effective.

169. During the CRS activities by the NGO the CRS have played a monitoring role, reviewing the IEC material, assisting in ABCD and helping with the formation of the BAG in each of the other Barangays.

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[4] See the "Evaluation Report on PIO2 CRS/SD Procedures and Outputs from October 2003 – April 2004" report number E33.

What worked?

170. The BAG is very well accepted by the informal NGOs and HOAs, although it has a slightly biased view towards problems in informal areas. This assessment has been made by the people who have formed and serve on the Bag and needs to be substantiated to have not reached many in the community.

171. Community entry programs in informal areas.

What didn't work?

172. Community entry programs into formal areas. Little was done to study or understand the needs of the communities within formal subdivisions and producing strategies to collect records from them.

173. On the surface the community dialogues appear to be a waste of resources with only 7% of the community going to them they are not an effective method.

174. The effectiveness of the CRS activities has not been fully evaluated. Even when statistics are available these are not used, many benefits are not tangible and have not been measured, eg increased community awareness of their rights.

What was planned but didn't happen?

175. Analysis of the results from Holy Spirit field validation on the effectiveness of the CRS program.

176. Analysis of the PHILSSA data which has yet to be delivered.

G. Evaluation of Methods

177. The PIO2 M& E team have been holding a series of workshops with the staff from each of the units to evaluate the methods trialled. These workshops have been followed up by interviews with team leaders and staff from the units.

Cadastral Index Mapping

178. Cadastral Index Mapping is defined in Activities 3.1.2 and 3.1.4 in the project Log frame which states:

Activity 3.1.2: Collect and collate all existing land records from different agencies and identify inconsistencies and anomalies, and develop a database for the purpose

Activity 3.1.4: Develop a comprehensive set of cadastral index maps for the prototype area, evaluating various procedures (including the use of orthophoto).

179. The CIM activities have been continuing without any main TA support. The International Mapping and Survey adviser was not mobilized during the first two quarters of 2003. Assistance has been through the Land Title Records Adviser and the Orthophoto Adviser up until May 2004[5]. As a result the main operations have been to complete the production of the CIMs for the prototype area rather than to test any new further methods

[5] See the "CIM and Mapping Functional Analysis Results" for more details.

Table 3: Evaluation of CIM activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
Plan retrieval				
Retrieval of Survey Plans	• The paying of bills on survey plans for LRA to fast track the retrieving	• Only one retriever from DENR-NCR retrieves plans for PIO2 • Project is forced to pay for copies from the partner agencies	• Survey plans from DENR are hard to locate thus, slowing the retrieval process.	In future the payment situation needs to be sorted out in project design. If the agencies are partners the copies should be supplied to the project without charge as the TCTs are.
Plan database				
Encoding of Plans	• Existence of the database • The cross index has had the plan database incorporated into it. • Enquiries developed to find LRA and DENR plans	• During capture the absence of link between the database of Office Validation and CIM • During capture unable to detect LRA/DENR plans	• Unclear entries in the survey plans retrieved (reported missing or no record available).	Development of a single database structure that suits both PIO1 and PIO2. Coding of plans from DENR and LRA to distinguish each.
CIM Production				
Hand Drawn CIMs	• No need for any expensive computer equipment or digitising board. • Only drafting skills required, do not need to know how to digitise	• Slower more expensive method • Difficulty in updating, many times the whole CIM has to be redrawn. • Not feasible without survey control.	• CIM are not produced correctly due to the lack of technical descriptions • No drafting tables at the beginning • Lack of manpower early in project	While this method is slower it does not rely on any complex technology. If the overall aim is to develop a GIS these CIMs could be used for digitising at a later date.
Digitising of CIMs	• Digitized CIM: venue for committing erasures are limited • Availability of plotter and CIM manual	• Wrong calibration at times • Requires control of some description; • AutoCAD works on a plane system; not a map	• Incorrect technical descriptions on plans. • Low memory of the computer. • Lack of manpower early	Fast cheaper method but with a large initial outlay. The data is ready to be placed in a GIS and linked to the textual data. Recommended for areas nearly

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
		projection • Highly qualified operators	in project	fully titled.
Final CIM	• CIMs produced with only the UPI linked to the cross index are less cluttered and can be used in the OSS.	• QA process is under cloud, CIM still have some duplicated UPIs.	• Only two staff carry out the function	The product must be continually reviewed and updated once released to the OSS.
QA	• The presence of a standard. • Familiarity with the survey plans • Development of a colour coding scheme in the correction of CIM	• Some survey plans are missing or lost • Lack of storage facility • Extensive filling out of the survey sheets • M&E Tools not used to ensure quality	• No survey plans to counter check the CIM developed	Quality Assurance needs to be tightened up; there is no reason a plan leaving QA should have duplicated UPI numbers when the numbers are crossed off on a list. Training in QA standards and use of tools may be required to improve the quality.

Cadastral Index Mapping Lessons Learnt

- On access to ROD QC records, LAMP is merely spending resources to duplicate what LTCP has accomplished. As at the date of this report, no LTCP data was provided to LAMP. LAMP has accessed ROD QC data itself from 5 Barangays.
- For missing survey plans after all available options have been exhausted to locate the survey plan, the technical description available in the title and in the respective agencies can be used to fill the gaps in the CIM.
- DENR and LRA have different methods of storage. It is essential that methods for land records storage pointed out in the National Land Records Management Strategy be utilized for retrieving the plans.
- The projection maps from LRA and DENR and the Assessor's tax map are useful as alternative sources for the identification of survey plans.
- In the case of PIO2 the use of the hybrid method (digitizing and hand drawn) in the preliminary CIM avoids errors such as misalignment of two CIM.
- The use of QA in the production of CIM limited the errors experienced in CIM production.
- A synchronization plan for all the PIO2 activity output should be maintained.
- Duplication of CIM/UPI numbers causes major problems for the other operational units and hampers the conversion of data into the GIS.
- Photocopying survey plans (eg for scaling) distorts the real projection and should not be undertaken.
- Proper adherence to the CIM manual minimizes confusion and ensures proper understanding of the method and procedures in CIM production.
- Training such as in Advance cartography and GIS has improved the capability of staff in CIM production.
- Without a system of monitoring the versions of a CIM it is difficult to determine who has a copy, whether it is the latest version, or which copies need to be updated. All final CIM need to become controlled documents under a quality system of CIM updating.

Cadastral Index Mapping Recommendations

180. The following are the recommendations for the PA LAMP;

- The list of survey plans required should be prepared as quickly as possible.
- The funds required for survey plan retrieval be made available and accessed quickly when needed.
- LARES records and updates would allow speedier retrieval of survey plans.
- The use of projection maps for the creation of CIM should be used where available.

181. The following are the recommendations for the LAM Program:

- Considering the limited capacity of NAMRIA and the failure to adhere to contractual deadlines, it should be considered that for the LAM Program, international tenders be obtained for both the GPS and orthophoto map production. However it is not viable to use orthophotos in the Urban area and it has been recommended that lower cost aerial photos would be sufficient as a background showing the informal situation.
- The way in which the metes and bound are presented in any document and in survey plans should be changed to the international convention of reading bearings from North in a clockwise direction, i.e. 265°35' not N85 35E. This is a left over from the period early last century where some horizontal circles in the instrument (transits) were by quadrant.
- CIM should be produced using the semi-digitised methods and using GPS control.
- Quality Assurance of CIM needs to be a high priority, the project is trying to improve the quality of land records and needs to ensure that it is not producing a sub standard product.

Office Validation

182. Office Validation is defined in Activity 3.1.2 in the project Log frame which states:

Activity 3.1.2: Collect and collate all existing land records from different agencies and identify inconsistencies and anomalies, develop a database for the purpose.

183. There are three main activities carried out in the process by the Titles Validation and Reconstitution Unit (TRVU). These activities are:

- Retrieval of TCT's from the ROD, and lists of TCTs from the Assessor's records.
- Capture of the TCT record in the database and comparison to the record held by the Assessor's.
- Linking of the CIM parcel to the Cross Index.

Table 4: Evaluation of Office Validation activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
Cross Index				
Use of Excel spreadsheet for the cross Index	• Ease of setup no knowledge of databases required. • Rows and Columns are similar to those held in databases	• Fields that can contain multiple records • Cannot set up data entry formats • Difficult to develop reports from • Difficult to analyse the data.	• There was a lack of equipment available for office validation. There is only one computer between four operators, no printers and only one scanner, shared with field validation	Excel is not an effective tool for holding data that requires quick access, reporting, analysis etc. However the structure is excellent for creating transfer files from one system to another, as in sending data from the assessor's database to the cross index.
Use of the Access database for the cross index	• Can use separate linked tables for fields that can contain multiple records • Easy to set up data entry formats, create reports and analyse the data. • Can hold large amounts of related data which can be easily linked. • Users can be quickly trained to use the forms and become productive. • Inexpensive comes packaged with	• Requires a programmer /analyst to develop the database and the forms/ reports. • Lack of a clear documented backup and roll back strategy. • Lack of proper virus protection software.	• Size of the database Access becomes unwieldy when it holds over 1 million records. • PIO2 budget did not allow for the purchase of expensive database software.	For the size of the area Access is more than capable of holding the data required. If moving to a fully integrated national system a larger application may be considered, but for small stand alone OSS this is more than adequate.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
	Microsoft office professional.			
Retrieval of TCTs from the ROD				
Retrieval from the lists (no sorting except in TCT order)	• Lists were quick to produce	• Wrong TCT numbers on LGU records for TCTs with dates shown before the registry was burnt due to renumbering by ROD. • Large waste of effort by retrievers and OV staff.	• PIO2 assumed that the registry continued numbering titles not gone back to TCT no. 1.	If this method is used again TCTs would be sorted into categories before and after the fire.
Sorting of lists into categories, i.e registered before the fire, registered after the fire.	• OV staff do not have to go through the TCTs in the lists created from a registration date after the fire, to determine if the TCT is relevant or not. • Lists for TCTs registered after the fire only require the TCT to be retrieved • TCTs on lists before the fire, or with no registration	• Without proper training the method is no different to the previous method for TCTs registered before the fire or with no registration date. • Requires a programmer /analyst to develop the separate lists. • Lack of supplies, such as toner for photocopiers that slow down the	• Assessor's records do not have 100% coverage of the prototype area and are reliant on the owner update the tax records after a sale.	To get the full benefits of this approach staff must be trained to locate the correct record instead of just retrieving what is on the list. An entire registry should be captured rather than segments that rely on outside sources for the data (eg by Barangay). However if the methods are to be used again this is the preferred method.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
	date are checked against the land description of the TCT before being retrieved, if they do not match the TCT is not retrieved.	retrieval.		
Imaging TCT records				
Capturing images of Transfer Certificate of Titles.	• Permanent record of the TCT • Can be attached to the titles database record. • Less physical storage space required.	• Time consuming to image the TCT can take 1.5 minutes or longer using PC scanner. • Duplication of effort where LARES have already scanned the TCT • If the folder holding the Scanned images is moved or renamed (even to the same name) the hyperlink is lost. • Or if the image is added to the database as an embedded image the database file gets too large	• Scanning equipment and computer to hold the image. • Cannot remove the originals from ROD, • Lack of space at the ROD, so TCTs had to be photocopied inside the ROD then scanned from the photocopy.	This method may be required in areas where the TCT is still in paper form, ie LAMP is ahead of LARES. Otherwise the LARES images should be used and LAMP not get involved in scanning.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
		quickly.		
Office Validation Data Capture				
Capture of all records by CIM and comparing to the Assessor's records (Hybrid Method)	• CIM completed at the end of the process.	• TCTs are not retrieved in CIM order requiring the OV staff to go through three different sets of lists to locate the records. • Parcel record was not created for a parcel that did not have a TCT • Extremely slow method, 7 CIMs took three months. • Complex inventory of what has and has not been captured from a list.	• Initially lack of equipment, for a team of 5 only 3-4 could use the equipment at any time.	This is not a method that will produce the results at a rate that would be able to keep pace with CIM production or FV.
Capture of TCTs, comparing to the assessor's records. Then when all TCTs for a Barangay are captured, records linked to	• Faster method, cost per title cheaper. • All TCTs are captured for a retrieval list so inventory is easier • When attaching CIM/UPI number	• Parcel record was not created for a parcel that did not have a TCT • Double handling of records 1st time to create the parcel then later to add the	• Initially lack of equipment, for a team of 5 only 3-4 could use the equipment at any time.	The preferred method; easy to administer and allows flexibility. TCTs can be captured as they are retrieved. Once all TCTs are captured linking to the CIM is a quick process.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
the CIM are systematic.	no lists have to be searched through TCT's are already captured, so benefit of time	CIM/UPI number		
Capture of cancelled TCTs				
Where a TCT has been cancelled the cancelled TCT is also retrieved and copied; at data entry these have been captured.	• Historical trail built up in the Cross index.	• Waste of time and resources that could be finishing records needed for field validation. • The index only needs current information (and is only duplicating what LARES holds for historical data.)	• Not a requirement of the project to capture and store this historical data.	The cross index has the capability to provide this information if the retrievers are trained to enter the data. This is quicker and much more cost effective as the report can be run from the database.
Inventory of titles				
Manual inventory of the TCTs that have been delivered compared to the TCTs requested	• Unit knows which TCTs have to be re-requested. • Work on hand for data entry operators is known.	• Time consuming uses up one resources time. • Difficulties in determining what TCTs had not been captured or pulled • Results are not validated.	• Lack of staff to carry out inventory.	The cross index has the capability to provide this information if the retrievers are trained to enter the data. This is quicker and much more cost effective as the report can be run from the database.
Storage of TCTs	• TCTs can be sent to	• TCTs were stored	• PIO2 has limited storage	Storage of TCTs against the CIM,

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
against the CIM	the LGU with the Mismatch report for a CIM to save the LGU pulling extra TCT records. • Any left over TCTs have not been allocated to a CIM	against the Barangay not the CIM. • Staff unable to follow the manual	capacity and cannot hold onto all the TCTs in the prototype area	ideally as an image is recommended. LGU available to hand-over.
Quality Assurance				
QA of the keying carried out for Parcel/TCT capture.	• Ensures the quality of the key entry. • Helps in retraining staff • Provides feed back to staff and managers on the quality of keying.	• Over used, should be carried out extensively for new staff and randomly for qualified staff. • Mistaken for being the final QA of CIM. • Costly in time and resources.	• Time consuming process.	Once an encoder becomes proficient in data entry the number of keying errors are minimal and difficult to find. This form of QA is to help the encoders become proficient and must be minimised for experienced encoders as it is very costly.
QA of the CIM once the UPIs have been added.	• Helps to ensure the quality of the product. • Ensures that duplication is eliminated.	• Requires discipline and structured approach to checking the data. • Very time consuming • Has yet to be carried out. • TCTs are not held	• Lack of procedures developed. • Reports from the system are not developed to assist the process.	The final product from the prototype needs to be of the highest possible quality. A full QA of all CIMs prior to the production of final CIM, then a final QA of the final CIM are the only way this quality can be assured. However the system resources need to be used to help minimise the amount of checking

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
		in CIM order only stored within a Barangay.		carried out.
Sex desegregation of data				
Adding Sex desegregation to the TCT records	• Facilitates gender analysis of data. • Project able to meet the gender requirements of LAMP.	• Guess estimate of sex – available info is not enough to determine sex. • Staff had to go back through the database to locate and update records. Impacting on other PIO2 activities.	• Sex fields were added after data capture was nearly completed	In the future this information can be added at the OSS with the assistance of the customers, to ensure the quality.

Office Validation Lessons Learnt

- Without access to the LARES-LTCP, LAMP is merely spending resources to duplicate what LARES has accomplished. Office Validation should only begin when a whole registry has been converted.
- A full analysis of the requirements and the structure of the database should be carried out before any data is captured. The initial database left no facility for capturing TCT data and only had a single field to indicate if the data matched the Assessor's records or had been changed by transfer. This system then relied on the Assessor's data being correct instead of the TCT being the base document.
- Microsoft Excel is not a suitable product for producing a cross index database.
- Too much time was wasted at the start in manually getting the Assessor's data correct which added no value to us. Also important fields and data that could be used in the cross index where removed from the data structure. The Assessor's data is now 7 months old and arrangements are required to get an up to date copy of it.
- The Systems Analyst should have been introduced into the project at the start, not after 6 months. Full analysis should have been carried out on the PIO1 and PIO2 data to get a uniformed data structure. However, without a full time analyst, both systems were developed independently.
- The equipment for office validation should have been properly specified, including a separate server and delivered at the start of the project. Staff cannot be expected to carry out their work without the proper equipment and training.
- Attempting to capture data on stand alone equipment then trying to consolidate the data leads to poor quality records. A proper network to a central database is the only way to ensure data integrity.
- A separate office validation manual should have been created at the start of the project, rather than making it a subsection of field validation. Once created it must be reviewed and updated regularly to keep it relevant.
- Arrangements to obtain the data from LARES were not confirmed until early 2002. Then the TCT's were inaccessible until May 2002 due to the movement of the ROD to a new building.
- Office validation requires following strict guidelines and proper management. All information captured should be independently captured and mechanisms put in place that allow monitoring of the quality of the work. Without these measures the old saying is correct "Garbage in Garbage out".
- The CIM is not a satisfactory basis for data collection if CIM production is much slower than title data collection. In this method using the CIM parcel number as the primary key to hold information against was not practical because it held up data entry of the title data. Also once the CIMs are adjusted the CIM numbers for many parcels will change. If the CIM number is to be used as the primary key, then Office Validation should not occur until the CIMs have been completed. However in a situation where other agencies hold land data on their systems it is too difficult to use the CIM number as a link to those systems. A second key based on the land description (lot, block, plan) is the most effective method as all systems hold the

land description. This key we called the SPI and allows record capture and cross comparison to be done. The benefits CIM & OV can run in parallel ahead of CIM completion.

- Once the office validation network is setup it cannot be easily relocated. Any movement of staff and equipment must be made with the consultation of the systems people so that it can be moved without causing disruptions to the network and stopping the office validation.
- The two step method, ie data capture of all the TCTs for a Barangay then attaching the records to the UPI, is far more efficient than the Hybrid method, ie trying to find all the records for a single CIM amongst multiple TCT retrieval lists then capturing the whole record (TCT, UPI and comparison) in one step.
- When the Assessor's send updates it is important that they only send the updates since the last set of records were delivered. Updating large data files with data that is already held in them causes many problems and uses too many resources.

Office Validation Recommendations

184. The following are the recommendations for the PA LAMP;

- Since the prototype office does not have the storage capacity to hold a copy of the registry, Photocopies of TCTs should be stored with a CIM and when the mismatch report is presented to the LGU they should be sent with it.
- A system is required to monitor completed CIMs and to identify when one is being updated in the office validation unit.
- The updating of Assessor's records into the cross index needs to be investigated. The process needs to be documented and reviewed to determine if it is causing problems with records that have been manually linked.

185. The following are the recommendations for the PA LAMP;

- Databases were developed without a national strategy being considered and rework will be required in the future. A proper data management system will be required for a more extensive development. The equipment and the structures will need to be fully specified, as well as more work being carried out on transaction rates, file sizes, etc. to determine the database capacity required.
- In an urban context the UPI is limited as a key to combine records from other agencies. For the UPI to work as the key for the database systems, CIMs must be fully completed before Office Validation begins. Also, the entire registry should have been captured to facilitate the comparison of records between agencies. However this does not resolve the problem of the UPI not being known and maintained in other databases that the cross index links to. PIO2 have used a separate field combining the Lot/Block and Plan number as these fields are held in all systems and are easily combined to get a match between records. A satisfactory link must be agreed upon for a national system that can be used by all database systems.
- A separate strategy need to be looked at for areas were the Assessor's/Treasurer's data is not data converted to computer format. In the national LRM strategy the decision has to be made whether an Office Validation is required for areas where the ROD records have not been lost.

- Proper linkages to other systems are required with a system that updates the Cross index with the latest information from the agencies, this can form part of the duties of staff from the various agencies working within the OSS. Such a cross index maintained up to date at the OSS would ensure data across agencies is consistent.
- Capture of TCTs must be carried out in each Registry in a systematic manner and if the data is to be used by BOO and LAMP then a sharing arrangement must be in place. TCTs must only be captured once and the updates transmitted to the appropriate system(s).

Field Validation

186. Field Validation is defined in Activity 3.1.5 in the project Log frame which states:

Activity 3.1.5: Develop and test procedures for field verification of land records.

187. There were three pilot studies carried out in the process by the Titles Validation and Reconstitution Unit (TRVU). These pilots were used to develop the methodology used for the full scale field validation. These procedures were tested in the field validation for Holy Spirit and have been used by the NGO in the field validation of the remaining 4 Barangays

Table 5: Evaluation of Field Validation activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
Pilot Field Validation Activities				
Field Validation Pilot Activity 1 Base Station Method – Established subdivision. The activity involved establishing a base station	• Easy to arrange. • Only 4 staff required full time plus one or 2 support with supplies. • Low overhead costs	• Very low rate of return for time spent. • Reason why low number could only be speculated no real evidence. • Unproductive, staff spent large amount of time sitting around doing nothing.	• Carried out between 9am and 4:30pm when most people were at work. • Office Validation was not carried out prior to the field validation.	It is recommended that this method not be used as a stand alone method. Too much time is wasted with staff sitting around waiting for property owners and the rate of return is far too low.
Field Validation Pilot Activity 2 Door to Door Method – Established Subdivision. A base station was still provided with this method, however the base station contained only one or at the most two people. The rest of the field enumerators went door to door gathering information	• All properties are covered. • Able to collect survey results to determine why people did not participate in first activity. • Improves public relations and allows information dissemination. • People who want to drop off results don't have to wait for field enumerators to return, they can drop them at the base station.	• Reliant on person living there being the owner. • Still do not get 100% responses and have only 50% of properties validated against known records. • Time wasted going to properties that would have been office validated because OV was not done first.	• Only a three day activity did not allow for following up on information. • Lack of support staff for enumerators and as a result much needed feedback could not be supplied. • Office Validation was not carried out prior to the field validation.	This method is far more effective but should only be used on properties that have not been office validated.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendation
Field Validation Pilot Activity 3 Door to Door Method – Informally settled area. A base station was still provided with this method, however the base station contained only one or at the most two people. The rest of the field enumerators went door to door gathering information	• Improves public relations and allows information dissemination. • People who want to drop off results don't have to wait for field enumerators to return, they can drop them at the base station.	• Very low return for the number of properties visited • High cost of visiting every property. • More an extended CRS program than a useful tool for gathering the required land records.	• Only a three day activity did not allow for following up on information. • Lack of support staff for enumerators and as a result much needed feedback could not be supplied	Should only be used on properties that have not been office validated and where multiple dwellings are on a property only the first one should be visited
Field Validation of Records				
PIO2 organising the Field validation of individual barangays. Having established a BAG and carried out the majority of OV and CIM preparation.	• Training program followed as specified. • Able to assist with enquiries. • Staff only paid for work carried out. • No complex contract to negotiate.	• Need to keep a management team in the field. • Need to supply support equipment to the field. • Still not a complete trial as the OV and CIM were not all completed.	• Ability of PIO2 to get the funding approved and to be able to pay the enumerators. • Insufficient support staff to monitor all operations and to analyse the results.	Success rate will need to be measured against the NGO run project to determine the cost effective method.
An NGO being employed to carry out the field validation of multiple barangays. **(This activity is yet to be fully evaluated)**	• Support equipment supplied by the NGO, eg computers.	• Support staff from PIO2 is the same size as it is for PIO2 running the operation.	• Availability of PIO2 staff to help manage the process	

Field Validation Lessons Learnt

188. Pilot Field validation activity 1 – Voluntary approach.

- Field Validation cannot be carried out without a CIM record to as the data collected in the field does not have a spatial reference to relate it to.
- The setting up of a base station where people come to deliver their documents does not work. With only 99 respondents from 800 parcels, the voluntary approach of field validation results in a very low response rate.
- Five people sitting in a base station waiting for respondents is a waste of time, productivity and money.
- Parcels that do not have buildings on them need to be identified as part of, or prior to the field validation activity. With no letterbox or occupant it is nearly impossible to notify of the owner of the activity.
- Safety of the staff should be paramount. The injury to the staff member that occurred as part of the motorcade should have been prevented by following basic safety procedures and ensuring that all staff had been on board before the vehicle began moving. Also, the drivers should take off slowly and smoothly not quickly accelerating.
- The selection of time to conduct field validation in established areas should be identified appropriately. Weekdays generated a small number of respondents since majority are at work.
- Other means of informing the public should be utilized through homeowners association meetings, or church announcements through the parish priest since the CRS campaigns cannot be relied upon solely to inform everyone in the area.
- The "selling" of the project to stakeholders from established subdivision should be identified and developed to generate more public support and participation in the activity.
- Conducting field validation without office validation is more tedious and time consuming which should have not been the case. The very purpose of conducting pilot field validation is to identify and implement a more streamlined process rather than a tedious one.
- The manual for conducting field validation should have been read and reviewed before conducting the pilot field validation.
- A document should have been prepared prior the conduct of the pilot field validation, highlighting the objectives of the activity and expected outputs.

189. Pilot Field validation activity 2 – Door to Door approach in Established Subdivision.

- The door-to-door approach proved to be more time-efficient and more productive. The questionnaires allowed the prototype to gain an appreciation of the reasons why information cannot be gathered from all sources.
- The three days allocated to this activity did not allow sufficient time for any follow up activities making it difficult to determine if the rate of response should have been higher.

- Communication between the base station, enumerators and drivers are required for field validation. Time was lost waiting for people who were late, people waiting in the wrong place, people who had gone on ahead and not told the others, and people who were still in the field when the others had finished, but could not be located as they were within occupancies. Also they would be able to request assistance rather than having to walk back to the base station, get the assistance, then go back to the property.
- Where an area has had some activity carried out and further field validation activities are being carried out the letter drop should not include any property that is not to be included. This caused a lot of confusion in the field validation pilot area when the second field validation was carried out. People who had responded to the first field validation returned with their documents even though they were not required and they were confused as to why they needed to present their documents.
- The results should be documented each night or early the next day to identify any problems with the collected information. Many of the enumerators had not filled in the CRS survey, but this was not picked up until the activity was finished. Earlier analysis of the results would have identified this problem earlier and the importance of the activity could be re-enforced to the enumerators.
- Collection forms were not properly proof read before printing and they contained two questions with the same wording. Also the field validation jackets were printed with a spelling mistake. Careful proof reading is required before any printing or acceptance of materials.
- Security arrangements need to be finalised well in advance of any activities. Any payments required should have been negotiated and agreed to long before hand, not charges added at the last minute and nearly stopping the activity. Also the times and days that security teams are to be ready should also be known, rather than having the enumerators hanging around waiting for the security people to arrive.
- Bottled water should be provided for the enumerators as part of their kit and should be catered for in the budget. The enumerators cover large distances in the hot sun and water replacement is very important.
- The process should have been documented thoroughly. All results should have been analysed as collected to allow for modifications of the process that would have increased the efficiency of the results.
- An analysis design/framework should have been developed to streamline the analysis and interpretation of results.

190. Pilot Field Validation 3 -Door to Door Approach in Informal Areas

- The manual should have been updated and reviewed by the field validation team before the conduct of the third pilot of field validation.
- The gathering of issues during the Area Specific Community Dialogue conducted by the Community Relations and Services (CRS) unit equipped the field validation team with knowledge on prevailing land related issues in the

area. Therefore, the gathering of basic knowledge on land related issues present in the area is vital in facilitating field validation.

- Field Validation is a means to directly communicate with the stakeholders of the project. This activity is a venue to inform and create an amicable relationship with the stakeholders.
- A specific criterion for the selection of field enumerators was established that enables a better facilitation for data gathering. The field enumerators in the third pilot were residents of the area making them more adept in communicating with the residents of Villar-Maloles particularly the land related issues present in the area.
- Different approaches should be implemented in different areas within the prototype; specifically in established areas and informal settlements. The approach should include a means to capture information on "rights" particularly in informal settlements; and a different design for data analysis.
- The conduct of an assembly between the field validation team and residents as well as homeowners' organizations assisted in the acceptance of and participation in field validation activities in the area.
- A brief brochure highlighting PIO2's activities particularly Field Validation and objectives should be distributed during the actual conduct of Field Validation. The brochure should contain illustrations to gain the attention the respondent and encourage them to read the material.
- A strategy to identify parcel boundaries needs to be developed and integrated in the training design of field enumerators.
- The presence of too many foreigners during the conduct of field validation alarmed residents from the field validation area. The following concern was raised: the Villar Maloles area is being sold to the foreigners which would lead to a demolition would be conducted.
- Conducting a three day field validation is insufficient to cover the whole area.
- Proper identification of field enumerators should be provided. These include identification cards, t-shirts, vests, and caps.
- More equipment is required in the field. The single TA laptop only has a three hour battery life and needs to be supplemented with a second battery pack and a car charger. The printer needs to be looked at and a model purchased that works from a battery pack. At least one more laptop is needed, this was identified in the PIO2 budget, to support the operations.
- The results need to be analysed quicker and more PIO2 staff support are required in the field to assist in the capture of the data.

191. Field Validation Holy Spirit

- Management of the data analysis step was weak. Information was only captured for parcels which yielded a TCT or tax declaration. Without details of why no information could be gathered strategies for the next step are difficult to formulate.

- All parcels on survey records need to be captured in the cross index to then allow the field validation data and documents to be tied to the parcel record.

192. Field Validation with a partner NGO.

- Working with a partner NGO still requires a monitoring and assistance role from the prototype. The NGO does not have a strong background in the project objectives and the prototype management must ensure that they follow the requirements of the project.
- Enumerators from informal areas will not be accepted as data collectors in formal subdivisions.
- The BAG formed in informal subdivisions does not have the expertise to devise strategies and collect data from formal subdivisions.

Field Validation Recommendations

193. The following are the recommendations for the PA LAMP

- A standard training program should be designed for all field enumerators working in the prototype. This training should include highlighting the LAM project-its activities and objectives; basic public relations skills that provides different approaches in dealing with respondents from different socio-economic classes; relevant information on laws/policies related to land; and conflict resolution.
- Other methods need to be tested to try and locate the owners of parcels that do not have any TCT records located in the ROD.

194. The following are the recommendations for the LAM Program;

- Field validation will not be required in all areas, only where the records have been lost or destroyed and/or there is a high incidence of informal settlement.
- Adequate funding must be available for the activity and the funding must be easy to access.
- A separate approach has been established for subdivisions and informal areas. The informal areas will incorporate a CRS information program that helps the residents understand how they can access the ownership records for the land they are residing on. In the established areas the information to be gathered will focus on establishing ownership and assisting those owners who need to reconstitute their titles. These procedures need to be tested by analysing the results from the NGO and then it can be determined if they are sufficient for the long term program.
- Alternate government strategies will be required for properties where owners have abandoned their rights and no longer pay land tax or had their titles reconstituted.

One Stop Shop

195. The One Stop Shop is defined in Activity 3.2.2, 3.2.3and 3.2.4 in the project Log frame which states:

> **Activity 3.2.2:** Establish a multi-agency TWG to oversee the planning and implementation for a OSS, and to coordinate between agencies.
> **Activity 3.2.3:** Develop the OSS model and its mode of operation, and formulate a workplan for its establishment, with associated agency roles and responsibilities.
> **Activity 3.2.4:** Develop and document systems and procedures for the initial OSS operation.

196. While all of these activities have taken place and the OSS building renovations have been completed the equipment to support the OSS activities is still yet to be supplied

Table 6: Evaluation of One Stop Shop activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendations
Partner Agencies Support				
monthly meetings with TWG meetings workshops meetings with department heads Study Tour	• The agencies are able to provide inputs into the development of the OSS operations. • Meetings with agency heads allows the prototype to gain strong support at the agency head level • The study tour allowed exposure to working examples and to talk with people involved in setting up the process.	• Some TWG members did not have the authority to make decisions. • Some TWG representatives could not provide adequate feedback to their department heads • inadequate meetings with agencies/ conflict of schedules	• Some TWG members were not sure of the level of decision making they were authorized for. • Unavailability of agency heads (schedule conflicts	The project needs to ensure that the feedback to managers is carried through.
Administrative Support (finance procurement)				
OSS construction procurement of equipment Hiring of staff	• None	• Delayed approval of the reprogrammed budget. • Problems in getting the plan prepared by LRA. Weak compliance with procurement requirements	• dependency on the PMO to provide the support for the approval process. • Lack of knowledge of the procurement process. • lack of procurement officer • Frequent changes in PIO2 management	There should be a specialized unit that can handle all procurement for the project.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendations
OSS Systems development				
Training of Staff Manual Development Simulation workshops Database (cross index) networking	• Strong inputs from the TWG and OSS staff. • Parallel streamlining efforts from the partner agencies. • Enthusiasm and strong interest of the OSS staff • Conduct of the simulation workshops to pre test the OSS operations	• Lack of mechanism to share information with the BOO project.	• Possible conflict with the LARES project.	The involvement of staff that will operate the OSS will ensure that they take ownership of the processes and assist in its successful operations.
OSS Sustainability				
To promote the sustainability with the agencies concerned and have them take over its operations when PIO2 ceases to exist.	• Agencies have already agreed to work in OSS providing a better customer service. • LGU have already promised to commit 1.5 million pesos to the OSS	• OSS started April 2004. • PIO2 have not put together a financial plan for sustaining the OSS as they haven't been able to base it on actual costs incurred.	• Capacity of the agencies to run the OSS without an independent managing group.	Development of a financial and operational plan to sustain the OSS. Lobbying of agencies to staff and fund long term OSS operations.

OSS Lessons Learnt

- Securing of the site for the OSS needs to be one of the first activities carried out. Once this is secured any plans and building works need to be followed up as these activities take the longest period of time to complete.
- Lack of understanding on procurement and administrative requirements delayed the construction of OSS.
- It is essential that a MOA should be signed by all the participating agencies which shall highlight the specific roles of each agency in the OSS.
- Seeing the benefit of OSS-TWG workshop in getting the full attention and cooperation of the members, future discussions on critical/important aspects of OSS development should be undertaken in a workshop environment.
- The OSS development demands full focus from the DPM person assigned to the task. Interventions on concerns of administrative and other components (CIM and OV-FV) have undermined his effectiveness on the assigned task.
- More emphasis should be placed on assigning additional staff to work on OSS improved coordination and documentation of meetings.
- The equipment requirements for the OSS must be worked out and the request included in the budget as early as possible.
- Development of OSS computer linkage with other agencies should take into consideration expenses other than the computers (ie. software, leased line, network connections, etc.).
- A smooth interfacing of the PIO2 database and its use in the OSS which will be linked to other existing systems of other agencies, should be carefully considered as this will likely form part of proposal for national strategy.
- Need to open lines of communication between the technical and decision-making people.

One Stop Shop recommendations

197. The following are the recommendations for the PA LAMP;

    - The OSS must be made fully operational as soon as the staff can be detailed.
    - All efforts must be exerted to get the equipment required for the OSS and to fund the CRS campaign for its opening
    - Sustainability plan needs to be developed to sell the project to the agencies and get their commitment to keeping the OSS operational.

198. The following are the recommendations for the LAM Program;

    - The management of any future OSS needs to be reviewed and a decision made as to whether it will be independently managed or managed by one of the agencies.
    - Rural and Urban OSS deal with different agencies and have unique problems relating to their areas. The National strategy will need to take these factors into account.

- The involvement of staff that will operate the OSS will ensure that they take ownership of the processes and assist in its successful operations.
- There should be a specialized unit that can handle all procurement for the needs of the one stop shops and also organises the building and relocation processes.

Fake Title Investigation

199. Fake Title Investigation is defined in Activity 3.1.1 in the project Log frame which states:

> **Activity 3.1.1:** Evaluate existing procedures to detect fake, duplicate and missing titles, records or plans and to resolve anomalies.

200. This was expanded to forming a TWG that would look at adopting a national strategy that would bring together the activities of the agencies involved and form a united approach.

Table 7: Evaluation of Fake Title Investigation activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendations
Review of Past Activities	• Each agency has developed their own procedures and is aware of the problems.	• Lack of a unified plan between agencies. • Separate systems used cause duplication of effort. • Criminals are only warned by some agencies (including the ROD) rather than a police investigation being carried out.	• Multiple attempts have been made to develop an affective set of requirements and have failed.	The review has to be signed off by the TWG and distributed as directions for staff in the agencies.
Technical Working Group established under PIO2 guidance	• Now headed by Deputy Administrator Feliciano giving it strong representation from LRA the lead agency • Willingness of the members to get a result. • Draft manuals completed on detection of F & S Titles	• Size of the TWG difficult to get decisions made with so many diverse interests.	• Availability of members to meet more than once a month. • Started in July 2002	The TWG must make the necessary arrangements to form a national strategy and continue the work after PIO2 has finished its operations.
Development of a database of fake and spurious TCTs	• The agencies can view examples and known producers of fake documents. • Central depository that can be accessed by all.	• Finding an agency to take control of the process.	• Where to hold the database and how to issue copies to all concerned agencies if PIO2 is to cease operations	LRA as the lead agency and the head of the RODs needs to be the agency which controls the data and distributes it.

Fake Title Investigation Lessons Learnt

- Fake title investigation cannot be affective if it does not have a GOP counterpart. If the TAs investigate the procedures and learn the issues, constraints and requirements, this knowledge is lost when they leave at the end of the project, with no benefit to the GOP.
- There are many types of fake and spurious titles/rights held in the community.
- There is not a clear strategic action plan for the passing of information of fake records and attempts to register fake records in the Philippines.

Fake Title Investigation Recommendations

201. The following are the recommendations for the PA LAMP;
    - PIO2 assist the TWG in developing a sustainability program.
    - Development of the database to hold examples of fake and spurious titles.
    - Development of the manuals to guide the agencies common approach to fake and spurious titles.
    - Training programs developed and run in agencies, banks and other affected organisations.
202. The following are the recommendations for the LAM Program;
    - A national strategy be developed and adopted by the agencies involved in the TWG.
    - LAMP phase 11 look at funding the operations of the TWG and the long term program to eliminate fake and spurious titles.
    - Continuation of the training program developed in Phase 1.

Community Relations Services

203. Community Relations Services (CRS) is defined in Activity 3.3 in the project Log frame which states:

    Activity 3.3: Community consultation, customer relations and services strategies developed and tested to support Outputs 3.1 and 3.2, and the longer-term LAM Program.

204. CRS has been involved in all field activities since the first Pilot study and has introduced innovations including the Barangay Advocacy Group (BAG), Area Based Community Dialogues (ABCD) and Community Organised –Community Dialogues (CO-CD)[6].

[6] For more details see report D33 "Social Dynamics in PIO2".

Table 8: Evaluation of CRS activities

Activity	Strengths	Weaknesses	Constraints	Overall Recommendations
Community Assemblies to assist in introducing Global Positioning System (GPS) stations into the community	• Educated public on the reasons for having the stations • Ensured that the GPS staff were not seen as part of a demolition team.	• Only a small portion of the community attend community assemblies. • Stations were still dug up and destroyed	• Fear of informal community that any government survey is there to begin demolition of their homes	The stations need to be placed in positions that are not easily destroyed or selection should be a building corner etc that is less likely to change.
Barangay Advocacy Group (BAG)	• strong LGU support • high participation in FV activities in informal settlements	• Some members are not participative. • Activities have not been evaluated for their effectiveness.	• Difficulty in convening all the members due to their number.	The activities of the BAG need to be reviewed in relation to their terms of reference and the effectiveness measured.
Area Based Community Dialogues (ABCD)	• The community members are easier to convene. • Active participation of community member at the dialogue • Effective way to collect community concerns	• Low community participation (only 7% in Holy Spirit). • No break up of attendances between formal and informal. • The value to the community has not been evaluated.	• Community members especially men are not available to attend due to their work commitments.	The figures from PHILLSA need to be analysed to determine if this method is effective. There needs to be a method devised to determine the benefits to the community, rather than assuming the dialogues are beneficial.
Community Organised – Community Dialogues (CO-CD)	• Reduction in size of BAG from 63 to a committee of 9 who report back to the others.	• The training did not cover all the required skills. • Weak support to planned activities. • Lack of well defined objectives and	• No clear financial allocation	The effectiveness of this program needs to also be evaluated if it is to be used as a strategy and funded in the long term program.

Activity	Strengths	Weaknesses	Constraints	Overall Recommendations
		outcomes.		
Development of Information and Education Campaign (IEC) materials	• Allow the project to hand out information about LAMP and the PIO2 activities. • Highest percentage of people interviewed learnt of LAMP from this method (23% Holy Spirit).	• IEC materials are not popular; not appealing to the masses. • People don't like reading and feel most brochures are junk mail.	• Low Budget for IEC materials	With all materials and approaches used a study needs to be carried out to determine the cost effectiveness.
Assisting PHILLSA in CRS activities	• PIO2 are able to monitor the process.	• Carried out in 4 Barangays at the same time, therefore impossible to ensure consistency. • Lack of permanent assistant from PIO2 • Lack of new approaches adopted or testing of the Holy Spirit approaches	• Lack of resources to assist in the activity	A thorough examination of the PHILLSA activities needs to be carried out when the details are delivered.

CRS Lessons Learnt[7]

- Although the CRS considers the BAG as highly effective and helpful to CRS activities and goals, it has difficulty in convening all the members due to its great number of members. Because of this, the CRS can not effectively disseminate the information needed by the community regarding LAMP's goals and objectives.
- The Project needs to have a clear phase in/phase out plan. The initial approach did not give any thought to an exit plan once a Barangay is completed.
- Internal coordination between and among the units of PIO2 in implementing any activity in the prototype barangay is very important to ensure the consistency of all community activities with the agreed CRS/SD framework as well as to synchronize and synergize all efforts, which are deemed to contribute to the effective field validation of land records.
- With their competence in community organizing-community development work as well as in policy advocacy work, civil society organizations have a very important role to play in LAMP. In building partnership with them, however, efforts have to be taken to avoid administrative problems from hampering the collaborative work arrangement. Measures that can be undertaken are: (a) Involving them in the convergence mechanism for community development, such as the CRS-TWG, and in inter-agency mechanism for land records improvement, such as the LAG; (b) Specify collaborative arrangement in the Contract and Project Inception Report; (c) Level off expectations at the start of Project; and (d) Establish regular mechanism for dialogue and joint problem solving. It is also important to identify and establish common grounds (i.e. common analysis of the situation and common vision) and common interests (i.e. improved land records) with them.
- Entering into and establishing partnership mechanism, such as the experience with PhilSSA, should not lead PIO2 to lose full management control of the procedures and outputs to be undertaken in its prototype barangays. Measures have to be undertaken to keep PIO2 involved in the management (i.e. planning, monitoring and evaluation) of key activities, even in areas subcontracted to NGOs.

CRS Recommendations

205. The following are the recommendations for the PA LAMP;

- A specific review of BAG, ABCD and CO-CD needs to be carried out to determine if any approach should be removed, strengthen or merged. Results from the field validation forms need to be properly analysed and the results used to determine the success of these approaches. Also more CBM&E needs to be undertaken to help gain a full understanding of the effectiveness of the CRS campaigns at the level below the BAG.
- BAG members should be engaged in more training that would increase their capacity to act as a bridge between LAMP and the community.

[7] A comprehensive set of CRS lessons and recommendations can be found in "Evaluation report on PIO2 CRS/SD procedures and outputs" report no. E33.

206. The following are the recommendations for the LAM Program;

- Depending on the level of records within the project area the type of CRS campaign needs to be determined. In areas where records are good the campaign may be restricted to providing information on the OSS and some additional education programs for informal settlements.
- Separate strategies are required for informal and formal areas. Prior to entering any area the profile of the area must be determined, and the community leaders approached for their support.

H. Benefits of the Project

Local Government Unit – Assessor's and Treasures

207. Office validation is identifying gaps in the records held in the assessor's database. Part of the office validation process is to compare the records and produce a miss match report between the LGU data and the TCT that will give the assessor's the ability to investigate the discrepancy and update their records.

Table 9: Benefits and Impacts LGU

Benefit	Impact
Cross Index Where properties have been transferred or subdivided/consolidated and the owner has not informed the LGU the assessor's will be able to access the latest information and determine if they need to take further action. While the project is identifying these gaps it is also aware that the assessor's probably have a large unconverted file, given that 38% of parcels in the prototype area do not appear in the assessor's database records, these are now identified and the assessor's can use the information provided to accelerate any further conversion	Improvement in the records held by the LGU. While the current legislation requires the public to provide information to the Assessor's they can at least know which properties need to be updated and contact owners to encourage them to come in and update the records
Cadastral Index Map The Assessor's already possess a tax map; however this is a manual map that is not always up to date. Also it is not in the national standard and has not adopted PRS92. Also because the CIM is already digitised the LGU will be able to develop their own layer of data and eliminate the need to keep a paper based mapping system.	Improved access to accurate data. The CIM/GIS will display all registered parcels within the prototype area, including new subdivisions that have not been presented to the LGU. When implemented the GIS is quicker and easier to update and will contain the new plan information once the TCTs are issued which is much faster than the current method.
The prototype will be making available the Cadastral Index Maps and Cross Index for the agency staff to use within the OSS	The LGU staff can locate properties on the CIM and using the orthophoto as a back drop can make an assessment on whether any improvements have been made to the

Benefit	Impact
	property (based on their last assessment record).[8]
CRS The LGU Treasures will also benefit from the efforts of the prototype in finding records and educating the public.	Increased revenue base, as more people understand the process and can negotiate the purchase of the land they live on there will be increased revenues as sales now leave the informal market.
Field Validation Location of parcels/plans within the prototype area that are still held in the Municipal offices of San Mateo and the Rizal Registry of Deeds not in Quezon City.	Increase in revenue base. These properties are paying land tax to San Mateo not Quezon City. The LRA can move the TCTs from Rizal ROD to QC ROD and Quezon City can take over the management of their facilities.
One Stop Shop Working together with the BIR in the OSS the LGU staff can compare the BIR assessed value for a property as opposed to their assessment	Assessed values can be more consistent between the agencies and in the short term the BIR and Assessor's will be able to carryout assessments together, prior to the introduction of the Nation Appraisal Authority (NAA).
GIS Through the project LGU staff are exposed to new technology, including GIS, scanning and digitising.	The LGU will improve the skills base of their staff without having to outlay large sums of money to send them on courses.

[8] The Orthophotos are 2 years old and can only be used as a guide, for example if a customer claims no improvement yet there is a building on the property which was not there when the last assessment was made. In all cases a field inspection should still be carried out. In the future it could be more efficient and cheaper to use aerial photos.

Registry of Deeds

208. Many of the benefits to the ROD have been already identified in the reports by the NLMS and the report from the International Land Law Adviser. These reports offer short and long term solutions to the operations of the RODs and the storage and maintenance of records.

Table 10: Benefits and Impact ROD

Benefit	Impact
Cadastral index Maps For the first time the ROD staff can use the CIM to see the spatial representation of the TCTs. This assists in identifying gaps and overlaps in the records, especially where documents have been tampered with. In this way the CIM, together with the cross index will provide an effective method for detecting fake and spurious titles. It will allow the ROD staff to quickly identify the authenticity of records while providing links to other necessary data form the assessor's records.	Reduction in the registration of Fake Spurious and overlapping titles. The Registrar of Deeds can present accurate information to the courts to prevent them from awarding decisions that would compromise the integrity of the registry.
Cross Index The CIM and the cross index will fill in the gaps that will appear in the records captured in the LTCP. As the records captured by the LTCP are only from TCTs, the project can display the Assessor's information where a TCT is not available and the parcel(s) will be shown on the CIM.	Improve the accuracy and completeness of the Registry. LAMP is working towards improving the land records within the prototype area, while improving public confidence in the system.
Scanning of Plans As the prototype is scanning plans, these plans will be available to the ROD staff to validate the technical description on the TCT.	In time the ROD will be able to dispense with Technical descriptions and make the plan part of any TCT search, as it will be linked via the land description on the TCT.
Field Validation Location of TCTs within the prototype area that are still held in the Rizal Registry of Deeds not the Quezon City ROD.	Improved accuracy of records. These problems are not identified by the ROD as it is a deeds registry and does not have a cadastral map.
The project will also be going into the field	The project will add to records held in the

Benefit	Impact
to locate the owners of the properties to assist them in reconstituting their TCTs.	registry by promoting reconstitution.
CRS Education of Public on the correct identification of owners and the relationship between the land parcels and the Registry of Deeds. Providing the community with invaluable information on how the process works and what their rights are.	The public are less prone to being prayed on by syndicated as they can investigate the true owners of the land at the ROD.
One Stop Shop ROD can advise the public at the start of the process on the full requirements for lodging documents. The ROD staff on the front desk can check that the requirements are met before accepting the dealing, rather than waiting for the other agencies to finish their processing.	A single entry point where the ROD is not continuously advising on the process that usually begins at the LGU Assessor's. Customers are not returning to find out that they still have other requirements to fulfill before they can lodge.

Bureau of Internal Revenue

209. BIR was one of the first organisations to look at their internal operations to see what changes could be made to streamline them for the OSS. They received an immediate benefit from this change as they were able to create flexible smaller teams that could be rotated throughout BIR. While the project cannot take full responsibility for causing the change it was one of the driving factors that helped in the decision to carry out this reorganisation. The table below sets out the benefits BIR will be able to enjoy from the OSS operations.

Table 11: Benefits and Impact BIR

Benefit	Impact
Cadastral index Maps The prototype will be making available the Cadastral Index Maps and Cross Index for the agency staff to use within the OSS.	Availability of tools to assist in the assessment process. The BIR staff can locate properties on the CIM and using the orthophoto as a back drop can make an assessment on whether any improvements have been made to the property (based on their last assessment record).[9]
Cross Index The Certificate Authorising Registration (CAR) details and an image of the CAR can be stored against the parcel in the cross index.	Decrease in the forging and reusing of CARs which is a problem in the current system, linked to the CIM.
Field Validation and CRS The BIR will also benefit from the efforts of the prototype in finding records and educating the public.	As more people understand the process and can negotiate the purchase of the land they live on there will be increased revenues as sales now leave the informal market.
GIS The BIR will be able to use a layer in the GIS to map the tax zonale information.	Tax zonale information will be readily available to base assessments on.
One Stop Shop Working together with the Assessor's in the OSS the BIR staff will have the ability to compare the LGU assessed value for a	Assessed values can be more consistent between the agencies and in the short term the BIR and Assessor's will be able to

[9] The Orthophotos are 2 years old and can only be used as a guide, for example if a customer claims no improvement yet there is a building on the property which was not there when the last assessment was made. In all cases a field inspection should still be carried out.

property as opposed to their assessment.	carryout assessments together, prior to the introduction of the Nation Appraisal Authority (NAA).

Department of Environment and Natural Resources

210. The prototype is planning to scan all plans at the DENR, in the short term all plans in the prototype area will be scanned, but the long term objective is to scan all DENR plans. The main benefits to DENR are set out in the table below.

Table 12: Benefits and Impact DENR

Benefit	Impact
Scanning of Plans The prototype is scanning all plans at the DENR, in the short term all plans in the prototype area will be scanned, but the long term objective is to scan all DENR plans.	Security Copy of the Plans. Besides providing a backup copy of the plan the DENR representative in the OSS will have access to all current LRA and DENR plans. As part of the National Land Records Management Strategy (NLRMS) they will have images of all plans available throughout the country, eliminating the problem of lost or stolen plans.
Cadastral index Maps The CIM will give the DENR the ability to view all subdivisions/consolidations in an area when registering plans and to determine what plans have already been registered at the LRA.	Avoid overlapping parcels, access to all plan information for the prototype area. This is far more information than their current projection maps which lack information about plans registered by the LRA. Stop duplication of registered plans over the same property, the DENR can inform the owner that they must cancel any plans registered at LRA before they will register the new survey plan.
Cross Index The cross index allows the DENR to check that the applicant is the registered proprietor, as well as validate the land description and TCT reference of the parcel(s) in the plan.	Reduction in the registration of plans to produce fake and duplicate titles. This will help prevent people attempting to register plans over land that they do not own, using forged documentation.
GIS Through the project DENR staff will be exposed to new technology, including GIS, scanning and digitising.	DENR will improve the skills base of their staff without having to outlay large sums of money to send them on courses.

Benefit	Impact
Field Validation Location of parcels/plans within the prototype area that are still held in the Rizal Registry of Deeds not the Quezon City ROD.	Improved accuracy of records. These problems are not identified by the DENR as the plan is lodged with the correct TCT from the Rizal ROD and the projection map does not contain Barangay boundaries.
SPIS Stronger records management, archiving and research. It also improves access to records and information and improve security and preservation of records.	Improved over-all records management and modernizes the current records system.
One Stop Shop DENR will be carrying out initial registration at the OSS with the help of the CIM.	Faster, more efficient processing and approval of plans and initiate conversion of mapping to PRS 92.

Land Registration Authority

211. Many of the benefits to the LRA have been already identified in the reports by the NLMS and the report from the International Land Law Adviser. These reports offer short and long term solutions to the operations of the RODs and the storage and maintenance of LRA records.

Table 13: Benefits and Impact LRA

Benefit	Impact
Scanning of Plans In the short term all plans in the prototype area will be scanned, but the long term objective is to scan all LRA plans.	LRA already have a backup copy of the plans in microfilm, but this is only accessible were the plans are stored and where a microfilm reader is available. The LRA representative in the OSS will have access to all current LRA and DENR plans.
Cadastral index Maps The CIM will give the LRA the ability to view all subdivisions/consolidations in an area when registering plans and to determine what plans have already been registered at the DENR.	This is far more information than their current projection maps which lack information about plans registered by the DENR. They will be able to project the new plan onto the CIM to determine if there is any overlap and with the use of the GIS hold an interim plotting of the map in the system. Stop duplication of registered plans over the same property, the LRA can inform the owner that they must cancel any plans registered at DENR before they will register the new survey plan
Full record of all registered surveys that can be related back to TCTs and presented for court cases.	LRA can give the court a full picture of what is registered for an area to help the courts make the correct decisions in court cases relating to land.
Cross Index The CIM and the cross index will fill in the gaps that will appear in the records captured in the LTCP. As the records captured by the LTCP are only from TCTs the project can displaying the Assessor's information where a TCT is not available and the parcel(s) will be shown on the CIM. The project will also	The LRA will have a complete record of the properties and be able to easily identify which ones still need to be reconstituted. The additional properties encouraged to have their titles reconstituted from the field validation will increase the number of TCTs in the ROD.

Benefit	Impact
be going into the field to locate the owners of the properties to assist them in reconstituting their TCTs.	
GIS Through the project LRA staff will be exposed to new technology, including GIS, scanning and digitising.	LRA will improve the skills base of their staff without having to outlay large sums of money to send them on courses.
Field Validation Location of parcels/plans within the prototype area that are still held in the Rizal Registry of Deeds not the Quezon City ROD.	Improved accuracy of records. These problems are not identified by the LRA as the plan is lodged with the correct TCT from the Rizal ROD and the projection map does not contain Barangay boundaries.
SPIS Although LRA has a database of its plans, SPIS will modernise their existing system using scanned images and digital photos of plan.	Improved over-all records management and modernizes the current records system.
One Stop Shop Faster, more efficient processing of application for reconstitution, better coordination with other agencies such as DENR, LGU and BIR and stronger linkage and information sharing with other agencies.	Improved overall records management, information sharing and service delivery resulting into reduced land cases, fake titles and problematic titles.

Benefits to Customers/Community

212. The biggest benefit will be the OSS where the customers will be able to access all the agencies in the one location.

Table 14: Benefits and Impact for Customers/Community

Benefit	Impact
Cadastral index Maps and Cross Index With the CIM to help them locate their property and the cross index to assist in locating the records of the agencies the customer service level will be vastly improved.	Easier for customers to transact with the agencies, reduced costs in time and effort
One Stop Shop With all the agencies the one location some of the documentary requirements on the customer could be reviewed. For example when a case is formed the original TCT could be added to the case removing the requirement for the customer to supply certified copies of the plan to the agencies. For those agencies that are required to store certified copies they can make their own copy.	Reduced cost of transacting with government. Opportunity to encourage more people into the formal market. Reduction in the storage capacity required by the agencies.
There is currently a great deal of misinformation and when the customers visit agencies they are only given a small portion of the information they need. This will no longer be the case with the OSS able to provide all the information that customers need to carry out their transactions.	Improved public service, taking away the mystery of the process. Also a reduction in the cost to the public as they will be able to carry out their own conveyancing without needing to hire an agent who knows the complete process.
Reduction and/or elimination of facilitation fees that customers are forced to pay.	The problem of facilitation fees will always be a problem in the current structures. While the OSS will use exit surveys and monitor transaction flows these steps will not necessarily remove facilitation fees. However it is hoped that over time the reporting back of customers experiences will highlight which areas have the greatest problems and help improve the system.

Field Validation and CRS For many customers the information program provided by the prototype through CRS has provided them with invaluable information on how the process works and what their rights are.	Reduction in the number of Syndicates working in the areas. The public are less prone to being prayed on by syndicates as they can investigate the true owners of the land.
BILIS A Barangay based land system that gives the linkage between the ROD and LGU records providing up to date records tied to the spatial record in the form of a Hard copy CIM.	The community can locate the latest land record information before going to the agencies to obtain copies/transfer land/etc.

I. Achievements of the Project

Cadastral Index Mapping

213. The role of the Cadastral Index Mapping (CIM) team has been to create CIM from existing map data in the offices of participating agencies, using survey information and orthophoto maps to control the mapping process. A set of preliminary CIMs were created for the prototype area. Once office and field validation were completed the CIMs were adjusted to final CIMs for use in the OSS.

214. Over the past 6 month period the Survey and Mapping technical adviser has not been mobilised but the Photomapping and GIS advisers have provided inputs. However PIO2 has continued the production of CIM by plotting the survey plans held in DENR and LRA. Two methods have been fully tested the first was plotting the CIMs by hand the second was digitising the plan data, including the parcel boundaries, then the other information is hand plotted onto the CIM. Further details are available in the "Final report Land Parcel Mapping PIO2 Dec 2002" report compiled by the Survey and Mapping Technical Adviser.

215. A small group of Orthophotos have been delivered to the prototype and the International technical adviser for orthophotos was mobilised. He has tested the quality and of the Orthophoto and compared them to the existing CIMs, and made comparison of CIM production with an option using the orthophoto. His findings are reported in the "TA Report Orthophoto Mapping". Also preliminary development of Graphical Information System (GIS), using Map info, has been undertaken and a plan database which links the plans to the CIMs has been developed.

Activities

216. The retrieval process consisted of the following activities namely: a.) generating the list of plans for retrieval; b.) actual retrieval of plans; c.) identification and location of missing plans; d.) the searching and validation of survey plans through the Survey Plan Inventory System (SPIS) and; e.) filing of the survey plan.

Generating the list of plans for retrieval

217. The retrieval process begins with the identification of survey plans for retrieval. The survey plans are organized per Barangay based on the Assessor's database. Because PIO2 realized that the list from the Assessor's database is not updated and contains gaps, other options to identifying survey plans were required. One method employed was to examine the survey plans retrieved and search for updates. Where an adjoining survey plan number is identified, it is searched in the database to determine if it has been retrieved or not. A second method was to prepare a list for plans from the projection maps of LRA and DENR. The list of survey plans is then validated against the database to determine whether the survey plans have been retrieved. The third method is to obtain plan numbers from the Office validation unit where they have searched a TCT and have found the parcel has been subdivided. Finally copies of survey plans and or survet plan numbers are located during field validation.

Retrieval of plans

LRA

218. In requesting for the retrieval of survey plans, a letter is prepared separately for LRA and DENR, containing survey plan numbers that the prototype require copies of. Unfortunately survey plans from LRA took one month to be supplied, contributing to the delay in the production of CIM. To speed up the process the prototype began to pay for the copies of the survey plans. While this accelerated the process there were also occasions when 1.) the microfilm broke down; 2.) the Chief of Records was on leave and no one else sign the release of survey plans.

DENR

219. DENR plan retrieval is faster than the LRA retrieval, this was helped by having PIO2 staff detailed by DENR assigned to retrieve survey plans from the agency. However the process was not without problems, the retrieval of survey plans for the unit was still slow as the retriever did not have access to the DENR vault, the DENR staff assigned to assist in retrieval for the project was on-leave and not replaced during that period; and other DENR retrievers wanted honorarium as incentive for their work. The access problem was not resolved until the Regional Executive Director (RED) intervened, allowing four PIO2 employees to retrieve survey plans in the vault.

Identification and location of missing plans

220. There is a high rate of errors in the data from the Assessor's database and miskeying often made it difficult to identifying the exact agency a survey plan belonged to. On most occasions the missing survey plans identified in one agency actually belong to another agency. This resulted in sourcing other venues for retrieving survey plans through contacting private surveyors in the prototype and through homeowner's association. In the field validation activity for Holy Spirit, PIO2 was able to gather survey plans not identified in the Assessor's office database.

Survey Plan Inventory System (SPIS)

221. SPIS was originally designed to provide a computerized system for identifying whether survey plans were retrieved, missing, and not available. The system has proven to be invaluable and has since evolved into a comprehensive database that is linked to titles validation and the Assessor's records. This enabled the automatic identification of survey plans by validating and searching through the records of office validation and the Assessor's. However SPIS has the same problems as all systems developed using "system prototyping" it lacks proper documentation and is not controlled by PIO2 management. Also there is no documented backup, recovery or disaster program for the system.

Survey plan filing system

222. PIO2 has made the decision to become a storage facility for the copies of plans obtained within the Barangay. All plans retrieved by the prototype are retained as paper copies and the filing system segregates retrieved survey plans using the following steps:

    - Step 1: All survey plans are segregated by barangays;

- Step 2: Then plans containing PCS are separated from PSD survey plans;
- Step 3: Afterwards plans are separated per agency (whether it is from DENR or LRA);
- Step 4: Lastly, survey plans are arranged chronologically by referring to the first two digits of the survey plans.

Accomplishments

223. The CIM group have completed all the preliminary CIMs for the prototype area and have compiled all the final CIMs for Holy Spirit. All parcel boundaries have been digitised and are held in the GIS. Unfortunately the CIM group do not keep totals of parcels per CIM which could be used to determine if the work carried out in office validation is complete in relation to that CIM. What figures could be compiled have been carried out by the TA, without aid from the CIM group who despite multiple requests could not supply the required information. While the CIMs have been updated with the information for Payatas, this is a recent event and is yet to be added to the GIS.

Table 15: CIM production activities

Activity	Where	Accomplishment
Retrieval of Plans	DENR	985
	LRA	735
Preliminary CIMs Prepared (semi-digitized)	Holy Spirit	63
	1:1,000	23
	1:500	40
	Batasan Hills	49
	1:1,000	36
	1:500	13
	Bagong Silangan	32
	1:1,000	25
	1:500	7
	Commonwealth	45
	1:1,000	17
	1:500	28
	Payatas	49
	1:1,000	34
	1:500	15

224. The following table is a compilation of the resources, time and costs required in the CIM process. While the outputs vary it is difficult to verify the source of the evaluation and the correctness. The calculations for the retrieval of survey plans have been based on the official project period of 28 month, ie November 2001 to March 2004, and does not include the bridging period.

Table 16: Outputs for the CIM development

Step by step procedures	Resources	Time	Manpower	Output
1. Retrieval of Survey Plans	- own money used for travelling - *Monetary Resources:* Payment of LRA plans and printing - Vehicle - Computer/database	LRA: 6.5 hours per plan DENR: 4.8 hours per plan	- One focal person	Per Month: LRA 26 plans DENR: 35 plans
2. CIM Preparation	- Low end PC - Digitizer - Plotter - 8 cartographers - two drafting tables - three lettering sets - tracing paper - mylar - scanner	33 person hours	- Seven Cartographers doing hand drawn CIM - One AutoCAD operator	Per Month: **AutoCAD Operator:** >20 CIM/mo. **Cartographers**:>50 CIM/mo
3. QA	• Blueprint of CIM • Highlight marker • Pens • Pencils • Print-out of survey plans	1 person hour	• Three staff • GE I • DENR GE • Supervising Cartographer	>50 CIM/mo.

Cost of the production of CIM through the semi-digitized method

225. The production of CIM has two phases first a Preliminary CIM is produced and sent to office validation. After all the parcels have been office validated the CIM is sent for field validation. At the end of this process all amendments are made to the CIM and a final CIM is produced.. The costs estimation is based on an "average CIM" but it should be noted that CIM will vary considerably in the number and size of parcels mapped. Similarly there will be differences in the time required to find copies of Cadastral Survey Maps for initial tracing, and for quality assurance (checking of lot numbers and coordinates etc) of plotted information. At the time of this cost estimate study no Final CIMs had been completed, however there are now 62 completed Final CIMs for Holy Spirit. Cost will be determined in the Lessons and Methodology document being prepared by PIO2.

Methods and Associated Issues

226. There are two main CIM preparation procedures that have been tested at PIO2:

i) Fully manual CIM preparation where parcels are traced from survey plans (after scaling the plans by means of photocopying);
ii) Digitisation of parcel boundaries and manual completion of names and numbers by cartographers.

A further procedure will be implemented when there is sufficient computer equipment available – ie fully digitised CIM preparation.[10] The following unit cost calculation is based on the hybrid digitised/manual procedure that was being practiced at the time of this study.

There are many steps in the preparation of a CIM using this hybrid procedure. The steps can be summarised as follows:

- Retrieval of survey plans (from DENR and LRA);
- Entering bearings and distances of mother lots;
- Digitising parcels within the subdivisions by the calibration method;
- Manual completion of all numbers and names on the CIM;
- 'Office validation' to check against title information held (identifies any later subdivisions);
- 'Field validation';
- Final CIM preparation.

227. Throughout this process there are some four distinct quality assurance steps and associated corrections to the incomplete and preliminary CIM before final CIM are produced. At the time of the study, no CIM had progressed through all steps. Furthermore, the retrieval of survey plans has been a very difficult and time-consuming process and is still incomplete for many CIM. Not all plans are available from the responsible agencies and remain to be located. As a consequence, the estimation of CIM unit costs described below only considers the steps once survey plans have been retrieved up until preliminary CIM are made available for field validation (steps 2 to 6 inclusive). The costs associated with remaining steps will have to be added at a later date.[11]

Different Estimates of Time:

Method 1

228. The 4 cartographers drafting CIM at the time of the calculation were given a target of two CIM per cartographer per week. The remaining 5 staff in the CIM Unit were responsible for management, supervision, digitising, quality assurance and plan retrieval. However, this target has yet to be achieved. The total number of preliminary CIM completed from project commencement up until the time of the study was 72 (this includes 16 large scale CIM 'blowing up' areas of small parcel size from the normal scale CIM).[12] The target number is therefore not a good basis for unit cost estimates.

Method 2

229. Cartographers were asked to estimate the average time to complete the steps. The following assumptions were made in the estimations provided below:

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[10] At the time of the study there was only one computer and one digitising table and no plotter or large format printer available for CIM production.

[11] Nevertheless, the major costs associated with CIM production are included in the estimate of unit costs provided herein.

[12] CIM are produced at 1:1,000 and 'blow-ups' at 1:500.

- No time is spent finding/retrieving survey plans;
- CIM are fully filled with parcels (CIM on barangay boundaries, or with large areas where no survey plans are available, will be quicker to complete as a proportion of their area will be blank).[13]

Table 17: Labour time estimates for preliminary CIM preparation

Summary step in the CIM preparation process	Labour time estimates (person-hours) per CIM
Digital steps in producing CIM with parcel boundaries	12
Manual completion of all numbers and names on the CIM plus corrections after QA	20
All QA steps prior to office validation	1
Updating and correction following office validation	N/A

The total labor time for the above steps amounts to 33 hours per CIM.

230. A form was developed to improve the accuracy of the estimate for the second step in the above table – the most time-consuming. Cartographers will be required to complete this form as they work on new CIM. This is expected to provide a more accurate estimate for labour input.

Method 3

231. An additional estimation can be simply based on the number of preliminary CIM completed each month using this hybrid procedure and dividing by the total labour time of the 9 person CIM unit. This estimate, unlike the earlier estimates above is the actual output of the CIM unit and includes time taken for other activities that unit personnel undertake (including training and workshop attendance etc). This will result in a comparatively high estimate of the labour input in CIM production.

Table 18: CIM Unit output

Month	June	July	August	September	October	November	Total
No. of CIM	8	12	10	21	22	12	**85**

232. During the cost estimate period 85 CIM were completed. On an average the CIM personnel composed of nine individuals, completed 1.57 CIM per month. To compute the total labour cost for the 1.57 CIM, the total labour cost of the entire CIM unit including engineers is Php 90599. This is divided by 9 (personnel) and divided by 160 (hrs per month) which is Php 62.92 per hour. This equates to 102 hours to complete one CIM. Earlier CIM Unit output has been the result of different procedures in CIM production and as such cannot be used to generate unit costs for this procedure.

[13] An average of x parcels was 150

Calculation

233. The following calculation uses a labour input of 80 person-hours per preliminary CIM (not including time for plan retrieval, field validation, or final CIM preparation). The cost of equipment is calculated based on a depreciation rate equivalent to 20% per annum. For the time taken to prepare 1 CIM this is equivalent to 24% of the value. The following draft calculation may be modified if more accurate estimates of resources used in CIM preparation can be determined.

Table 19. Calculation Table

Activity/Resources	Unit	Unit cost (PHP)	Total Quantity	Total Cost (PHP)
Personnel				
Labour Cartography/Digitising/QA [14]	Hours	80.89	102	6417.84
Survey plans[15]				
LRA plan	Plan	9	5	45.00
DENR plan	Plan	5	5	25.00
Blue Print	CIM	9	1	9.00
Travel time and costs to plot or print[16]				
Driver time for return trips[17]	Trip	18.9	11	207.90
Vehicle running costs/depreciation	Trip	60	11	720.00
Drafting materials				
Mylar (22 x 28)	CIM	270	1	270.00
Tracing Paper	CIM	140	1	140.00
Blueprint or whiteprint copies	Copies	9	4	36.00
Drafting equipment (depreciation cost)				
Drafting pen & ink etc	Set	3200	0.0033	10.56
Mechanical pencil	Set	40	0.0033	0.13
Lettering set (Leroy)	Set	9700	0.0033	32.01
Triangular scale	Scale	300	0.0033	0.99
45 deg triangular ruler	Piece	50	0.0033	0.17
30 deg triangular ruler	Piece	50	0.0033	0.17
T square	Piece	80	0.0033	0.26
French curve	Piece	150	0.0033	0.50
Protractor	Piece	80	0.0033	0.26
Cutter	Piece	40	0.0033	0.13
Drawing instrument set	Set	500	0.0033	1.65
Drafting table	Piece	4500	0.0033	14.85
Office chair	Piece	2900	0.0033	9.57
Eraser	Set	120	0.0033	0.40
Lead Pencil	Box	150	0.0033	0.50
Pencil	Box	200	0.0033	0.66
TOTAL				**8014.81**
Unit cost per CIM				**8000**
Unit cost (of CIM preparation) per lot				**53**

[14] Average salary for those working on CIM is PHP 10,066 per month.
[15] No allowance has been made for the labour time and trips required to collect plans
[16] Based on 30 minutes for each return trip to DENR and a driver wage of PHP 6,039 per month (PHP 18.9/hr). Vehicle running and depreciation costs estimated at PHP 10 per km, and each return trip is 6 km.
[17] Based on wage of PHP 6039 per month, 20 working days (8 hours) per month, 30 minutes per trip.

The Quality Assurance Procedure

234. Quality assurance was introduced to improve the quality of the CIM development. It was also required because there was no standard pattern for UPI numbering and the CIM format may differ from one cartographer to another. Quality Assurance is conducted during the digitization and hand drawing stage. Quality assurance for digitized CIM utilizes this procedure:

- Once the AutoCAD has finished plotting parcels, a copy of the CIM is submitted to the Quality Assurance personnel.
- QA on digitized CIM involves the superimposing of the CIM over the survey plans.
- The CIM format, grid, and grid tick measurements are also verified against the standard measurement of CIM format, grid, and tick.
- Errors are returned to the AutoCAD operator for amendment.
- In cases where there are no errors on the digitized CIM, the CIM is blueprinted and distributed to specific cartographers for sheet preparation, parcel plotting, and assignment of UPI.

235. Once the cartographer completes the sheet preparation, parcel plotting, and assigning of Unique Parcel Identifier (UPI), the CIM is blue printed for quality assurance. The quality assurance officer fills-out a series of checklists which are aimed at checking the errors in sheet preparation, parcel plotting, UPI numbering, and preliminary CIM compilation.

A colour-coding scheme was developed to aid in identifying errors in the CIM.

- Green marks-used to highlight correct UPI numbers, lot, and block numbers.
- Red marks-used to identify errors in the CIM like assigning duplicate UPI numbers.
- Black- used to identify the survey boundary.
- Blue- used to identify newly consolidated or subdivided plans.
- Pink-is used to insert survey plan numbers.

After colour-coding of the CIM, the checklist is attached to the blue-print copy of the CIM and forwarded to the assigned cartographer for corrections and updating.

Final CIM production

236. By the end of March 2004 final CIM has been created for all areas of Holy Spirit, ie 65 Final CIMs have been created. These CIMs are recognised as having potential errors, ie there are still some duplicated CIM numbers within the cross index. However PIO2 also recognises that the CIMs are subject to continuous update due to re-subdivision location of errors/missed information/etc. and have made a conscious decision to make these the first editions and start the updating process on a as presented basis.

Office Validation

Background

237. The role of the Office validation team has been to consolidate the land parcel records from various sources to create a single set of land records within a cross index. The information is gathered from the Registry of Deeds (ROD) the City Assessor's/Treasurers (LGU), the Land Registration Authority (LRA) and the Department of Environment and Natural Resources (DENR).

238. The cross index has been designed to hold an index of information for a parcel. This index will be used to locate records within the different agencies by using the parcel shown on the CIM. The user can locate their parcel on the CIM and by entering the parcels unique identification number into the cross index they will be able to get:

- the TCT reference number for searching the record in the ROD;
- the PSPIN and/or the tax declaration for searching the record in the Assessor's or Treasurer's offices;
- the plan number for searching the plan at either the LRA or DENR.

239. The value of the cross-index is that it clearly shows if there is not a one to one relationship between these three key indexes for documents held by the three agencies for the land record. Then for cases of mismatch (missing or duplicate records), action can be taken such as:

- updating the LGU tax role to include all land parcels;
- reconstituting ROD titles;
- resolving duplicate titles;
- or any other appropriate action that the agencies need to carry out after investigation of their records.

240. Unfortunately confidentiality sections of the BIR legislation do not allow the cross index to hold the TIN of the owner but their details can be searched at the BIR using the TCT number, the tax declaration number or the owner's name, which are all held in the cross index.

241. PIO2 developed a workflow in the production of Cadastral Index Maps and the cross index to be placed within the OSS. Office validation is the next step after the production of the preliminary CIM for a particular area. Once the preliminary CIM has been created and each parcel allocated a Unique Parcel Identifier (UPI) the parcel records are validated against the records of the ROD and the LGU. Office validation is given a copy of the CIM to work with that contains the UPI and the unique land description of each parcel. As each parcel is validated it is highlighted on the CIM to indicate that no further validation is required. Once a CIM has been through Office Validation it is passed to the field validation teams to investigate parcels that are not highlighted.

242. The basis for locating records within the prototype area has been the Quezon City LGU Assessor's database as they can be sorted into Barangays. Records held in the ROD are stored in TCT number order not by barangay and while the barangay information is held on the face of a TCT, is difficult to use without looking at every

TCT in the ROD. The original assessor's data was supplied in November 2001, it contained the barangay code and from this data TCT pulling lists could be made for each Barangay. Updates of LGU data were not received until over 12 months later, but now updates are supplied to the prototype at regular intervals from the Assessor's database. However the process of updating needs to be documented and reviewed to determine if it is causing problems with records that have been manually linked.

The summary break up of data held in the cross index is shown below.

Table 20: TCT's captured from the ROD

Barangay	No of Parcels ***	No of TCTs Captured
Holy Spirit	8,163	5,954 live (621 cancelled TCTs)
Bagong Silangan	8,180*	5,082 live (1,126 cancelled TCTs)
Batasan Hills	9,794	7,142 live (2,171 cancelled TCTs)
Commonwealth	11,158*	7,635 live (1,192 cancelled TCTs)
Payatas	Unknown parcels have not been separated from Commonwealth or Bagong Silangan	
Totals	**37,295**	**25,813 live** **5,110 cancelled**

* This includes parcels which should be separated into Payatas
*** Note : These are parcels on approved survey plans and shown on PIO2 CIMs.

The total number of parcels differs from the original estimate of 35,359 parcels, but is based upon current Assessor's database records. This shows that there are nearly 2000 parcels that the Assessor's do not have in their database.

The figures for all of the Barangays, except Holy Spirit, will be further adjusted once the results of the Field Validation carried out by the NGO have been processed and any additional TCTs collect from the ROD, based on this field validation information.

Office Validation Methods tested

Collection of TCT's from the Registry of Deeds

243. Collecting TCTs from ROD even using the "pulling lists" has proven to be an extremely tedious process, time and intensive resources. Searching for records on a Barangay basis, and then capturing an area for matching with CIM production does sound ideal. But the reality is that it is not a workable method. There is a large co-ordination effort required to produce lists, pull titles and then represent a list for searching of titles that were unavailable the first time. The better approach would have been to capture all the "live" titles in the ROD: estimate 300,000 at Q.C.

Current Process

244. A list is taken to the registry and each Transfer Certificate of Title (TCT) located, once located the list is ticked, or if the TCT is not available crossed. Retrieved TCTs are then photocopied and a stamp placed on the TCT to indicate that it has been captured as part of LAMP. The TCT is then returned to the registry and stored back in the relevant book in page number order. The retrievers then check the books of the ROD to locate where a TCT with a cross was and if possible copy the TCT. Where a TCT had been cancelled and a new one issued a photocopy of both the cancelled parent and new TCT(s) is produced.

    The copying of records was necessary as the original could not leave the ROD and the Prototype was situated originally at City Hall and later within the LRA compound.

Method 1

245. The first method used a list of all known TCTs for a Barangay, at the time of testing the TCTs were not stamped as being part of the prototype area. This method was not successful as it did not take into account the fact that titles shown on the Assessor's records could have been part of the file that was burnt in the fire at the Quezon City registry. The ROD had to renumber titles beginning at TCT No.1, rather than continuing the numbering from the last title issued prior to the fire. As a result the lists contained many titles that were not within the prototype area and a low % of the titles retrieved were relevant. For example in Holy Spirit approximately half the TCTs on the assessor's database were registered before the fire and, because of the ROD renumbering have the potential to be in the wrong area. The majority of these were in the lower range TCT numbers and from pulling lists of 40 titles it was not unusual to only have 2 or fewer titles that were relevant.

    PIO2 had large stockpiles of useless TCT photocopies that were slowing down the process and the system was not efficient. This method was quickly ceased and evaluated as being detrimental to a streamlined, efficient process

Method 2

246. To compensate for the problem identified in the first method, this second method took advantage of the fact that the Assessor's records hold the date of registration of the TCT. This allowed the lists to be split into three categories as shown below:

    - TCTs that were registered before 1989;
    - TCTs that were registered after 1989; and
    - TCTs that do not have a registration date.

Table 21: Break up using registration date (Assessor's Records)

Barangay	Bagong Silangan	Batasan Hills	Commonwealth	Holy Spirit
Before 1989	2736	2989	3190	2444
After 1989	4375	5774	4131	2777
No Date	309	311	282	167
No Date and No TCT No.	303	318	1080	182
Total	**7723**	**9392**	**8686**	**5570**

247. Title retrievers were trained to look at the land description and owner shown on the TCT before taking it for photocopying, unless the TCT was on the "Registered after 1989" list. Otherwise the retrieval process was the same for the first method, with the following additional steps added. If the TCT was not over the same land, shown in the list, it was noted in the comments that the land description was incorrect. No photocopy of the TCT was made. The title reconstitution division was then referenced, to try and locate any reconstituted titles based on the TCT number supplied by the Assessor's database records.

248. The pulling lists are produced on a Barangay basis each list displays the information in TCT no order and contains:

- Lot Number;
- Block Number;
- Plan Number;
- Area;
- TCT Number;
- Registration Date; and
- Owner's names.

Some TCTs have been difficult to retrieve the two most prominent being:

- TCTs that have been lost/destroyed and have not yet been reconstituted;and
- TCTs that are subject to a court case and cannot be viewed without the written approval of the court

249. The overall result of this method was that only TCT's required by the project were retrieved and the data entry staff could capture the TCTs without having to keep referring back to the details on the original lists. While it is not the most efficient way to retrieve the TCT, it has been the best method available given the restrictions placed on the prototype. For future applications, the whole ROD TCTs which are "live" should be captured with the essential index information.

The final cost to retrieve a single title, including photocopying is Php 37.53. The cost to buy a record from LARES is 150 pesos. This cost plus the cost of capture will be compared to the cost that LARES will charge to retrieve the data from their system and supply it to the project then PIO2 to add the necessary links to the CIM and other agencies (see table 29).

Copying of Records

250. Currently the copies of titles are obtained using a photocopier supplied by the project within the ROD. Before PIO2 could obtain it's own copier in the ROD scanning of TCTs was trialled. Various qualities of scanning were trialled to determine if the quality and the speed would be acceptable for capturing images to be data captured. The quality was excellent with the exception of Text and Image which rearranged the data to fit after the image. The times taken vary for the type of image to be stored as does the storage sizes. Interestingly enough the format with the lowest file size took the longest to scan, however this was a different program and was not the easiest to use.

The quickest time taken was with the photocopier (3 seconds) and although this does not produce a digital image that can be stored, this does not present a problem as the BOO project has already scanned all TCTs in the Q.C. Registry of deeds. For LAMP to duplicate the process would be a waste of resources, the results of the testing are set out in the table below:

Table 22: Comparison of Scanning Methods Tested

Scan Quality	Size of scanned file	Time Taken	No of Sheets
Colour	2Mb	1 minute 40 secs	1
Grey Scale	2.9Mb	53 secs (per sheet)	2
Black and White Bitmap	89Kb	1 minute 5 seconds	1
Black and white scalable	289Kb	1 minute	1
Text and Image	223Kb	1 minute 25 secs (per sheet)	2
Photocopy	N/A	3 seconds	1

251. More recently, the use of a digital camera has been tested, and offers the best future option, at least for speed.

Office Validation of records

252. Office Validation consists of two processes. The first is to create a parcel by the capture of the TCT information into the database and comparing it to the Assessor's records. The second is to tie the parcel to the CIM via the Unique Parcel Identifier. PIO2 also looked at scanning the image of the photocopied TCT to the cross index, as well as the type of software to be used for the cross index as part of the testing of different methods.

Capturing Images of Transfer Certificate of Titles.

253. Apart from the initial trial of imaging TCT's in the registry of deeds a trial group of photocopied TCT's were also scanned. While this method would not be seriously used for a registry where LARES had captured an image of the TCT, there may be times when LAMP is working in a registry not covered by LARES, ie if the two projects do not capture data from the same region at the same time. Also the document, which is scanned and held against the parcel, does not have to be the TCT it could be any other document that is relevant.

    There are two options for storing the image. Each has its advantages and the final decision on which would be the preferred method would depend on whether any

documents would be scanned and stored as part of a parcel record in the long term LAM program. The methods are:

- Holding the image as a separate file that is hyperlinked or an attached file to the database, storing the link in a field against the parcel record, or
- Holding the image in a field on the database as an embedded picture.

254. The hyperlink option keeps the size of the database smaller but retrieval of the image is slower, the embedded option allows faster retrieval of the image but can affect the overall performance of the database as it is much larger. The PIO2 database is held on a normal desktop computer, rather than a dedicated server so the images were stored in a separate file, however this has other problems, if the file has been moved or the database placed in a different location all links have to be resaved. The overall conclusion is that if LAMP is intending to pursue storing imaged data it will need a dedicated server with more appropriate database software, before there is the need to select the better method. The last thing that needs to be considered is the strain an image places on a network, sending vast amounts of data slows the performance of other traffic on the network. For network traffic issues it would be easier to hold imaged document tables on computers that need them and deliver the images required for individual one stop shops.

Software selection for the Cross Index

255. Two formats were tested for holding the cross index the first was using a Microsoft Excel Spreadsheet the second was using a Microsoft Access Database. The design of the project had not budgeted for any database software so these two products were considered as the only viable alternatives. If the project is to be expanded and a central database is to be developed then the program will need to look at commercial database products that will handle large scale databases; however for the size of the prototype these two products are sufficient

Excel Spreadsheet

256. The initial database was created in Microsoft Excel. While the data held was only the Assessor's records this was quite reasonable. Excel holds the data in a single row so by scanning across the row the required data can be found. But once additional information like TCT data, CIM UPI numbers, multiple owners are added the data becomes too complicated for the structure. Excel is an excellent product for writing data to be transferred into database tables but makes a very cumbersome database. It was quickly dismissed as an alternative.

Access Database

257. The cross index currently resides in an Access database. Access allows the capturing of data from multiple sources into individual tables that are linked to each other. Data can be entered using a form (data entry screen) and the users do not have to know where or how the data is stored. Through Access PIO2 have been able to hold data from the CIM, the ROD, the Assessor's and from field validation all linked together. Search screens are being developed to allow the searching of DENR, LRA, ROD, LGU and field validation data. Also tools can be created by the systems analyst to allow the checking of the data integrity and to report on discrepancies and gaps in the data. For office validation the forms used have created parcel records

and allowed the user to quickly and easily create a new parcel, link it to the assessor's record; add the TCT data and compare the TCT data to the assessor's records. This is far quicker than the cumbersome excel system which was initially used. However Access does have limitations; it will only hold around 3 million parcels, which is not an issue for the prototype, but makes it unsuitable for a national database system. The cross index is now a major development representing a lot of project time and money, however as with all systems developed using "system prototyping" it lacks proper documentation and is not controlled by PIO2 management. For example, there is no documented backup, or disaster recovery program for the system. The Managers need to be in control of which staff are given access and what system, ie cross index, SPIS, GIS, etc, however this is controlled by the systems people, the managers don't even know the passwords for the different systems. This dependency on the IT people takes control of the operations away from the managers and makes the staff take problems to the IT branch not their managers.

Office Validation capture methods

258. Once a CIM has been linked to the cross index and it contains a validated title record the parcel on the CIM is then highlighted blue. This highlighted parcel will not be checked in the field, as PIO2 has all the details we require for it. Two methods have been trialled to date. The initial capture was very fragmented and has been ignored in the evaluation as it was part of the training process. The methods which were evaluated are:

- Combined capture of records, validation against the assessor's records and the tying of the record to the CIM in one step (Hybrid Method):
- The two step method of creating a parcel by the capture of the TCT information into the database and comparing it to the Assessor's records. Then tying the parcel to the CIM via the Unique Parcel Identifier on a CIM by CIM basis.

Hybrid Method

259. This method was named the Hybrid method as it was not the method intended to be trialled but a hybrid of it developed by the office validation data capture team in response to the needs at the time. The need at the time was to begin finalising CIM linkage on the database. As the data capture had when different types of CIM production were being trialled, there were already around 1,500 TCTs in the cross index. The need was to create completed CIMs for the field validation activities in Holy Spirit. The data entry staff went through the draws searching for any TCT's that were relevant to the CIM they were working on, this required going through the 10,000 TCTs that had been retrieved from the ROD to locate any that were stored there. This was very time consuming and removed the data entry operator from their computer slowing down the actual capture. At the end of the process there was a completed CIM where all TCT's known on it had been captured, however this came at a cost in time and effort. Cost estimates of the process showed that each CIM cost Php 3164.56, with an average of 214 parcels per CIM, of which on average 42% of TCTs are captured. The cost per parcel was Php 35.21

Two Step Method

260. Under the two step method the linking of the CIM to the cross index does not occur until all the TCTs within the barangay have been captured. Then the CIM/UPI numbers are captured. Under the figures shown for that period just over 4 times as many parcels were completed, this was because the data entry operators did not have to waste time looking through lists of TCTs to locate specific titles.

261. Currently the cross Index contains the following records for each Barangay. This data cannot be compared to the totals on the CIM as this information is not yet available, making it impossible to estimate the work effort to complete each Barangay. Requests have been made to the CIM group for the required information but it is yet to be compiled and supplied.

Table 23: Holy Spirit records in the Cross Index

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14402104110	66	31	46%	32	48%
14402104112	3	3	100%	3	100%
14402104113	74	59	80%	66	89%
14402104114	44	40	91%	42	95%
14402104120	339	161	47%	151	45%
14402104121	8	8	100%	8	100%
14402104122	48	29	62%	39	83%
14402104130	33	0	0%	0	0%
14402104131	61	42	69%	46	75%
14402104132	3	3	100%	3	100%
14402104140	51	16	31%	21	41%
14402104141	6	0	0%	0	0%
14402104142	25	0	0%	0	0%
14402104210	282	157	56%	186	66%
14402104211	53	29	55%	29	55%
14402104213	6	6	100%	2	33%
14402104220	251	161	64%	128	52%
14402104223	5	5	100%	5	100%
14402104230	147	82	56%	83	56%
14402104231	10	2	20%	2	20%
14402104232	9	6	67%	9	100%
14402104234	49	33	67%	34	69%
14402104240	46	26	57%	33	72%
14402104241	8	5	63%	7	88%
14402104410	7	6	86%	7	100%
14412104121	4	4	100%	4	100%
14412104123	5	5	100%	0	0%
14412104130	11	9	82%	6	55%
14412104134	171	164	96%	171	100%
14412104140	220	131	60%	122	56%
14412104143	11	11	100%	11	100%
14412104230	172	121	70%	110	64%
14412104240	106	55	52%	40	38%
14412104241	48	45	94%	0	0%
14412104242	8	8	100%	0	0%
14412104243	227	198	87%	0	0%
14412104244	134	126	94%	3	2%
14412104310	176	106	60%	110	63%
14412104314	15	9	60%	4	27%
14412104320	334	229	69%	232	69%

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14412104324	4	4	100%	4	100%
14412104330	239	125	52%	105	44%
14412104340	412	244	59%	228	55%
14412104341	5	5	100%	0	0%
14412104342	59	59	100%	59	100%
14412104344	28	27	96%	24	86%
14412104410	325	241	74%	240	74%
14412104413	7	7	100%	7	100%
14412104420	232	141	61%	112	48%
14412104422	251	193	77%	37	15%
14412104424	344	316	92%	102	30%
14412104430	317	199	63%	184	58%
14412104431	36	36	100%	36	100%
14412104433	47	31	66%	34	72%
14412104434	23	21	91%	3	13%
14412104440	289	216	75%	219	76%
14412104442	222	209	94%	218	98%
14412105130	33	25	75%	25	75%
14412105131	13	6	46%	0	0%
14412105133	286	84	29%	88	31%
14412105310	40	22	55%	23	58%
14412105311	138	132	96%	138	100%
14412105313	282	278	99%	279	99%
14412105330	28	19	68%	28	100%
14412105331	22	21	99%	22	100%
Totals	**6958**	**4792**	**69%**	**4038**	**59%**
Recoded on wrong CIM	67	67		67	
Not on a CIM	1150	989		1661	
Multiple entires	-12	279		578	
Total in Database	**8,163**	**5,954**		**6344**	

Notes:

- 1150 Parcels and 989 TCTs in HS are not attached to CIMs, while 67 Parcels and TCTs are recorded on the wrong CIM. These can easily be reported on and after investigation amended;
- The real problem is the 279 multiple entries for TCTs and the 12 for Parcels that are duplicated against the same preliminary CIM number. The multiple entries in the Assessor's records are the result of a record being created every time a property owner pays their property tax and are not a concern or an error. The search system links to all records for a land parcel, therefore these multiple records are available against the land parcel;
- There are a large number of parcels, TCTs and Assessor's records not recorded against the CIM. The high numbers represent the work effort left to complete Holy Spirit, however the large number of Assessor's records are either the result of multiple entries in the remaining records or the fact that many Barangay boundaries have been reshuffled over the years and the Assessor's records do not reflect the current situation.

Table 24: Batasan Hills records in the Cross Index

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14402104220	3	2	67%	3	100%
14402105110	327	231	71%	245	75%
14402105112	98	75	77%	75	77%
14402105113	99	82	83%	74	75%
14402105114	145	109	75%	112	77%
14402105120	471	287	61%	329	70%
14402105140	1	0	0%	0	0%
14402105210	265	166	63%	198	75%
14402105220	226	154	68%	164	73%
14402105230	121	52	43%	59	49%
14402105240	291	201	69%	227	78%
14402105420	234	106	45%	122	52%
14402106110	500	343	69%	375	75%
14402106120	352	209	59%	217	62%
14402106130	422	317	75%	344	82%
14402106140	45	44	98%	44	98%
14402106210	2	0	0%	0	0%
14402106310	50	13	26%	15	30%
14412105140	1	0	0%	0	0%
14412105223	22	22	100%	22	100%
14412105230	10	6	60%	8	80%
14412105240	51	35	69%	45	88%
14412105241	235	232	99%	235	100%
14412105242	245	244	99%	245	100%
14412105243	57	56	98%	57	100%
14412105244	196	193	98%	196	100%
14412105320	4	4	100%	5	100%
14412105330	210	175	83%	190	90%
14412105340	120	69	58%	75	63%
14412105410	83	55	66%	60	72%
14412105420	190	107	56%	105	55%
14412105430	435	287	66%	314	72%
14412105440	156	61	39%	83	53%
14412106130	192	131	68%	124	65%
14412106131	101	101	100%	80	79%
14412106133	85	85	100%	79	93%
14412106140	208	154	74%	154	74%
14412106142	7	2	29%	6	86%
14412106230	1	1	100%	1	100%
14412106231	26	26	100%	18	69%
14412106310	488	316	65%	323	66%
14412106320	467	256	55%	278	60%
14412106330	255	125	49%	150	59%
14412106340	632	483	76%	545	86%
14412106410	329	294	89%	293	89%
14412106430	275	216	79%	241	88%
14422104444	1	1	100%	0	0%
Totals	**8734**	**6128**	**70%**	**7167**	**75%**
Recoded on wrong CIM	-74	-74		74	
Not on a CIM	1193	1108		720	
Multiple entries	-59	287*		1250	
Total in Database	**9,794**	**7,142**		**9211**	

Notes:

- 1193 Parcels and 1108 TCTs in Batasan Hills are not attached to CIMs, while 74 Parcels and TCTs are recorded on the wrong CIM. These can easily be reported on and after investigation amended;
- The real problem is the 287 multiple entries for TCTs and the 59 for Parcels that are duplicated against the same preliminary CIM number. The multiple entries in the Assessor's records are the result of a record being created every time a property owner pays their property tax and are not a concern or an error. The search system links to all records for a land parcel, therefore these multiple records are available against the land parcel;
- There are a large number of parcels, TCTs and Assessor's records not recorded against the CIM. The high numbers represent the work effort left to complete Batasan Hills, however the large number of Assessor's records are either the result of multiple entries in the remaining records or the fact that many Barangay boundaries have been reshuffled over the years and the Assessor's records do not reflect the current situation.

Table 25: Commonwealth records in the Cross Index

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14412104110	2	2	100%	2	100%
14412104120	214	103	48%	98	46%
14412104121	44	43	98%	15	34%
14412104123	35	35	100%	0	0%
14412104140	3	2	67%	3	100%
14412101210	84	58	69%	60	71%
14412101211	253	237	94%	215	85%
14412101212	372	365	98%	104	28%
14412101214	158	56	35%	0	0%
14412104220	73	34	47%	15	21%
14412104221	105	97	92%	25	24%
14412104222	128	122	95%	94	73%
14412104223	497	445	90%	280	56%
14412104224	235	227	97%	7	3%
14412104230	16	9	56%	9	56%
14412104240	1	1	100%	1	100%
14412104420	1	1	100%	1	100%
14412105110	38	25	66%	34	72%
14412105111	242	45	19%	41	17%
14412105130	1	0	0%	0	0%
14412105210	30	21	70%	7	23%
14422104240	127	49	39%	59	46%
14422104320	5	0	0%	0	0%
14422104340	322	132	41%	139	43%
14422104410	107	37	35%	40	37%
14422104420	138	60	43%	63	46%
14422104421	2	2	100%	2	100%
14422104422	6	6	100%	6	100%
14422104430	362	171	47%	191	53%
14422104431	1	1	100%	1	100%
14422104432	1	0	0%	0	0%
14422104433	139	134	96%	139	100%
14422104434	14	13	93%	4	29%
14422104440	147	74	50%	75	51%

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14422104441	116	37	32%	0	0%
14422104442	230	182	79%	0	0%
14422104443	29	25	86%	0	0%
14422104444	484	456	94%	1	0%
14422105110	12	8	67%	9	75%
14422105113	2	1	50%	1	50%
14422105114	25	20	80%	22	88%
14422105120	24	18	75%	24	100%
14422105130	253	160	63%	192	76%
14422105131	252	128	51%	143	57%
14422105132	71	61	86%	67	94%
14422105133	31	26	84%	31	100%
14422105134	55	53	96%	55	100%
14422105140	242	103	43%	122	50%
14422105210	279	93	33%	111	40%
14422105211	9	0	0%	0	0%
14422105212	84	73	82%	82	98%
14422105213	2	0	0%	0	0%
14422105220	31	18	58%	18	58%
14422105221	8	6	75%	7	88%
14422105230	280	105	38%	118	42%
14422105240	448	389	87%	416	93%
14422105310	157	47	30%	52	33%
14422105320	69	14	20%	3	4%
14422105321	44	25	57%	34	77%
14422105330	93	49	53%	43	46%
14422105333	288	273	95%	52	18%
14422105340	32	28	88%	11	34%
14422105410	140	58	41%	65	46%
14422105430	56	31	55%	20	36%
14422106110	41	26	63%	23	56%
14432105420	59	31	53%	31	53%
14432105440	46	38	83%	39	85%
14432106310	205	63	31%	69	34%
14432106320	151	26	17%	25	17%
14432106330	283	160	57%	168	59%
14432106340	155	35	23%	43	28%
14432106342	7	0	0%	0	0%
14432106410	62	18	29%	21	34%
Totals	**8758**	**5491**	**63%**	**3838**	**44%**
Recoded on wrong CIM	10	6		10	
Not on a CIM	2086	1917		862	
Multiple entires	304	249		2597	
Total in Database	**11158**	**7387**		**7271**	

Notes:

- The CIMs highlighted green are wholly contained in Payatas, the ones highlighted red are in dispute between Payatas and Commonwealth, while the CIM highlighted grey is part Commonwealth and part Payatas.
- 2086 Parcels and 1917 TCTs in Commonwealth are not attached to CIMs, while 10 Parcels and 6 TCTs are recorded on the wrong CIM. These can easily be reported on and after investigation amended;

- The real problem is the 249 multiple entries for TCTs and the 304 for Parcels that are duplicated against the same preliminary CIM number. The multiple entries in the Assessor's records are the result of a record being created every time a property owner pays their property tax and are not a concern or an error. The search system links to all records for a land parcel, therefore these multiple records are available against the land parcel;
- There are a large number of parcels, TCTs and Assessor's records not recorded against the CIM. The high numbers represent the work effort left to complete Commonwealth, however the large number of Assessor's records are either the result of multiple entries in the remaining records or the fact that many Barangay boundaries have been reshuffled over the years and the Assessor's records do not reflect the current situation.

Table 26: Bagong Silangan records in the Cross Index

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14412105220	144	65	45%	71	49%
14412105223	22	21	98%	22	100%
14412106110	364	206	57%	224	62%
14412106120	167	26	16%	33	20%
14412106130	126	66	52%	81	65%
14412106140	140	74	53%	80	57%
14412106142	65	65	100%	65	100%
14412106210	1	1	100%	0	0%
14412106211	212	140	66%	140	66%
14412106212	6	0	0%	0	0%
14412106213	0	0	0%	0	0%
14412106230	146	126	87%	146	100%
14412106231	262	196	74%	223	85%
14422105420	189	128	68%	149	79%
14422105440	287	206	72%	217	76%
14422106120	306	226	74%	240	78%
14422106130	60	48	80%	50	83%
14422106140	313	279	89%	308	98%
14422106210	229	125	55%	144	63%
14422106220	75	24	32%	26	35%
14422106230	617	617	100%	617	100%
14422106232	1	1	100%	1	100%
14422106240	152	55	36%	73	48%
14422106310	298	179	60%	197	66%
14422106311	1	0	0%	0	0%
14422106320	298	206	69%	226	76%
14422106330	407	233	57%	271	67%
14422106340	307	199	65%	219	71%
14422106410	383	212	55%	238	62%
14422106420	153	59	39%	74	48%
14422106430	278	109	39%	118	42%
14422106433	64	3	5%	3	5%
14422106440	34	7	21%	12	35%
14422107110	90	19	21%	26	29%
14422107130	162	43	27%	56	35%
14422107310	6	0	0%	0	0%
14432106220	1	0	0%	0	0%
14432106230	13	9	69%	13	100%
14432106232	6	6	100%	6	100%
14432106234	7	6	86%	7	100%

CIM No	Parcels in cross index	TCT in cross Index	% of TCTs captured	Assessor's records linked in cross Index	% of Assessor's linked
14432106240	540	259	48%	276	51%
14432106241	17	16	94%	17	100%
14432106242	17	17	100%	16	94%
14432106243	49	32	65%	40	82%
14432106244	46	45	98%	46	100%
14432106420	184	72	39%	76	41%
14432106422	23	19	83%	23	100%
14432106424	22	12	55%	14	64%
14432106430	180	38	21%	41	23%
14432106440	5	0	0%	0	0%
14432107110	17	4	24%	7	41%
14432107130	145	83	57%	88	61%
14432107131	52	47	90%	48	92%
14432107133	15	15	100%	15	100%
14432107310	71	14	20%	18	25%
14432107311	27	26	96%	27	100%
14432107330	6	3	50%	3	50%
Totals	**7808**	**4687**	**60%**	**5105**	**65%**
Recoded on wrong CIM	26	7		26	
Not on a CIM	719	706		1423	
Multiple entires	-347	206		596	
Total in Database	**8180**	**5599**		**7150**	

Notes:

- The CIMs highlighted red are in dispute between Payatas and Bagong Silangan.
- 719 Parcels and 706 TCTs in Bagong Silangan are not attached to CIMs, while 26 Parcels and 7 TCTs are recorded on the wrong CIM. These can easily be reported on and after investigation amended;
- The real problem is the 206 multiple entries for TCTs and the 347 for Parcels that are duplicated against the same preliminary CIM number. The multiple entries in the Assessor's records are the result of a record being created every time a property owner pays their property tax and are not a concern or an error. The search system links to all records for a land parcel, therefore these multiple records are available against the land parcel;
- There are a large number of parcels, TCTs and Assessor's records not recorded against the CIM. The high numbers represent the work effort left to complete Bagong Silangan, however the large number of Assessor's records are either the result of multiple entries in the remaining records or the fact that many Barangay boundaries have been reshuffled over the years and the Assessor's records do not reflect the current situation.

262. Cleansing of the cross index database is also required for CIM/UPI connection as shown in the table below there are still discrepancies. There are differing numbers of CIM between what has been produced and what is in the cross index, these could be caused by the incorrect keying of the CIM/UPI number. Another factor could be CIMs that where added or deleted and have not be sent to the Office Validation unit.

Table 27: Comparison of CIMs created to those held in the Cross Index

		From CIM Production figures	From Cross Index
Preliminary CIMs Prepared (semi-digitized)	Holy Spirit	63	65
	1:1,000	23	24
	1:500	40	41
	Batasan Hills	49	48
	1:1,000	36	35
	1:500	13	13
	Bagong Silangan*	32	57
	1:1,000	25	37
	1:500	7	20
	Commonwealth*	45	73
	1:1,000	28	40
	1:500	17	33
	Payatas	49	
	1:1,000	34	
	1:500	15	

*In the cross index these contain CIMs that are actually within Payatas or are in dispute with Payatas. Commonwealth has 17 CIMs in Payatas and 11 disputed, while Bagong Silangan has 21 disputed with Payatas. While the CIMs were recently updated to reflect the Payatas boundaries, the cross index has not been updated.

Current Capture Details

263. The current process is to capture all the TCTs for a Barangay then attach the TCTs to the parcels for a particular CIM.

Table 28: Break up of TCTs and Parcels captured in the Cross Index

Barangay	No of TCTs (live & Canc.)	No of Parcels	Parcels attached to CIM	Not Attached to CIM
Holy Spirit	6575	8163	7013	1150
Bagong Silangan	6208	7808	7050	758
Batasan Hills	9313	9794	8512	1282
Commonwealth	8827	11268	8758	2510
Totals	**30923**	**37033**	**31333**	**5700**

While all endeavours were made to get the majority of TCT's into the system to cut down the amount of field validation work it was not possible to complete all the work, as shown by the 5700 parcels that didn't get attached to their CIM Unique Parcel Identifier (UPI).

Comparison of methods

Table 29: Comparison of the Methods trialled in Office Validation

	Averages			
Method	**Cost per Parcel**	**Time per parcel**	**Cost per CIM**	**Time per CIM**
Hybrid	Php 35.21	26 mins	Php 7,534.94	11 days 4 hours & 44 minutes
Keying without Names	Php 18.87	14 mins	Php 4,038.18	6 days 1 hour and 56 minutes
Keying with Names	Php 21.57	16 mins	Php 4,615.98	7 days 1 hour and 4 minutes
LARES	Php 160.78	5 mins	Php 34,406.92	2 days 1 hour and 50 minutes

CIM costs and times are based on the average CIM size of 214 parcels. Calculations are operator's times only any other costs equipment floor space etc. would be the same for each method. The LARES cost consists of 150 pesos per record plus 10.78 pesos for the operators to compare the record and attach the CIM/UPI number.

264. The cost to retrieve and copy a TCT is Php 37.53 per record and is not added as in any further data capture the capture would be from the TCT using the books rather than locating and copying individual records. The LARES method is the quickest but is 8 times more expensive than using PIO2 staff to key the data. Keying records without names is 3 pesos cheaper per record and a day quicker per CIM, but the benefits of being able to locate records by name are lost, as is the ability to inform the LGU of incorrect names in their records. The preferred method, if the data capture is to continue, would be to key with names. The cheapest method for the project to collect records would be the base cost of Php 30 per title of electricity, floor space etc.[18], plus the Php 37.53 to retrieve and copy the TCT plus the Php 21.57 to capture and validate the record. The full cost is Php 89.10 compared to Php 160.78 to use the LARES data and validate it. Even the full capture figure is not correct as the project used untrained data entry staff who were paid a wage irrespective of the number of TCTs captured. This produced a low rate of capture inflating the cost of capture. Studies carried out on large registries in Australia, using data entry staff paid on a per title basis with an accuracy of 99%, show the figures to be closer to Php 66 per title.

Matching of the Assessor's records

265. Currently 29,532 TCTs have been captured and have been attached to parcels in the Cross index, the difference includes 5,792 cancelled TCTs, 5,670 which have been superseded in the parcel record by the new (live) TCT, of the TCTs held in the database:

- 24,814 don't match against assessors records; while
- 4,728 match the assessors records.

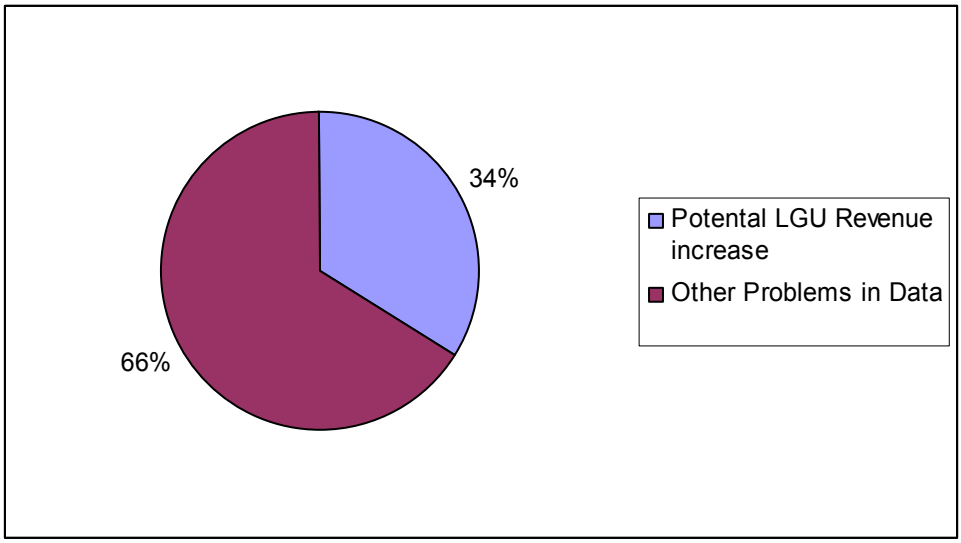
PIO2 received an update of the records from the assessor's database in January 2004 and are negotiating to have regular updates provided. The table below shows the break up of mismatch reasons.

[18] See the M&E evaluation report for Office Validation

Table 30: Mismatches between TCTs and LGU records

Mismatch reason	Number	Live	Cancelled
No Assessor Record	5009	4915	94
Land Description Different	1222	1206	16
Area Different	172	166	6
No/Wrong TCT#	125	118	7
Subdivided/Consolidated	184	35	149
Potential LGU Revenue Increase	**6712**	**6440**	**272**
Date of Registration different	40	39	1
Et al	324	320	4
LRA Reference Not Keyed	177	175	2
N Not Keyed	4039	4019	20
Names Different	97	95	2
No/Different Reg. Date	120	118	2
Reconstituted	3717	3643	74
No reason entered	595	526	69
Transferred	8992	3647	5346
Other problems in Data	**18101**	**12582**	**5520**
Overall Totals	**24814**	**19022**	**5792**

The potential benefits to the LGU are best represented in the chart shown below.



266. While these figures are high they are still to be investigated, as much of the TCT data has been compared against the original copy of the assessor's database, rather than against the latest data. As each CIM is finalised and signed off the records will be rechecked and a report will be prepared, for that CIM, to be sent to the Assessor's. However the likelihood is that they will change little as the responsibility for providing the information to update the Assessor's records currently lies with the property owner.

Field Validation

267. The initial field validation activity was three pilot studies carried out in November 2001 and the first half of 2002. These pilots were used to develop the approaches to be used in the full scale field validation, incorporating the lessons learnt and

recommendations. An operational manual was then developed to be used in the field validation activities.

Results of the three Pilots

268. It was determined that field validation will use a separate approach depending on the area that is being validated. For established areas a base camp will be setup and field team will only go to properties that have a dwelling on them and have not been office validated. For informal areas all properties will be field validated, even if they have been office validated. Again a base camp will be used but the field team will collect as much information about the parcels as possible. Prior to any field validation the CIM and the office validation must be completed. No field validation will commence until a field inspection has been carried out with the local barangay representatives and a field inspection report completed. The field inspection report is shown below:

CIM Number: _____ Number of Parcels _____

Type of Settlement: Informal ☐ Established ☐ Both ☐ Other ☐ (see below)

Number of Parcels: Informal _____
Formal _____
Vacant _____

Other Important information, Include Common Land Related Issues present in the Area.

_____

_____

_____

_____

_____

_____

269. Prior to field validation the CRS team will have worked in the area informing the residence of why the project team will be there. They will also have distributed documentation about LAMP and why the field validation is being carried out. All arrangements with local authorities, Barangay officials, Barangay security people, NGO's etc will have been completed.

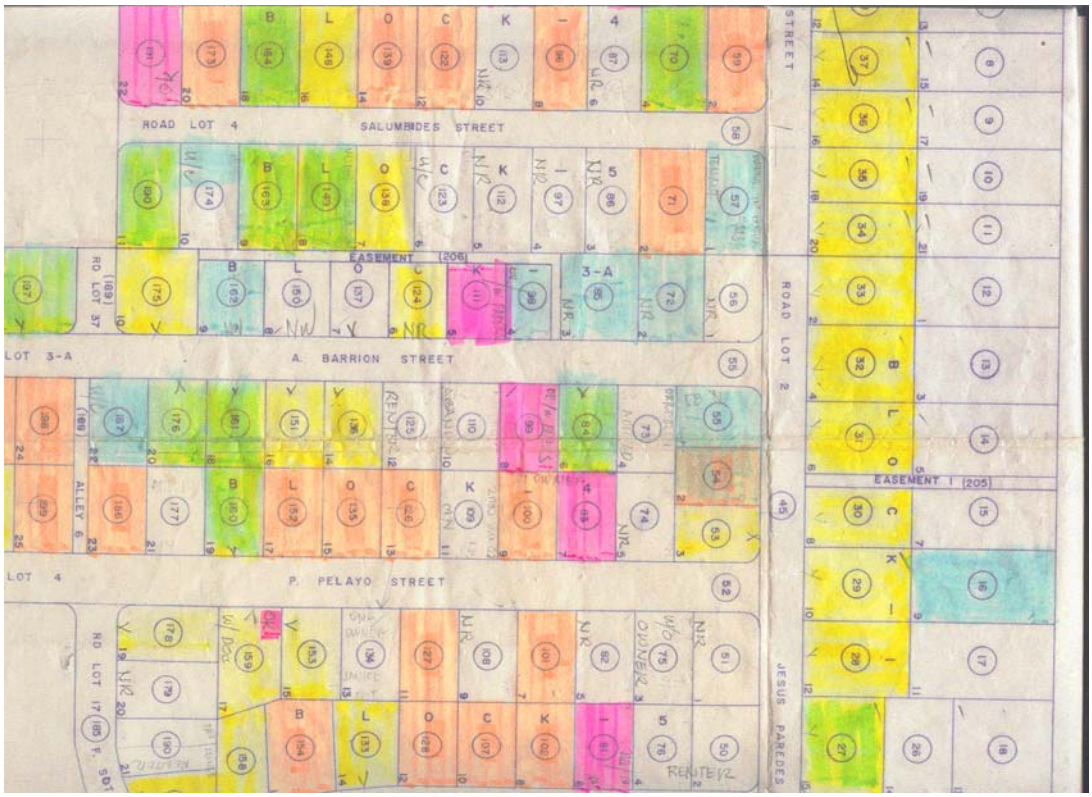
270. The field validation teams will work from a copy of the CIM that has highlighted the parcels that have already been office validated. As a parcel is correctly field validated it will also be highlighted, building up a pictorial representation of the validation effort. Once field validation is complete, the information will be added to the database, including the scanned documents from the field. Included in the scanned documents will be all field validation survey forms. In this way, a complete picture of the area will be documented.

Field Validation of Holy Spirit

271. A full field validation has been undertaken by PIO2 in Barangay Holy Spirit. All lots visited. Field enumerators used for the field validation were all employed from the Barangay and they contained a core group who had worked in the 2nd and 3rd pilot field validations. The approach to the full scale field validation was more structured than in the pilots, no area was validated without the Cadastral Index Map for that area being presented. Prior to the field validation activities the CIM had undergone Office Validation and all parcels that could be office validated had been highlighted on the field validation copy of the CIM. If any CIM or part of a CIM had been subject to field validation in the pilot studies and information had already been gathered, the affected parcels were also highlighted. Finally a field inspection had been carried out to locate any parcels which did not have dwellings on them, ie were vacant. The field validation CIM was highlighted in the field as any TCT information was collected and the break up of colours on the CIM were:

- Office validated parcels highlighted blue;
- Previously field validated parcels highlighted orange;
- Vacant parcels highlighted yellow; and
- Parcels where TCT information was located during the filed validation highlighted purple.

Any parcels where office and field validation had not been able to locate the data were not highlighted on the CIM. Green was used to highlight a yellow (vacant) highlighted parcel that had been office validated, the yellow and green to blue but the colours did not always mix properly.



272. A base camp was established at the Barangay Office in Holy Spirit. The area was donated by the Barangay for the length of the field validation and two computers, the TA laptop and the Planning unit PC were placed in the base camp to capture the data when it was returned from the field. Two operators were trained in data capture and worked during the entire field validation capturing 2123 forms returned from the field.

273. After discussions with the M & E unit and the international M & E adviser the final format of the interview form to be used in field validation was agreed upon. The questions to be asked were translated into Tagalog to make the enumerator's task easier, a copy of the forms are held in the field validation user's manual. The only records that have been entered are those where the owner/dweller was able to supply some details regarding the ownership of the parcel. If the document could be presented it was scanned and returned to the owner otherwise it was noted as seen by the enumerator and the details transcribed onto the form. Scanned documents have been linked to the database via a scanned image field.

274. Each morning the field enumerators assembled at the Barangay centre to discuss problems and confirm what had been accomplished. The work for the day was then allocated and the teams taken to the area where they would be working. At the end of the day the teams returned to the Barangay centre and dropped off completed work, ready for data entry the next day.

275. The field validation activities carried out in the Pilot Studies returned the following:

- 167 TCTs that were found in the possession of the property owners;
- 38 of the TCT's located did not have matching records in the Assessor's data;
- 63 of the TCT's located did not have a TCT record held in the cross index.

From the overall field validation carried out after the pilots the following was found:

- 1472 TCTs were found in the possession of the property owners;
- 676 of the TCT's located did not have matching records in the Assessor's data;
- 134 had different TCT numbers to those held by the Assessor's office;
- 784 of the TCT's located in the field did not have a TCT record held in the cross index.

276. Pulling lists for the TCT's not held in the cross index were produced and sent to the Registry of Deeds. Until the TCTs are pulled and investigated it is difficult to estimate how many TCTs held by the owners need to be reconstituted, but potentially a majority of the 784 TCTs not held in the cross index could be in need of reconstitution. From the field validation an additional area covering 5 CIMs was identified. This required a further one week field validation activity to visit the 110 parcels.

Analysis of the field validation data

277. A full analysis was not carried out on the field validation data as the cross index did not contain all the parcels for Holy Spirit. Also after the completion the office, where the base camp was set up, was renovated; during the renovations the documents held in the office were accidentally thrown out. To see if the field validation was successful three CIMs have been manually analysed, but the process was very time consuming. One of the CIMs analysed is CIM 14412104140 which covers part of the BF homes estate and only contains established parcels (ie no informal settlers). Therefore the parcel structure on the ground is the same as the registered plans shown on the CIM. BF Homes is a walled subdivision with guards on any roads which have access to the subdivision. There are two initial plans of subdivision on which the area is based (LRC)PSD 133230 and (LRC)PSD16317

278. BF Homes was the area where the 1st and 2nd Field Validation pilot activities took place. The Pilot studies occurred before office validation was carried out so that in

many instances the parcels being field validated did not return any additional information. Because the pilots were designed to help refine the field validation data collection technique there was less emphasis on having the office validation completed at that time. As the area in this CIM had been part of the pilots it had already yielded 5 TCTs from the field that were not yet captured in the cross index, of these only 1 TCT found contained information which was not known to the Assessors.

Seven folios were found in the latest field validation, 4 contained later TCT numbers that had been reconstituted, while the other three were already known.

There are 110 lot parcels and 16 road parcels which have no TCT information held in the database. When the assessor's data was captured it appears that a default value of 1996 was added to the evaluation year. From their data the following have been found:

- 31 parcels have no assessor's records;
- 4 Parcels have Names held against them but no TCT data;
- 70 parcels only show 1996 as the evaluation year;
    - 9 with no registration date;
    - 53 registered before the fire at the ROD;
    - 8 registered after the fire at the ROD;
- 4 parcels show 1997 as the evaluation year;
- 3 parcels show 1999 as the evaluation year;
- 1 parcel shows 2000 as the evaluation year; and
- 2 parcels show 2003 as the evaluation year.

279. The following table below shows all the TCT's for which there is no TCT record and the known Assessor's records from the data supplied by the assessor's.

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
2	32A		PSD-16-009098?						
3	31	7	(LRC)PSD133236	240748	12/15/1977	1996	SAME	REDIMERIO OSCAR C & CARMENCITA A REDIMER	17 ROMUALDEZ ST BF HOMES DIL QC
5	35	7	(LRC)PSD133236	19675	5/17/1991	1996	SAME	ONG TERENCE D	11 ESCARLATA ST DEL NACIA VILLE BANLAT Q
6	2		(LRA)PCS31452125						
7	3		(LRA)PCS31452125						
8	8	13	(LRC)PSD133236	178518	6/23/1972	1996	SAME	AGUNOD BENJAMIN R & MA LOURDES J AGUNOD	4-E OCAMPO ST BF HOMES QC
9	10	13	(LRC)PSD133236	168741		1996	SAME	BF HOMES INC	PLAZA CERVANTES MLA
13	13	13	(LRC)PSD133236	179112	7/14/1972	1996	SAME	PANGILINAN LUIS G & EFIGENIA P PANGILINA	47 BLDG 2 BHHP ZAMORA PANDACAN MLA
17	36	7	(LRC)PSD133236	225954	12/28/1976	1996	SAME	SACUPAYO PAQUITO	713 M DELOS SANTOS AVE QC
18	34	7	(LRC)PSD133236	168665	12/10/1996	1997	WILFREDO & SONIA CHUA	ORTEGA VICTOR SD & ARLENE DEL ROSARIO	9 ORTEGA ST BF HOMES QC
19	37	7	(LRC)PSD133236	264142	9/28/1990	1996	SAME	PACIS RENATO R ET AL	1 ORTEGA ST COR BRIONES ST BF HOMES QC
20	1B		PSD-00-044126						
23	14	13	(LRC)PSD133236	222340	12/2/1976	1996	SAME	TANLIOCO JUDITH A	942 P CAMPA SAMP MLA
24	15	13	(LRC)PSD133236	178501	6/23/1972	1996	SAME	SALE JESUS JR	BLK 13 LOT 15 BF HOMES QC

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
25	13B		PSD -00-007404-032539-D	193925	8/5/1998	1999	ARCELI MENDOZA	MENDOZA RAMON & TERESA B MENDOZA	28 BALER ST CR MENDOZA SFDM QC
28	16	13	(LRC)PSD133236	168747		1996	SAME	BF HOMES INC	PLAZA CERVANTES MLA
33	4	15	(LRC)PSD133236						
35	10	14	(LRC)PSD133236	18724	1/19/1990	1996	SAME	GALEMA FRANCISCO S M/TO CRISTINA B GALEM	8 N ROMUALDEZ BF HOMES QC
38	13	14	(LRC)PSD133236	352315	11/27/1986	1996	SAME	NATIVIDAD AUGUSTO C M/TO JOSEFINA NATIVI	DE OCAMPO ST BF HOMES QC
40	17	25	(LRC)PSD133236						
43	3	28	(LRC)PSD133236	219715	6/23/1976	1996	SAME	BF HOMES INCORPORATION	BF CONDOMINIUM BLDG MLA
46	15	25	(LRC)PSD133236	315061	5/22/1984	1996	SAME	JUCO WILFREDO S M/TO CARMELITA E JUCO	2225 A ALCADE ST GAGALANGIN TONDO MLA
47	17	14	(LRC)PSD133236						
51	6	15	(LRC)PSD133236	272278	9/30/1980	1996	SAME	DIMAISIP TERESITA G	2316 T EARNSHAW GAGALANGIN MANILA
54	3	16	(LRC)PSD133236						
55	7	16	(LRC)PSD133236						
61	18	14	(LRC)PSD133236						
64	4	28	(LRC)PSD133236	368450	9/24/1987	1996	SAME	PONFERRADA RODOLFO A M/TO THELMA A PONFE	L15 B41 LAGRO NOVALICHES QC
65	5	28	(LRC)PSD133236	216283	2/6/1976	1996	SAME	OLFATO MILAGROS M	517 CANELIA TDO MLA
66	6	28	(LRC)PSD133236	181013	10/6/1972	1996	SAME	LAVA MANUEL & SABINA LAVA	250 DON MARIANO MARCOS AVE QC

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
68	2	28	(LRC)PSD133236	176227	4/25/1972	1996	SAME	CABAMBAM BENITO C	281 E RODRIGUEZ ESPANA QC
69	36	27	(LRC)PSD133236	168815		1996	SAME	BF HOMES INC	PLAZA CERVANTES MLA
71	11	25	(LRC)PSD133236	245105	5/25/1978	1996	SAME	EDUARDO EDGAR G M/TO ARLITA A EDUARDO	12 MORDADO ST BF HOMES QC
76	2	16	(LRC)PSD133236	181756	11/14/1972	1996	SAME	ESPIRITU REBECKA	2 BRIONES ST BF HOMES
79	6	16	(LRC)PSD133236			1996	SAME	LIMOS BONIFACIO & ZENAIDA LIMOS	1-A F MANALO ST CUBAO QC
82	11	16	(LRC)PSD133236	179194	7/31/1972	1996	SAME	DEL PILAR JOSE M & EUFROSIDA H DEL PILAR	12 BULLETIN ST QC
83	14	15	(LRC)PSD133236	295107	12/23/1982	1996	SAME	PINEDA ERNESTO D M/TO DENISE B PINEDA	135 MATAHIMIK ST UP VILL QC
84	16	15	(LRC)PSD133236	233905	3/21/1977	1996	SAME	SISON ROMULO	542 HALCON MANDALUYONG MM
87	7	25	(LRC)PSD133236	180393	9/8/1972	1996	SAME	GUPIT FORTUNATO JR ET AL	83 EAST MAYA DR PHILAM LIFE HOMES QC
93	1	29	(LRC)PSD133236	24992	9/2/1997	1996	RENATO & ALICIA CAMPON	RURAL BANK OF MANGATAREM INC	POBLACION MANGATAREM PANGASINAN
94	2	29	(LRC)PSD133236						
104	37	17	(LRC)PSD133236	371940	2/20/1984	1996	SAME	CADIZ JOSEPH C	7 R NEPOMUCENO BF HOMES QC
105	35	17	(LRC)PSD133236	311939	2/23/1984	1996	SAME	CADIZ JOSEPH C	7 R NEPOMUCENO BF HOMES QC

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
110	25	17	(LRC)PSD133236	226393	1/6/1977	1996	SAME	SASON JOSE JR R	19 NEPOMUCENO ST BF HOMES QC
120	42	17	(LRC)PSD133236	104013		1996	SAME	VICENTE GAIL D	3 COOPER ST SFDM QC
122	1	25	(LRC)PSD133236	178326	6/19/1972	1996	SAME	DUPAYA MYRNA A	20 SANDIKO BF HOMES H SPIRIT QC
124	4	25	(LRC)PSD133236	196291	1/5/1974	1996	SAME	KU AURORA C	23 V SALAZAR BF HOMES QC
132	1	30	(LRC)PSD133236	36100	11/20/1992	1996	SAME	JAVIER DOMINADOR S M/TO MA CRISTINA JAVI	UNIT 5 LANDSDALE ARCADE TIMOG AVE QC
136	2	25	(LRC)PSD133236	359550	5/8/1987	1996	SAME	SUBONG ROGELIO E & NIEVA SUBONG	NO 29 DELGADO ST BF HOMES QC
138	18-A		(LRC)PSD-331905	159802	7/2/1996	1997	RUPERTO E & ESPERANZA D IGAYA	IGAYA ESPARANZA D ET AL	1-B ORTEGA ST BF HOMES QC
148	23	19	(LRC)PSD133236	265010	1/23/1980	1996	SAME	JIMENEZ RAMON J & THELMA VALENCERINA	69 GEN SAN MIGUEL ST CAL CITY
150	22	19	(LRC)PSD133236	282103	10/20/1981	1996	SAME	REYES ALFREDO S & ROSARIO REYES	STA RITA PARISH PHILAMLIFE HOMES QC
154	30	19	(LRC)PSD133236	196035	4/3/1974	1996	SAME	ASUNCION OSCAR	DONA RAMONA BF HOMES QC
155	32	19	(LRC)PSD133236	38666	5/17/1991	1999	TERESITA & JEROME ENDENCIA	LORENZO AGNES & HELEN LOPEZ GIMAO	2050 E LEGARDA ST QUIAPO MANILA
158	11	24	(LRC)PSD133236						
159	10	24	(LRC)PSD133236						

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
160	1		(LRC)PCS-15120	121147	11/14/1994	2003	BENABAYE EUGENIO	AGCAOILI NORBERTO R	20TH AVE CUBAO QC
161	1		(LRC)PCS-15120						
163	20	27	(LRC)PSD133236						
176	19	32	(LRC)PSD133236						
180	19	27	(LRC)PSD133236	226904	1/13/1977	1996	SAME	BASA ERLINDA I	129 MH DEL PILAR SFM QC
183	8	24	(LRC)PSD133236	243508	3/28/1978	1996	SAME	CINCO GLORIA	126 PREMIUM ST GSIS VILL QC
197	1	24	(LRC)PSD133236	N-234632	3/6/2002	2003	EULALIO & TERESITA DIAZ	BATTAD MARICHU DIAZ	2 SANDIKO CR DELGADO STS BF HOMES QC
198	3B		(LRC)PSD337106	RT-95431		1996	SAME	RANCES WILFREDO JR T & MA MILAGROS V JIM	72 RD SN MIGUEL HTS MARULAS VAL MM
212	9A		(LRC)PSD357421	163691		1997	SAME	DOMALAON ELEUTERIA	19 MATINO ST QC
213	11	30	(LRC)PSD133236	179064	7/14/1972	1996	SAME	FERNANDEZ ELISEO A & TERESA S FERNANDEZ	12 ROMERO BF HOMES QC
221	4	32	(LRC)PSD133236	227969	2/15/1977	1996	SAME	CARREON EDUARDO P	35 MONCADO BF HOMES QC
222	2	32	(LRC)PSD133236	179455	8/3/1972	1996	SAME	CARREON EDUARDO P & ESMERALDA P CARREON	510 B MAYON ST SMH QC
228	5	27	(LRC)PSD133236	293955	11/24/1982	1996	SAME	REYES JOJI I	97 MINDANAO AVE QC
230	33	21	(LRC)PSD133236	255956	5/8/1979	1996	SAME	AGUILAR JORGE & FLOR D AGUILAR	SAN ISIDRO NUEVA ECIJA
236	21	21	(LRC)PSD133236						

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
238	24	21	(LRC)PSD133236	254944	3/16/1979	1996	SAME	PASTOR ESTHER A ET AL	15 MAARALIN ST DILIMAN QC
239	26	21	(LRC)PSD133236	221670	8/24/1976	1996	SAME	DAYRIT ALMA	18 MATIPID ST SIKATUNA VILL QC
242	32	21	(LRC)PSD133236	194742	11/21/1973	1996	SAME	OCAMPO VICTORIAN M & VICTORIANO M OCAMPO	22 MONTEMAYOR DEL MONTE QC
244	9B		(LRC)PSD261058						
247	4	27	(LRC)PSD133236	168796		1996	SAME	BF HOMES INC	PLAZA CERVANTES MLA
248	1	32	(LRC)PSD133236						
249	3	32	(LRC)PSD133236			1996	SAME	G MASANGKAY & SONS	2559 J ABAD SANTOS AVE MLA
255	10	31	(LRC)PSD133236	320998	8/29/1984	1996	SAME	ORENDAIN FLORENCIO B & ROSARIO S ORENDAR	1 J ROMERO DONA ROMANA QC
256	11	31	(LRC)PSD133236	180850	9/28/1972	1996	SAME	ORENDAIN FLORENCIO B & RUBY ORENDAIN	27 SAN JOAQUIN ST SFDM QC
261	4	31	(LRC)PSD133236	RT-23863	9/14/1983	2000	LENE FLORENTINO / SAME	MUNSAYAC ROMULO S & CONCHITA F MUNSAYAC	10 MALAMIG ST TEACHERS VILL QC
267	3	33	(LRC)PSD133236						
270	10	33	(LRC)PSD133236	40808	8/14/1972	1999	BF HOMES	MANANGHAYA MARIO T & REMEDIOS C MANANGHA	183 D TUAZON STA MESA HTS QC
271	12	33	(LRC)PSD133236			1996	SAME	G MSANGKAY SONS	2559 J ABAD SANTOS AVE MLA
272	14	33	(LRC)PSD133236	178532	6/23/1972	1997	SAME	CABACUNGAN JUSTINIANO F ET	BF HOMES

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
								AL	
273	16B		PSD-00007404-021611-D	88493	6/15/1993	1996	SAME	ESPIRITU REYNALDO E M/TO LOVELLA T ESPIR	VILLA VICTORIA SAN FERNANDO PAMPANGA
274	16A		PSD-00007404-021611-D	88494	6/15/1993	1996	SAME	TORRES JOEL M M/TO MA VICTORIA F TORRES	9072 HORMIGA ST MAKATI MM
275	20	33	(LRC)PSD133236	334166	8/22/1985	1996	SAME	SY ZENON ELMER E & MA PERPETUA E SY	19 HONTIVEROS ST BF HOMES QC
278	24	33	(LRC)PSD133236	309234	1/4/1984	1996	SAME	ROXAS GLORIA B ET AL	671 B SERRANO MAND MM
281	25	33	(LRC)PSD133236	178502	6/23/1972	1996	SAME	REYES CELEDONIO N ET AL	20 DELGADO ST BF HOMES DILIMAN QC
283	21	33	(LRC)PSD133236						
292	4	33	(LRC)PSD133236	168873		1996	SAME	BF HOMES INC	PLAZA CERVANTES MLA
296	6	26	(LRC)PSD133236	215080	12/9/1975	1996	SAME	GARCIA BENJAMIN I M/TO NICENA B GARCIA	62 MONCADO ST BF HOMES QC
297	1	34	(LRC)PSD133236	336576	10/23/1985	1996	SAME	MARTINEZ MA LOURDES O	50 MATUTUM ST SMH QC
298	2	34	(LRC)PSD133236	224106	11/22/1976	1996	SAME	TIENG PETER C	48 B CABIGNAYAN QC
301	5	26	(LRC)PSD133236	301684	6/21/1983	1996	SAME	GAMILLA OFELIA E	5 S BENITO ST BF HOMES QC
304	11	23	(LRC)PSD133236	295702	1/12/1983	1996	SAME	ZAPANTA HERMAN U	20 RD 2 PROJ 6 QC
307	14	23	(LRC)PSD133236						
308	9A		(LRC)PSD261058	234931	4/27/1977	1996	SAME	YAP LUIS JR L	180 APO ST STA MESA HTS QC
313	1B		PSD-00007404-027262-D						

UPI	Lot	Block	Plan No	TCT (Assessors)	Reg Date	Evaluation Year	Payee Name	Owner's Name	Owner's Address
314	2	35	(LRC)PSD133236			1996	SAME	BF HOMES INC	PLAZA CERVANTES MANILA
315	3	35	(LRC)PSD133236						
321	9	35	(LRC)PSD133236						
323	2	36	(LRC)PSD133236						
324	18B-1		(LRC)PSD-331905						
340	18A		PSD-00007404-021611-D						
341	18B		PSD-00007404-021611-D						
342	1A		PSD-00-044126						
343	1C1		PSD-00-044126						
345	1C2		PSD-00-044126						
354	3A		(LRC)PSD-337106	351796	11/11/1986	1996	SAME	NERI REYNALDO C M/TO FREDESVINDA M NERI	E RODRIGUEZ ST LUKES MEDICAL CENTER
55A	7-A		LRC PSD-332822	340717	2/12/1986	1996	SAME	LAPITAN HARRY T M/TO JULIETA LAPITAN	18-D ANA MARIA ST SFDM QC
55B	7-B		LRC PSD-332822	340718	2/12/1986	1996	SAME	LAPITAN PILAR T	18-D ANA MARIA ST QC
55C	7-C		LRC PSD-332822	340719	2/12/1986	1996	SAME	LAPITAN PILAR T	18-D ANA MARIA ST QC
55D	7-D		LRC PSD-332822	340720	2/12/1986	1996	SAME	LAPITAN PILAR T	18-D ANA MARIA ST QC
55E	7-E		LRC-PSD-332822			1996	SAME	LAPITAN PILAR T	18-D ANA MARIA ST SFDM QC

280. When we add the results of the field validation to the keying from office validation a clearer picture of the area is shown. However what these statistics do not show is the break up between formal and informal areas. Also no TCTs had been captured for three new subdivisions that required the production of the smaller scale CIMs 14412104241, 14412104242 and 14412104243. This lowers the percentage of TCTs captured; however the table accurately reflects the situation at the time field validation was carried out.

Table 31: Analysis of Field Validation results

CIM No	Parcels	Parcels in cross index	TCT in cross Index	% of TCTs captured	Held in assessor's records only	No TCT or LGU records	Actual new records found in FV	Records found from FV database	FV forms captured
14412104130	8	0	0	0%			4	5	100
14412104134	178	155	157	88%				7	33
14412104140	202	103	94	47%	36	32	12	8	1
14412104143	11	10	10	91%	0	0	1	1	3
14412104230	180	78	81	45%				16	16
14412104240	108	39	30	28%				0	4
14412104241	46	0	0	0%				0	0
14412104242	8	0	0	0%				0	0
14412104243	212	0	0	0%				0	0
14412104244	65	12	12	18%				5	9
14412105130	34	90	90	265%*				46	105
14412105133	98	5	5	5%				70	71
14412105310	23	1	1	4%				0	36
14412105311	105	64	64	61%				49	49
14412105313	279	172	172	62%				191	194
14412104420	219	127	91	42%				18	33
14412104422	162	0	0	0%				126	131
14412104424	194	62	62	32%	84	31	28	161	179
14412104410	344	316	226	66%				9	10
14412104320	334	273	198	59%				27	30
14412104310	176	145	89	51%				17	18
14412104330	238	212	116	49%				6	20
14412104340	393	235	212	54%				12	92
14412104430	312	222	153	49%	105	35	42	91	93
14412104431	36	34	34	94%				0	0
14412104440	295	253	169	57%				170	171
14412104442	223	1	1	0%				206	206
14412105330	22	8	8	36%				1	1
14412105331	23	0	0	0%			23	23	22
14402104220	119	127	110	92%				0	11
14402104210	269	122	122	45%				0	48

CIM No	Parcels	Parcels in cross index	TCT in cross Index	% of TCTs captured	Held in assessor's records only	No TCT or LGU records	Actual new records found in FV	Records found from FV database	FV forms captured
14402104120	330	134	130	39%				0	35
14402104110	76	20	16	21%				0	138
14402104130	24	0	0	0%				46	46
14402104140	45	6	6	13%				0	0
14402104230	137	63	65	47%				0	0
14402104240	18	20	20	113%*				0	0
14402104410	8	6	6	75%				0	0
Totals after FV	**5570**	**3115**	**2312**	**42%**				**1311**	**2004**
Current Totals as at March 2004	**Not Known**	**6958**	**4795**	**69%**					

- These CIMs are having sections redrawn at a smaller scale, but the new CIM has not been completed and supplied, in the interim the parcels have been tied to the original CIM. The CIM unit were unable to supply the number of parcels on the current CIMs the totals after field validation were manually counted.

281. Prior to the field validation, Office validation had located approximately 42% of the TCTs in the Barangay, and if all the TCTs located, ie 1311, were added the percentage builds to 65%. To date the percentage has risen to 69% but it is difficult to determine if this is purely the result of field validation as the Assessor's have also been improving their data and a new update was supplied with extra data to be searched in the Registry. The improvement is none the less excellent and encouraging for the use of the process. However clearly further strategies will need to be looked at to increase this percentage.

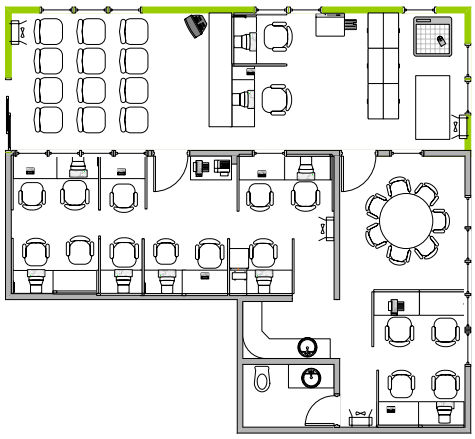
282. For the results that were manually tabulated it was found that where there is an Assessor's records that around 10% do not have details of the land tax payee. For the other 90% the next step will be to contact the last person who paid the LGU rates for the property, by using the address from the assessor's records to try and locate the registered owner. Other options are newspaper advertisements, banks/financial institutions, real estate brokers, NGO's and other organisations who store records. Then finally supplying a list of delinquent rate payers to the LGU to encourage them to take over the properties and sell them.

Field Validation using an NGO

283. Early in 2004 the NGO consortium headed by PHILSSA started the field validation activities for the other four Barangays. The CRS activities had began in late 2003 and all the enumerator training was finished before Christmas. Unfortunately the activities took place during the period when AusAID was deliberating over the extension contract and there was no TA support to the process. Some problems arose during this period the main one being problems with the laptops purchased by PHILSSA. As a result the capture of the field validation results did not occur in parallel with the field work. To date the difficulties that were encountered during that period by PHILSSA have prevented them from furnishing any results to PIO2.

One Stop Shop

284. The site for the OSS next to the new ROD in the LRA compound was renovated in late 2003. Unfortunately acquiring the funding to start the OSS operations has been held up by PMO and DENR processes. Early in 2004 the ROD started using the OSS building for issuing of certified copies of Titles and by March 2004 the acceptance of plans by DENR had been added.



The full OSS will eventually be located next to the ROD. The area, previously used by LARES, has been available since June 2002. The existing building will house the OSS representatives from the LGUs, LRA, BIR, DENR and ROD. The customer area and the reception area have been added to the existing building as part of the renovations.

285. The One Stop Shop (OSS) was included in the original design of the project. Since August 2001, when the prototype approached the Local Advisory Group (LAG) to seek there assistance in forming a Technical Working Group (TWG), there have been many activities. The agreements have been made with the agencies for the processes to be carried out, staff have been identified and trained and the additional PIO2 staff needed to support the OSS have been hired. The only thing holding the process up is the funding of the equipment.

286. The technical working group for the One Stop Shop (OSS-TWG) was formed in November 2001. The TWG is made up of representatives from the Bureau of Internal Revenue (BIR), the Department of Environment and Natural Resources–National Capital Region (DENR-NCR), Quezon City Local Government Group (LGU) Assessor's and Treasurer's offices, the Registry of Deeds (ROD) and the Land Registration Authority (LRA). Regular monthly meetings have been held with the TWG and numerous meetings with the agency heads to get agreement on the services to be provided in the One Stop Shop. The TWG were able to finalise the operations for the OSS and agreement has been reached with the agencies involved. A memorandum of agreement has been drafted and is awaiting sign off. Each agency has named the staff to be assigned to the OSS and they have been involved in the series of training workshops which have been held.

287. The initial OSS workshop was held in December 2001 to get agreement in principle to the process that the agencies would trial in the OSS. In June 2002 symposiums where held with, LRA, DENR-NCR, BIR and LGU Assessor's and Treasurer's

offices. The symposiums where to educate senior staff, of the agencies, about LAMP and the role their agency will be performing in the OSS. Since that time the agency heads have been regularly updated with the progress of the OSS development.

288. The first workshop, for the staff who will man the OSS, was on the expectations of the OSS from the public and to gather their expectations. This was held in September 2002 and this was followed up by a Change Management workshop in November of that year. A change management consultant was hired to facilitate the 2 day workshop and at the end of the process the staff had made a commitment to work towards making the OSS successful.

289. As PIO1 had been operating their OSS since early 2002 there was then a Cross visit study tour by the OSS-TWG to Leyte to look at its operations. The TWG looked at the lessons learnt in PIO1 and how it operated. After evaluating these they were able to come up with a set of recommendations not only for the OSS in Quezon City, but for a national strategy for setting up OSS.

290. In January 2003 the staff to be detailed to the OSS held their first simulation workshop. The workshop included all agency staff involved in the OSS, PIO2 staff and members from the NGOs involved in the prototype area. The processes were modified as a result of this workshop and a second simulation workshop was held in May 2003. This workshop trialled the amended procedures and was attended by the same participants as the first workshop plus the managers of the agencies who had supplied the staff for the OSS.

OSS Simulation workshop

291. In February 2003 a basic computer skills workshop was held for the staff detailed to the OSS. These staff will be using the Cross Index to locate the record within their agency and must be able to use a computer. This was followed up with OSS tracking and cross index training in June 2004.

292. In Late March early April 2003 a study tour to Australia and Thailand, attended by Managers and OSS TWG members. A study tour report was prepared with recommendations for long and short term that could be adopted.

Funding and Sustainability of the OSS

293. In the final quarter of 2003 PIO2 began talks with the Mayor's department at Quezon City. There were two areas that the prototype had hoped to get assistance from the Mayor for. The first was to assist in supplying funds to get the OSS operating in

absence of the funding from the World Bank which was tied up in government processing. The second was to talk about the prospect of the LGU taking over the operations of the OSS after the prototype office ceases operations in September 2004. A commitment for 1.5million pesos was made by the Mayor to the project, however due to many circumstances the money is yet to be delivered. The biggest problem being that PIO2 has no independent accounting division and must rely on the money being placed in a LAMP trust fund at DENR. The arrangements are nearly complete, however PIO2 is nervous leaving the money in control of PMO who have traditionally spent most of the allocations and passed little onto PIO2.

Fake Title Investigation

294. Fake Titles have been a major concern in the prototype area for a long period. Many of the problems have been amplified by the burning down of the Registry of Deeds in late 1988. Since then syndicates and unscrupulous individuals have been taking advantage of the confusion and the lack of understanding of the process in the community.

295. Patently fake or spurious certificates of title are those that have not gone through the process of registration or have not been duly issued and signed by the Register of Deeds. This includes the following:

- Certificates of title in fabricated or counterfeit title forms;
- Certificates of title in genuine title-forms but the signature of the Register of Deeds was forged;
- Certificates of title in genuine title-forms but issued and signed by an impostor or person not authorized by law;
- Fabricated or patently fake or spurious owner's duplicate certificates of title; and
- Fabricated or spurious original of the certificates of title.

296. Fraudulently issued certificates of title are those issued and signed by the Register of Deeds but their issuances are tainted with fraud or irregularity. These include the following:

- Genuine certificate of title with spurious or falsified Patent of the LMB or DENR (Land Sector);
- Genuine certificate of title with spurious or falsified court decision or order for the issuance of decree;
- Genuine certificate of title with spurious or deed of conveyance of the LMB or DENR (Land Sector);
- Genuine certificate of title with spurious or falsified survey plan;
- Genuine certificate of title with un-authorized alteration of the entries on the title;
- Genuine certificates of title covering inalienable parcel of land, such as government reservations, timberland, mineral lands, seas, lakes, rivers, streams, bays and other similar areas;
- Genuine certificate of title with spurious or falsified deed of conveyance;

- Genuine certificate of title covering parcel of land previously titled in the name of another person;
- Genuine certificate of title in the name of a foreigner not qualified to acquire land in the Philippines; and
- Genuine certificate of title with expanded area of land.

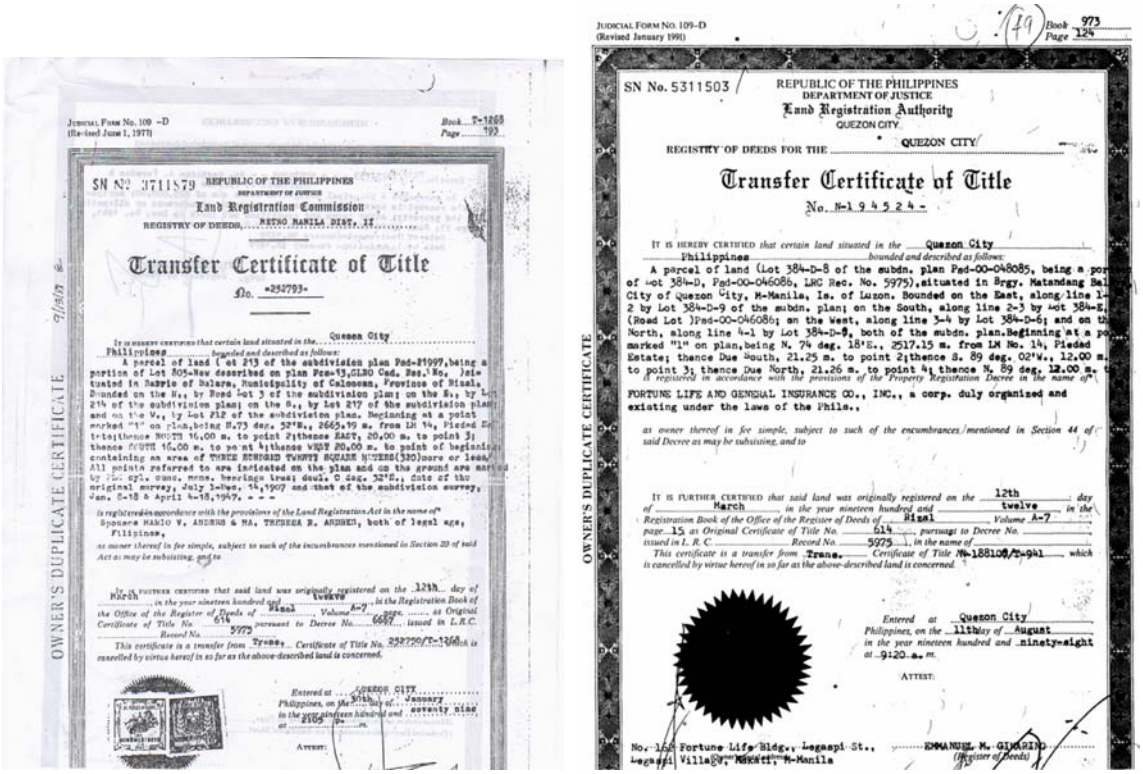
297. A major task of the prototype was also to bring together the various agencies involved in land and determine the procedures that they use in dealing with patently fake or spurious certificates of title. This process has been very slow moving, partly because of the large number of agencies involved and partly because of difficulties in getting a person from LRA to take charge of the process. The first workshop was not held until the start of the third quarter of 2002, seven months into the time that had been allocated. Two other workshops have since been held with government and the private sector involved in identifying and investigating fake and spurious titles. The first workshop in July 2002 was held with the government agencies involved and included the Land Registration Authority, the Registry of Deeds, the Land Management Bureau, the Philippines National Police; and the Solicitor Generals Office. The second workshop was held with the private sector and included Banks, NGO's, Estate Agents and members of the community. The third workshop was held in Tagaytay in April 2003 to review the documentation of the current procedures and to look at recommendations for improving the detection of fake and spurious titles.

298. It wasn't until mid 2003 that a Technical Working Group (TWG) was formed and work commenced reviewing the procedures and developing the requirements for a national approach. This committee is still in its early stages and after some initial difficulties is beginning to make progress. The LRA deputy administrator Atty. Feliciano has taken over the chairman and has an active interest in the operations of the TWG. The TWG has started drafting a MOA for sustaining its activities after the project ends in December 2004, which includes identifying rules and agreed terms of reference for the members.

299. The technical working group is working towards consolidate the procedures used in the various agencies into a national strategy. In the current system it is the usual practice to confiscate the fraudulent documents and to warn the offender that their activities are illegal. Often the case ends up in the draw of a registration officer and is not passed onto the PNP or the office of the solicitor general. When a combined strategy has been developed it will ensure that once a fraudulent title is found that all the appropriate agencies are informed and that steps are taken to apprehend and prosecute the offender

300. Fake records have also been identified in the field. The type of title produced and the degree of change made to a record depends on the skill of the forger and relies on either the ignorance of the buyer or a helper in the registry. TCTs are produced on a judicial form, over the years these have become more sophisticated to make the copying more difficult. Earlier judicial forms, as shown on the left in the example below, are far easier to forge than the later forms as shown on the right. The later forms are printed at the Central Bank of the Philippines the paper has many features that make it difficult to copy including a serial number that matches the number of the original record held in the ROD. However where the public are ignorant of the land transaction process and where records are held the selling of fake records is

made much easier. When a title can be sold or used to obtain payment for the right to live on the land without the buyer/occupier checking the original it makes it much easier to commit the fraud.



Transfer Certificate of Title

Land Registration Commission

Transfer Certificate of Title

Transfer Certificate of Title

301. In many informal areas owners are also issued rights certificates which they mistake for a right to live on the parcel. Many people are paying a monthly premium to a syndicate who have no mandate to issue the rights and use the ignorance of the land owner to their own benefits

Community Service Relations

302. For a full report on the CRS activities see the "Evaluation Report on PIO2 CRS/SD Procedures and Outputs from October 2003 – April 2004" report number E33". The CRS activities were one of the first activities introduced into the prototype area. PIO2 has maintained a high level of community involvement right throughout it's activities.

303. Despite the amount of success that is reported there are some fundamental questions still unanswered. What was really achieved by the Barangay Advocacy Group (BAG)? How successful were the CRS activities? And finally was the partnership with an Non Government Organisation (NGO) a success? While on the surface the BAG looks to be successful there has been no study carried out into whether the project just created another community committee, or a group who are helping educate the community and stop the operations of syndicates. From latest reports the BAG itself is now highly political with local groups trying to wrestle control of it and the members are showing little or no desire to be involved in the Community Based M&E, that would help measure its success. PHILSSA, the NGO with whom

PIO2 formed the partnership, is also avoiding supplying any data on the success of the CRS campaign, even though it was nearly 2/3rd of the contract cost.

304. A big question also remains on the recommended approach for the subsequent phases, the BAG was very time consuming and as yet no financial figures have been shown as to its cost, let alone the cost benefit. If the project continued in Quezon City they would need to form 143 BAGs, which is not a very viable strategy. These questions will need to be answered before the end of the first phase.