

BACK TO THE BARANGAY

Applying Rapid Appraisal & Problem Analysis Diagramming for a Project Pre-Feasibility Assessment: A Case Example ¹

Dr. Kenneth F. Smith, PMP

The Project ‘Life Cycle’ is a common Project Management concept, but *there is no universal standard of what it exactly consists*. Nevertheless, while institutions may differ and even quibble over the number, nomenclature and content of its **Phases** -- *for want of a more generic descriptive term* -- a common initial step during whatever you call the first Phase of your Cycle is what I’ll refer to here as a **Pre-feasibility Assessment**.²

A Pre-feasibility assessment is *essential* to avoid premature programming, because – *as the World Bank succinctly states* – “*some project ideas never make it past the early phase of identification; while others are reworked during the preparation and appraisal phases, and end up looking quite different from their original design.*”

Pre-feasibility assessments and Feasibility studies take many different forms, depending on the resources available and urgency of the situation, **but are usually quite limited in duration**.³ Somewhat analogous to a Grand Jury in a criminal case, **the process & purpose** of a pre-feasibility assessment is simply to visit the proposed project site; meet and discuss felt needs with some target beneficiaries and other stakeholders, and take a quick ‘*walk-about*’ to observe & determine **whether a more substantive study would be justified – technically and otherwise**.

However, whatever its composition, duration, and extent, an ADB ‘**Problem Analysis Diagram**’ (PAD)⁴ is a very useful graphic tool & technique for summarizing the pre-feasibility team’s **cause-effect and outcome findings & assumptions**; as well as effectively *visually communicating* its

¹ How to cite this work: Smith, K. F. (2023). BACK TO THE BARANGAY - Applying Rapid Appraisal & Problem Analysis Diagramming for a Project Pre-Feasibility Assessment: A Case Example, PM World Journal, Vol. XI, Issue V, May.

² The term **Pre-feasibility assessment** is usually for **infrastructure** projects. I’ve also encountered this step described as ‘*Rapid Reconnaissance*,’ ‘*Rapid Appraisal*,’ or ‘*Ground Truthing*.’ The Asian Development Bank (ADB) calls the process a ‘*Reconnaissance & Fact-Finding Mission*.’

³ Indeed, a wry comment by George Laudato -- *a former US Agency for International Development (USAID) colleague and program officer* -- when assigned to USAID’s Egyptian Mission in Cairo in 1998 was “*We don’t do feasibility studies. If it’s in the plan, we do it. If it’s not in the plan, we don’t do it!*” [I worked with George when I first went to the Philippines in the 1970’s.]

⁴ Also known as a USAID “*Problem-Solution-Results Tree*.”

conclusions to key stakeholders.⁵ Together with observations & any other issues for resolution, the **PAD** is the basis for a managerial **Go/No Go** decision to invest technical resources in a more comprehensive **Feasibility Study**.

If/when approved, the feasibility study will clarify -- *and where necessary correct* -- any pre-feasibility findings and issues; undertake detailed technical feasibility analysis; identify risks & assumptions, then recommend a project scope, components, deliverables and a preliminary estimated budget for management approval; prior to proceeding to the next Phase in the Project Cycle for project planning & detailed design.

Unable to sit still for long in my retirement chair, I recently donned my campaign hat and participated in a potential Development Project Pre-feasibility assessment. So rather than just talking about them *in the abstract*, I thought it might be instructive to ‘Show & Tell’ how at-least one such assessment was conducted, and the PAD developed.

Background

On 16 December 2021, Super Typhoon Odette brought torrential rains, violent winds, storm surges, landslides and unprecedented flooding -- wreaking destruction & devastation on infrastructure and personal property, as well as disorder & despair to the people living on the island of **Palawan**; before it exited the Philippines.

See map on following page

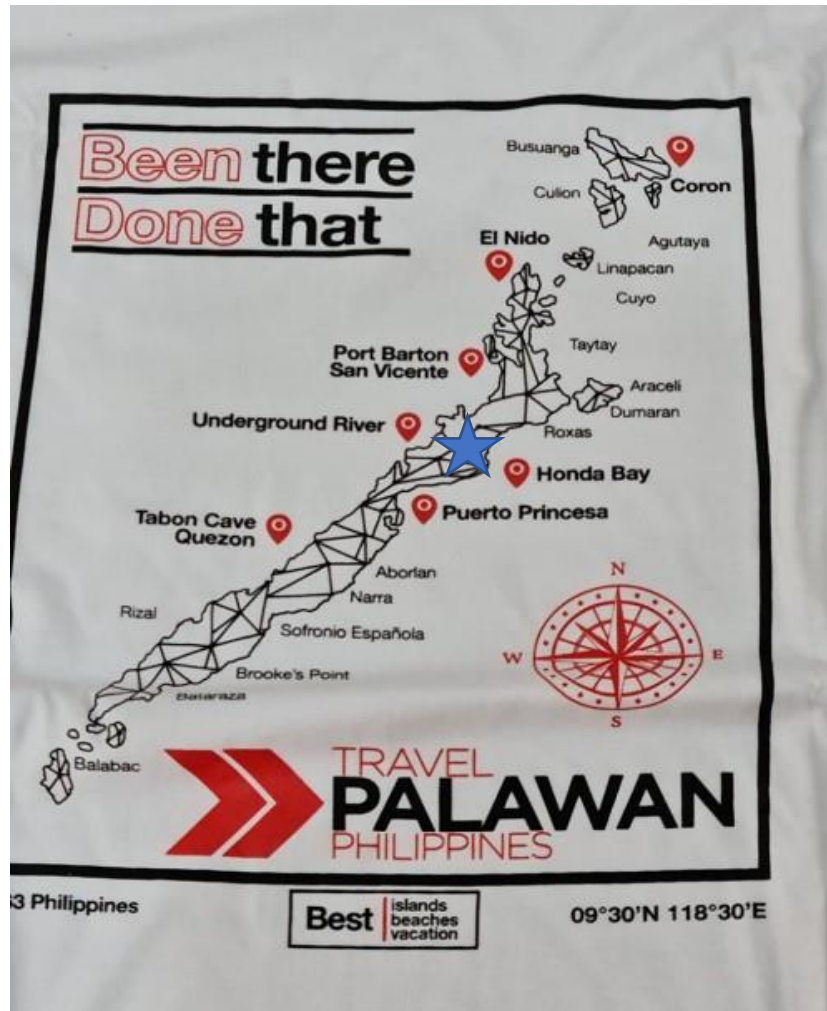
⁵ For a more comprehensive understanding of ADB’s **Problem Analysis Diagram**, See: “GUIDELINES FOR PREPARING AND USING A DESIGN AND MONITORING FRAMEWORK,” Asian Development Bank, pp. 27-30, October 2020

Figure 1



In addition to immediate disaster relief, and in consonance with its “*Living Stones*” theme, the **Episcopal/Anglican Diocese of the Central Philippines (EDCP)**⁶ rose to the challenge. During 2022, EDCP rapidly funded, planned, designed and– *with participation of the community* – replaced and rapidly built a completely new parish church in **barangay**⁷ **Babuyan** – an impoverished fishing community, just north of the Province capital of Puerto Princesa.

Figure 2



⁶ A Protestant Christian denomination -- *and community* -- in the predominantly Catholic Philippines.

⁷ Barangay (*pronounced baran guy*) = Village

In March 2023, I took a day -- together with several other Diocesan delegates -- to visit **Barangay Babuyan** to conduct a **Pre-feasibility “Ground Truthing”⁸ assessment.**

Figure 3



By providing **San Vicente Ferrer⁹ Church** as a spiritual place for worship, the Diocese attained its **prime Mission of *Enhancing the Community’s Spiritual Life*** in record time.

Figure 4



⁸ Also known in the Philippines as an “*Ocular Inspection.*”

⁹ **Patron Saint** of Construction workers, **Fishermen**, Plumbers and Prisoners.

However, it was readily apparent much more remained to be done in order to foster and restore the *vitality and viability of the parish* towards EDCP's longer *Community Sustainability Vision*.

We first received a briefing – *mostly in English* -- from Ms. Sandara, a community representative; then were introduced to several of the parishioners.

Figure 5



Then -- after a brief period for refreshment – we dispersed and ‘walked-about’ to explore **conditions in the barangay**. While taking photos to capture images that typified the situation, I made several observations along the way, with follow-up questions for a few residents; which were translated and expounded upon by my various companions.

Figure 6



Some other residents had to start over; but were able to ‘Build Back Better!’

Figure 7



Figure 8



Figure 9



Figure 10



NOTE the drop-off in the washed-out road, which limits vehicular access to the area where the church is located – about 150 meters further past the resident in the yellow shirt.

Figure 11

**Youth
Activities
Center**

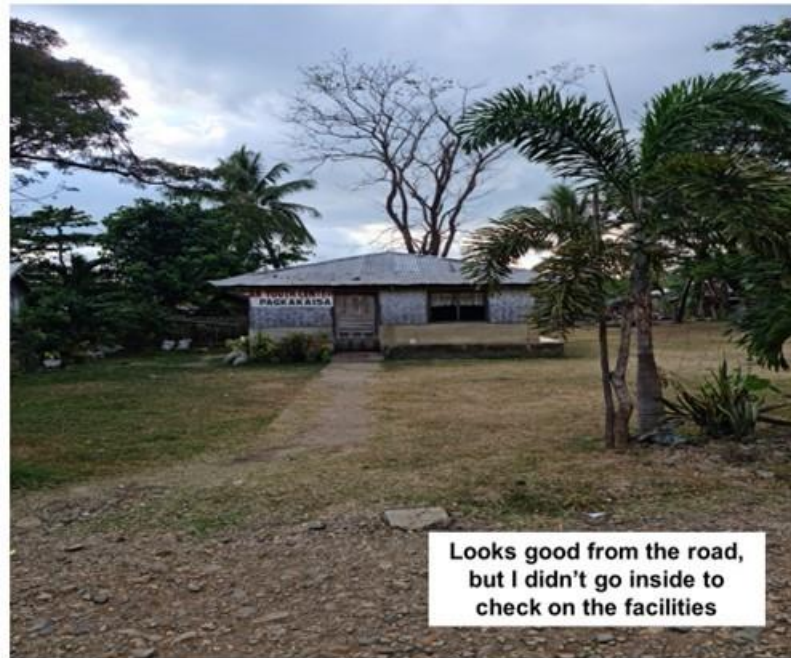


Figure 12



Figure 13



Figure 14



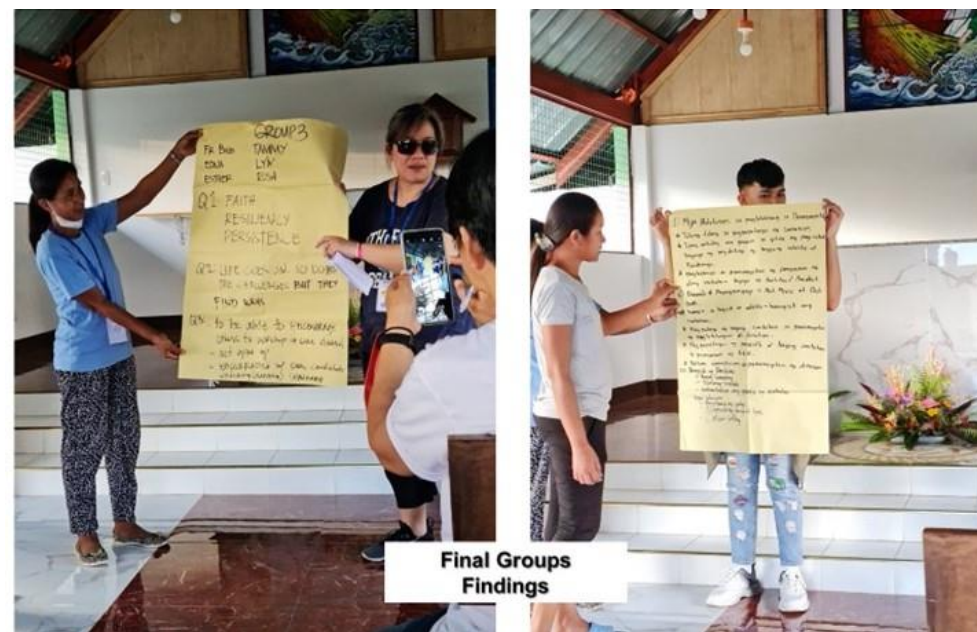
After our walk-about, we returned to the church, and broke up into small groups to discuss what we had individually observed, and gleaned.

Figure 15



Then each group presented their findings in plenary.

Figure 16



That concluded our Rapid Reconnaissance, and we returned to the capital.

Figure 17



**Leaving Babuyan's
 Barangay Road to
 rejoin the Highway
 and travel back to
 Puerto Princesa
 Poblacion**

Over the next couple of days, we discussed our findings, conclusions and recommendations further. I then undertook to summarizing and preparing our assessment report to present back in Manila to the Diocese, through my Church – The Holy Trinity. The core of the report was the series of **Problem Analysis Diagrams (PADs)**, as follows:

Figure 18



NOTE: The PADs were prepared in an animated power-point presentation format; so rather than being presented ‘*en masse*,’ the diagram was built up block by block to enhance comprehension.

Figure 19



Figure 20

TENTATIVE SUMMARY OF PROJECT DELIVERABLES & IMMEDIATE OBJECTIVES

- 1. Regeneration of Barangay Babuyan's Electrical Power**
- 2. Equipment & Supplies to Support Income Generation**
- 3. Construction of Barangay Road and Basketball Court**
- 4. Equipment & Supplies for Recreation and Education**

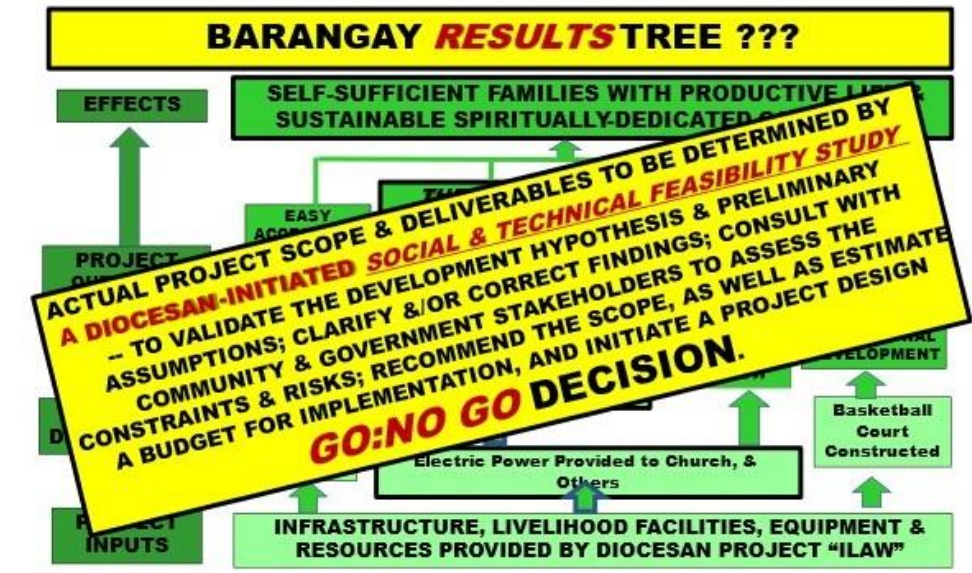
Thereby Enhancing the Capacity of its Residents to Resume & Revitalize their Livelihood Endeavors; Enabling them to Engage in Purposeful Community Social & Religious Activities

FOR PARISH SUSTAINABILITY TO THE ULTIMATE GLORY OF GOD

Goal Completed!
Mission Completed!
Vision Achieved!

However, the Solution Tree with its Tentative Deliverables still needs to be ‘Pruned’ &/or ‘grafted’ by a follow-on full-blown Feasibility Study to form a ‘Results’ Project tree¹⁰ for subsequent planning & detailed design.

Figure 21



The Feasibility Study should also take into consideration the following issues & concerns already identified by the Pre-Feasibility Assessment delegates:

ISSUES FROM PRE-FEASIBILITY ‘GROUND TRUTHING’ FOR VERIFICATION &/OR CLARIFICATION

1. **TARGET BENEFICIARY POPULATION:** The Church has an approximately 30 seat capacity – although the seating is moveable; however, it was unclear what the actual demand utilization is now, or anticipated in the future. I was unsure whether the San Vicente church serves only the Babuyan Barangay, or a larger catchment area including other nearby barangays.
2. I was informed that the Babuyan population consisted of approximately 1,000 families (or about 5,000 individuals). However a rough estimate in the limited area we visited only conceivably encompassed about 50 families – *so is much closer to my previous (and admittedly outdated) field experience of about 100 families (around 1,000 individuals – mostly children) per barangay. [31 years ago, I worked in Palawan for 6 months on a Provincial Integrated Area Development Project under an ADB Contract.]*

¹⁰ The starting point for a Project **Work Breakdown Structure**

3. **TARGET BENEFICIARY POPULATION LIVELIHOOD:** Although the Barangay is named Babuyan – i.e. Piggery – no pig pens, boar, baboy or biik (*i.e. male pigs -- for breeding --, hogs for slaughter & marketing, or next-cycle piglets*) were in evidence in my limited walk-around. I was informed the barangay was previously in the pig business, but its prime livelihood now is sea fishing.

Again, I'm unsure how recently the 'sea change' occurred; whether piggery activities were destroyed by the typhoon, or abandoned for other reasons (possibly *Asian Swine Flu*). In any event, is it feasible & desirable to reinstitute such a livelihood activity now? (Years ago, 'pig-chain' promotion was a USAID rural small-business enterprise program, with technical assistance from the Bureau of Animal Industry.)

4. **TARGET BENEFICIARY POPULATION LIVELIHOOD:** The Sea-Fishing activities obviously suffered major devastation – from many sunken boats, boats damaged beyond repair, and loss of fishing equipment and tackle, which has curtailed catch capabilities and concomitantly reduced catch capacity. However, we were uncertain of the size of the catch, customer market potential, and utilization of the catch – *i.e. whether it is now primarily subsistence for the barangay, or indeed surplus to immediate needs -- for marketing*. Moreover, hitherto, excess catch was only sundried.

If the catch is indeed sizable and there is a market for selling the excess, an equipped deep freeze storage facility (*with generator, or tapped into an external power source*) would significantly improve fishing folks income. Scope & Requirements remain to be explored.

5. **ELECTRICITY POWER SOURCE: The immediate responsibility of the Diocese was providing electric power for the Church,** and -- *collaterally* -- **highly desirable to make it available to the entire barangay.** Some residents already had power, so there may also be technical issues with the church hookup. Possible technical options are 1) to run cables from the existing source near the village store; 2) Tapping into the nearest household with power, and reimbursing the householder for usage; 3) purchasing and locating a generator near the church, 4) solar power, &/or some combination for backup.

Each of these alternatives has its own advantages, and drawbacks. Continuous payment for electricity from the utility service provider, based on usage levels; plus reported frequent power outages in the area raises affordability & sustainability issues. Purchasing fuel and a generator appears more reliable. However, solar power is also a distinct possibility; although the initial cost would be considerably higher. [There are some groups that already do this.] All options require technical assessment.

6. **EQUIPPING the Church:** There is a need to provide 1) items on the Altar, which are important for worship, 2) Musical instruments -- such as a keyboard, guitar, drums, etc. 3) Electronic sound system – amplifier, microphones, speakers, 4) Prayer books, Hymnals and Materials for Church service, Sunday school and children ministry, and general education.

7. **UTILIZATION of the Church building:** Located as an isolated elegant and pristine edifice, amidst rural barangay housing with sawali,¹¹ cinder block or concrete-plastered walls, and nipa¹² or corrugated ‘tin’ roofing; and only occupied briefly on Sundays seems very incongruous. Whether the church could also serve as a multi-purpose building for other community activities seems a pragmatic solution. [*The "barangay community hall" is a small bamboo shanty behind the church, that could accommodate only about half-a-dozen, seated. Presumably during meetings, others squatted outside in the space where the church is now located!*]

However, doing so would violate most religious 'sacred house' concerns and ethics. Nevertheless, we used it for our small discussion groups, and while we were in Puerto Princesa, St. Matthews Church was also used *in a casual manner* for meeting, greeting and orientation; with morning & evening meals on arrival, and return from our field trip.

An alternate solution would be to demolish the present community shanty, and erect a general purpose structure for community activities.

This issue should be discussed with the Palawan ministry, but probably best left to the community for resolution.

8. **BARANGAY ROAD REHABILITATION:** Access to and from the main highway – especially for small vehicles -- is currently impaired by the poor road quality, especially a major fracture in the roadbed with a half-meter drop¹³ near the village store where the road branches to the church area. We were informed Barangay road construction is a Provincial government responsibility, and it is in the provincial development plan.

Nevertheless, from past experiences with government-funded rural projects, and widespread need, the prospect for implementation in the foreseeable future is highly unlikely. Consequently, while this element in the plan may be very expensive, like Electrification, *it is a priority* and should be explored from the technical, social need & benefit/cost aspects.

¹¹ Sawali is a coarse twilled matting of flattened bamboo strips

¹² Nipa is thatch made of leaves of the nipa palm

¹³ Having previously lived and worked in the rural Philippines for many years, I am accustomed to seeing poor conditions that barangay residents endure on a daily basis, that would shock individuals from developed countries.

In as much as the *central thrust* of this proposed Project is provision of electricity for the Church and surrounding area, we dubbed it '*PROJECT¹⁴ ILAW¹⁵*'

In conclusion, I hope this article has provided a better awareness of the first step in the **Project Cycle**; and the case study has enhanced understanding of **Problem Analysis Diagrams (PADs)** and their invaluable contribution visualizing **Project Pre-Feasibility Assessment** findings and recommendations; as well as identifying issues for resolution with an *in-depth* follow-on Study.

STOP PRESS: *The Vestry just approved initiating a Feasibility Study! However, since this is an on-going Church-initiated project proposal -- rather than government funding -- subsequent steps to determine the project's eventual scope for this impoverished community, and its eventual implementation will depend entirely upon voluntary donations.*

Donations in any amount would be appreciated, payable to the Episcopal Church of the Holy Trinity, Makati, Philippines

www.holytrinity.ph

as follows:

Bank Name: Bank of the Philippine Islands (BPI)

Bank Address: Ayala Ave, Makati City

Account Number: 0291 0401 52

Purpose: Project Ilaw

Fund transfer from foreign banks: SWIFT Code: BOPIPHMM

Thank you!



¹⁴ **NOTE:** While all the items proposed herein – and possibly others yet to surface -- contribute to the overall *Vision of community sustainability*, the potential '**Project**' is comprised of several disparate, stand-alone components or **sub-projects**. Thus, some institutions would call it a *Program*, with separate **Projects**.

¹⁵ **Ilaw** (pronounced *EE LAUW* -- as in *HOW*) = Light.

About the Author



Dr. Kenneth Smith

Honolulu, Hawaii
& Manila, The Philippines



Initially a US Civil Service Management Intern, then a management analyst & systems specialist with the US Defense Department, Ken subsequently had a career as a senior foreign service officer -- management & evaluation specialist, project manager, and in-house facilitator/trainer -- with the US Agency for International Development (USAID). Ken assisted host country governments in many countries to plan, monitor and evaluate projects in various technical sectors; working ‘hands-on’ with their officers as well as other USAID personnel, contractors and NGOs. Intermittently, he was also a team leader &/or team member to conduct project, program & and country-level portfolio analyses and evaluations.

Concurrently, Ken had an active dual career as Air Force ready-reservist in Asia (Japan, Korea, Vietnam, Thailand, Indonesia, Philippines) as well as the Washington D.C. area; was Chairman of a Congressional Services Academy Advisory Board (SAAB); and had additional duties as an Air Force Academy Liaison Officer. He retired as a ‘bird’ colonel.

After retirement from USAID, Ken was a project management consultant for ADB, the World Bank, UNDP and USAID.

He earned his DPA (Doctor of Public Administration) from the George Mason University (GMU) in Virginia, his MS from Massachusetts Institute of Technology (MIT Systems Analysis Fellow, Center for Advanced Engineering Study), and BA & MA degrees in Government & International Relations from the University of Connecticut (UCONN). A long-time member of the Project Management Institute (PMI) and IPMA-USA, Ken is a Certified Project Management Professional (PMP®) and a member of the PMI®-Honolulu and Philippines Chapters.

Ken’s book -- **Project Management PRAXIS** (available from Amazon) -- includes many innovative project management tools & techniques; and describes a “**Toolkit**” of related templates available directly from him at kenfsmith@aol.com on proof of purchase of PRAXIS.