

Performance Assessment of Multi-Objective Projects and Programs ^{1, 2}

Dr. Kenneth F. Smith, PMP

In last month's "On the Average" article³ I presented a better indicator – *IMO* -- for assessing the performance of projects⁴ having a **single Objective (i.e. Purpose or Outcome⁵)** as well as a 'quick & easy' template to facilitate computation of their outcome. This month my assessment scope is broadened to assessing the performance of projects as well as programs with **multiple Objectives**.

Despite frequent admonitions by managers to focus on a **specific** objective, invariably corporate and government officials try to cram **multiple** objectives into their ventures in order to make them more 'robust' and appealing to potential stakeholders. Given a lack of resources, ambitious private sector undertakings are often delimited to 'priority needs;' but government projects and programs are less constrained. Indeed, in the public sector almost everything is deemed a high priority by one or more special interest groups. Constituent stakeholder desires are then spurred by politicians who promise to fulfill their 'wants;' either through regular appropriations or 'pork barrel' funding, replete with *quid pro quo* negotiations for votes &/or other favors. As a consequence, many necessary or highly desirable public programs & projects are encumbered; adorned like Christmas trees, with collateral –*sometimes even conflicting* -- objectives for various target beneficiaries; leaving hapless project managers to 'Carry On' with all their complexities, and deal with the dilemma as best they can.

Like it or not, this is the reality. Thus, assessing whether 'agreed-to quality' products were delivered "on time" and "on budget," as well as achieving a pre-determined *single sector target* is

¹ How to cite this article: Smith, K. F. (2023). Performance Assessment of Multi-Objective Projects and Programs, *PM World Journal*, Vol. XII, Issue IX, September.

² Editor's note: This advisory article and the example used by Dr. Smith is directly related to an emerging and potentially serious public crisis in The Philippines, exactly as described in the article. Most public programs necessarily must address the needs and priorities of multiple stakeholders. For example, the availability and price of rice in The Philippines and many other Asian countries affect farmers, distributors, traders, markets, consumers, economies, politics and even national security. Ken describes a tool to help manage such programs.

³ Smith, K.F. (2023). A Better Indicator for Targeting & Measuring Performance "ON THE AVERAGE", *PM World Journal*, Vol. XII, Issue VIII, August

⁴ Better, compared to the usual utilization of averages and percentages.

⁵ Generically, "In business, an *objective* refers to the specific steps a company will take to achieve a desired result." Source: *Market Business News*.] AKA the **Logical Framework "Purpose"** in project management terminology; or an "**Outcome**" in the **Asian Development Bank's Design & Monitoring Framework (DMF)**.

inadequate. Evaluation of the extent to which the plethora of program or project objectives – *each with differing priorities &/or target levels* -- were attained, *is also necessary*. Ideally, those objectives, with their respective indicators and target levels should have been identified at the outset in a logical framework⁶ – i.e. during the planning stage. If not, it behooves the project manager to identify them as soon as possible during implementation – *in addition to the means for capturing the relevant data* -- because even though accomplishment may lay beyond his/her managerial interest, control, and tenure, the project manager will be held accountable for achieving them by the court of public opinion!

A Contemporary Case in Point: In the Philippines, **rice** is the staple food and nation-wide food crop, so its *ready-availability* and at *reasonable prices* are prime social, economic and political benchmarks. Shortcoming in either indicator is a potentially volatile political flashpoint. Thus, just recently -- *during July 2023* -- in conjunction with back-to-back typhoons Egay & Falcon, President Ferdinand Marcos Jr.⁷ ordered officials in all adversely-affected local government units to submit detailed reports on the damage to agriculture, so the national government could address the needs in their jurisdictions -- *particularly of rice farmers*.⁸ Concurrently, despite evident widespread devastation, a ranking Department of Agriculture (DA) official assured the public that sufficient national government rice stock was on hand to weather the storms; and averred the government was still targeting to bring down the prevailing inflationary rice market price -- *currently fluctuating between 44 and 60 pesos/kilo* – although the 20 pesos promised by President Marcos during his 2022 election campaign was not likely. Faced with impending curtailments of both locally-produced and imported rice⁹ -- with concomitant price increases to consumers -- the Agriculture Department is now gearing up to take mitigating action; and possibly even a national ‘masagana’ rice production program for the ensuing season; somewhat reminiscent of the highly successful **Masagana 99 Program**¹⁰ launched by the President’s father 50 years ago.

⁶ Smith, K. F. (2021). Managing Project & Strategic Objectives with Logframe Analysis and the Logical Framework, *PM World Journal*, Vol. X, Issue IV, April

⁷ *Colloquially known as BBM -- Bong-Bong Marcos*

⁸ Fortunately, the typhoons hit right after the rice harvest, and standing crops were still in the early stages, for harvesting late September through December. Nevertheless, immediate -- and continuing -- reports were that damage was extensive and crop losses were severe.

⁹ India recently announced a ban on white rice exports, while the Thai government is encouraging their farmers to plant less rice in the future in order to save water; both former sources of imports. This leaves Vietnam as the Philippines remaining major source for limited importations, but at the risk of surging global prices.

¹⁰ The Masagana 99 – *bountiful harvest* – rice production program was launched in 1973 to avert a national crisis when a series of typhoons battered Central Luzon (the nation’s “Rice Bowl”) in July & August 1972; followed by drought and tungro disease which destroyed almost all subsequently-replanted rice crops. At an average of 84 cavans/hectare, Masagana **fell 15% short of its 99 ca/ha target** during its first year. Nevertheless, that was a **significant 133% improvement over the baseline** of only 36 ca/ha, and staved off nationwide starvation; a feat acknowledged as an unprecedented success for a government-managed program. [By 1976 -- *when I completed my tour of duty with USAID in the Philippines* -- the country even emerged from being a deficit rice-producing nation, to actually exporting its surplus rice crop to other countries in Asia; and continued doing so on a sustained basis for almost

In any event, Government action is needed immediately to assist local farmers preserve, harvest and sell standing crops; as well as to supplement national government rice stocks by purchasing locally-grown rice and importing directly for resale at some stabilized level in the future. Unfortunately, the issue is much more complex than simply increasing availability.

Government interventions to boost supplies and simultaneously lower costs -- *while beneficial to consumers* – encounter market dynamics which tend to depress local farm-gate prices – sometimes even below the break-even cost of production¹¹ -- dampening farmers incentives to produce in the future unless production &/or farm-gate sales are heavily subsidized. Government importation further exacerbates the countervailing perspectives of local farmers vs private sector importer interest groups. Commercial imports increase consumer prices -- *despite government attempts to control or regulate market supply and price levels by intermittently releasing government stocks*. Further confounding the complexity, recent raids conducted in Central Luzon by the Bureau of Customs discovered thousands of previously-unbeknown hoarded or smuggled sacks of rice stored in warehouses; some repackaged for resale as locally-produced product!

There are no easy solutions to this dilemma – and I certainly don't pretend to have the answers!

In truth, this is an enduring prime national political, social and economic issue which necessitates extensive strategic-level brainstorming by the government with representative stakeholders of the prevailing perspectives. A Think Tank-type conference utilizing a **Theory of Change (ToC)** approach to identify, examine and trace the cause-and-effect interrelations, vortexes and positive & negative vicious cycles¹² would be ideal – *more likely unrealistic* -- as agreement would be necessary for all parties to accept and adopt ameliorated outcomes. Short of that, unfortunately, contentious stakeholders will continue striving to implement actions that attain the outcomes they perceive are in their best interest.

a decade thereafter.] ***But nothing lasts forever!*** Moreover, **although both national production and individual farm rice productivity were significantly increased, other desirable collateral objectives – such as increased small farm incomes -- were not attained.**

Moreover, the supporting bank loan project -- to assist farmers procure inputs such as fertilizer and pesticides - - was an epic failure with widespread defaults; resulting in individual bankruptcies, as well as collapse of the rural banking business sector! [For more information and detail on the Masagana program, see my doctoral dissertation “*Determinants of Success in the Design & Institutionalization of Management Information Systems for Development Administration (DMIS): Lessons from the Philippine “Masagana 99” Experience.*” [An empirical direct participatory four-year involvement, and follow-up field case study] George Mason University (GMU), Fairfax, Virginia. 1988.]

¹¹ *Apropos* of an apt comment -- attributed to former US President Kennedy -- that *the small farmer is the only businessman who purchases all his inputs at retail, sells all his products at wholesale, and pays the freight both ways!*

¹² Or, as William Shakespeare so eloquently expressed it through Polonius in Hamlet, Act 2, Scene 2: “*Find out the cause of this effect, or rather say the cause of this defect. For this effect, defective comes, by cause.*”

Nevertheless, rather than impractically pontificating on the sidelines, **I do have a small something to contribute to the process.**

Given diverse crosscurrents to distill, a ‘**lesson learned**’ from Masagana was what stakeholders desired should be targeted, measured, ***then closely monitored and harmoniously managed by the government -- to the extent feasible*** – rather than ***focusing on the prime objective and expecting the collateral outcomes to evolve concurrently.***

Applying that lesson -- *for whatever it may be worth* -- I created a template that could assist a program manager establish disparate multiple project & program objective targets -- for systematic monitoring, and integrated after-action assessment.

The template utilizes the “***At Least***” indicator highlighted in my previous article, plus two others I have found useful in the past: “***Percentage Improvement over the Baseline***” and “***Thai Scale.***”¹³ As exemplified by Masagana’s production increases, ***improvement over the baseline is often a much more impressive achievement than is indicated by the customary emphasis on failure to achieve a target***; particularly if the target was set unrealistically high; while a five-point ***Thai scale – from 1 low to 5 high*** -- reflects overall integrated performance based on a ‘normal’ distribution curve.

The template is illustrated in Figure 1 on the following page.

¹³ Smith, K. F. (2021). Assessing Program & Project Performance with the ‘THAI-SCALE’ Technique & Template, *PM World Journal*, Vol. X, Issue XII, December

Figure 1

PROJECT / PROGRAM MULTI-OBJECTIVE PERFORMANCE RATING ASSESSMENT									
INDICATORS SHOW PERFORMANCE FROM VARIOUS PERSPECTIVES. SELECT THE MOST SUITABLE INDICATOR TO SUPPORT YOUR POINT OF VIEW									
ACHIEVEMENT LEVEL ON A 5 POINT SCALE, LOW TO HIGH			PROJECT / PROGRAM NAME:			"AT LEAST" ACHIEVEMENT			
Rating Scale below indicates SUBJECTIVE levels of achievement on each of the Project's or Program's following Objectives:			ANALYSIS OF PROJECT / PROGRAM TEAM'S ASSESSMENT			# of OBJECTIVES	% of OBJECTIVES		
			1.00	BASELINE MIN	2.00	POST MINIMUM	ACHIEVING or EXCEEDING the TARGET		
			3.00 BASELINE MAX		5.00 POST MAXIMUM				
1	UNSATISFACTORY	OBJECTIVE NOT MET	2.05	AVERAGE	3.80	AVERAGE	15		
2	PARTLY SATISFACTORY	OBJECTIVE PARTLY MET	0.33	ESD STD DEV	0.50	ESD STD DEV	75%		
			0.67	2 STD DEVS	1.00	2 STD DEVS			
3	SATISFACTORY	OBJECTIVE MOSTLY MET	2 STDEV LO to HI RANGE		2 STDEV LO to HI RANGE				
			1.38	2.72	2.80	4.80	1 - 5 THAI SCALE		
4	HIGHLY SATISFACTORY	OBJECTIVE FULLY MET	STATISTICALLY-SIGNIFICANT DIFFERENCE			Achievement vs TARGET =	3		
			NOTE: Although constructed for a 1 to 5 rating scale, this template can also be used with ANY Numerical or Percentage Range.						
5	OUTSTANDING	OBJECTIVE EXCEEDED	Baseline	Achievement	Target Avg	Plan ESD	Achievement ESD		
			2.05	3.80	3.90	0.31	-0.32		
ENTER UP TO 20 OBJECTIVES TO BE RATED. IMPORTANT: ENSURE ALL NON-RATED ROWS ARE BLANK. [DO NOT ENTER 0's OR DATA WILL BE DISTORTED.]			# of OBJECTIVES Rated	BASELINE LEVELS	POST PROJECT LEVELS	TARGET LEVELS	PERCENT OF TARGET	% OVER BASELINE	# ACHIEVING or EXCEEDING the TARGET
			20	1 - 5	1 - 5	1 - 5	Post / Target	Post / Base	
1			3	4	4	100%	33%	1	
2			3	2	4	50%	-33%		
3			1	3	3	100%	200%	1	
4			1	2	4	50%	100%		
5			1	4	4	100%	300%	1	
6			1	2	4	50%	100%		
7			2	3	3	100%	50%	1	
8			3	5	4	125%	67%	1	
9			3	4	4	100%	33%	1	
10			3	5	5	100%	67%	1	
11			3	2	3	67%	-33%		
12			3	5	4	125%	67%	1	
13			1	4	4	100%	300%	1	
14			1	5	4	125%	400%	1	
15			3	5	3	167%	67%	1	
16			1	5	5	100%	400%	1	
17			2	3	4	75%	50%		
18			3	4	4	100%	33%	1	
19			1	5	4	125%	400%	1	
20			2	4	4	100%	100%	1	
© 2023 Dr. Kenneth F. Smith, PMP kenfsmith@aol.com			AVERAGE	2.05	3.80	POST PROJECT OBJECTIVES EQUAL TO OR GREATER THAN AVG TARGET			
			MINIMUM	1	2	AVG TARGET	# OBJECTIVES	Number (#) =	15
			MAXIMUM	3	5	3.90	20	Percent (%) =	75.00%

As always, this template -- as well as many others to facilitate program and project planning, monitoring and evaluation – is available from me for free, on proof of purchase of my book Project Management PRAXIS (available from Amazon).

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, 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.

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