

Applied Transformational Strategies of Clark Air Base (CAB) as a Model for Global Property Management- Economic Zone Development (PM-EZD) and Investments

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Abstract - This research study identifies and evaluates the strategies applied in the transformation of Clark Air Base ("CAB") in the Philippines, once the biggest air base outside of the United States (US) into a financially viable and competitive global Property Management -Economic Zone Development ("PM-EZD") in order to derive insights for a template for overseas bases facing closure. Capitalizing on its locational advantages as military base (strategic location, land availability and suitability, infrastructure development), CAB used the strategies of ease of doing business, zone administration and management, competent work force, cost doing business, investment incentives and political stability to further enhance its competitiveness. Multiple Regression Analysis results showed that competent work force and cost of doing business registered high relationships with investments generated; zone administration and management and ease of doing business, moderate while investment incentives, weak. Sequential Equation Model ("SEM") results point to the effectiveness of ease of doing business (-.000); zone administration (.0007); work force (-.016); Infrastructure Development (-.016) cost of doing business (-.024) and investment incentives (-.0.29).. Confirmatory Factor Analysis showed the following results: Work Force (0.948); Ease of Doing Business (0.94); Zone Administration and management (0.911); Political Stability (0.861); and Investment Incentives (0.818).

Keywords: Military Bases, Transformational Strategies, Global Property Market- Economic Zone Development, Investment Location

1 INTRODUCTION

In 1991, the Philippines faced a serious problem of the closure of the United States (US) bases in the country. After almost a century, the U.S. was getting ready to leave as a result of the rejection by the Philippine Senate of the bases treaty. Several studies that came out at the time indicated that the abandonment of the bases would bring about economic and social dislocations (Lindsey C. 1989; Foreign Broadcast Information Service-East Asian Service, 1988). The critical situation was summed up by then Secretary of Defense Dick Cheney when he commented that the closure of the bases would be "a real tragedy for the Philippines."¹

Among the bases scheduled to be closed was the Clark Air Base (CAB). The problem was aggravated by the eruption of Mount Pinatubo (after 600 years of dormancy), which is only four miles to the west of CAB. The resulting damages on the facilities from tons of ash and mud, which would have required a rebuilding cost of US \$500 million, forced the premature departure of the Americans.

Yet, approximately 20 years later, CAB successfully transformed itself into a model global economic zone. It overcame the challenge of beating "swords into plowshares and spears into pruning hooks" (Isaiah 2:14). It has now become a finan-

cially viable undertaking that is recognized both locally and internationally for its outstanding performance.

2 THE PROBLEM AND THE BACKGROUND

Today, the rationale of maintaining the remaining U.S. overseas military bases is being seriously assessed. Firstly, the resultant capabilities and powers of superior advances in technology and space science on military software and hardware cast doubts on the effectiveness of military installations, especially those occupying relatively large areas. Secondly, decentralized, flexible and mobile networks are believed to be more effective deterrents against current security challenges, particularly possible terroristic attacks. Thirdly, the costs of maintaining overseas bases continue to spiral. Undersecretary of Defense Dorothy Robyn has been quoted as saying that "maintaining and constructing all U.S. bases cost American taxpayers \$41.6 billion in 2010."² Fourthly, military presence in overseas bases is being opposed by progressive movements and antiwar activists.³ Finally, there is a rising nationalist fervor among host countries which look upon the bases as infringements on their sovereignty.

¹ <http://www.american.edu/projects/mandala/TED/clark.htm>

² www.fpic.org/bring_war_dollars_home_by_closing_down

³ www.fpic.org/articles/too_many-overseas-bases

3 RESEARCH IMPEDIMENTS

The study focused on CAB because it holds the distinction of being the first U.S. overseas military base that underwent a successful large scale transformation. The period covered was from 2002 to 2011.

While there are claims from certain quarters that the U.S. maintains more overseas bases than it officially reports, the study limits itself to those reported by the U.S. DoD, primarily because of the availability of information on them.

4 SIGNIFICANCE OF THE STUDY

This study adds to the literature on the conversion of military bases into commercial complexes, global economic zones, or local and foreign investment opportunities.

CAB's transformational experience is pioneering and unique. Besides one of the first successful large-scale conversions, it is also took an unconventional route, employing a mixed-use development approach instead of merely expanding the uses of base facilities.

Moreover, the findings of this study can be used as a guide in fast-tracking similar conversions, not only in the development stages, but also in the operating stages.

On a broad front, successful commercial conversions will benefit all concerned – the U.S., the host country and global investors. For local consumption, the observations and findings will assist in making further improvements in the development and operation of CAB, ultimately leading to more benefits for the Filipino people and the investor locators.

For the researcher, this study has given him additional exposure not only to projects of this nature, but more so to new application of management concepts and principles in various situations and challenges.

5 REVIEW OF LITERATURE

A military base closure can result in job and tax revenue losses, reductions in personal and household incomes, decreased demand for housing, reductions in dollars spent by military personnel and their families in the local economy, and losses of recreational and other on-post services.⁴ On the other hand, base closures could also bring benefits. With careful planning, a closure could present an economic opportunity for revitalization (DoD, 1995) and expand the economic base of the host location. With Global PM-EZDs are (a) geographically delimited areas, usually physically secured; (b) under single management or administration; (c) providing benefits based on physical location within the zone; (d) classified as

separate customs areas (duty-free benefits) characterized by streamlined procedures ; and (e) whose operation are under more liberal economic laws than those typically prevailing in the country. (World Bank Study, 2008).

They entail huge investments in infrastructure especially in the initial stages. Because of the enormous project size, it is characterized by long gestation periods.

They could be effective vehicles in generating investments, particularly FDI's (World Bank and FIAS, 2011). Out of this investment generation, two types of economic benefits are derived, namely (1) static/direct benefits (foreign exchange through exports; employment creation and economic value added. and (2) dynamic/indirect benefits (economic linkages and spillovers) (Farole T., 2010).

Identified as contributing to the success of global PM-EZDs as investor locations are: (1) location (Rimmer and Dick, 2009); and (2) enhancements applied to these locations.

These enhancements can be categorized into (1) investment incentives (Enright, Scott, and Chung 2005); (2) competent workforce⁵; (3) zone management and administration (Globerman and Shapiro (2002, 2003); (4) ease of doing business (Piwonski K, 2010); and (5) cost of doing business; and political stability (UNCTAD, 1991).

The location of a prospective global PM-EZD is strategic for global PM-EZDs when it has (1) proximity to global gateways; and (2) accessibility to population, labor and other factors. These factors lead to the efficiency and effectiveness of global PM-EZDs (Wei G. 2000).

6 THEORETICAL FRAMEWORK

The study utilized Theories of Location Advantages and Investments and a nexus of Resource Base Theory of the Firm (RBT) – Competitive Advantage (CA) Theory – Sustained Competitive Advantage (SCA) Theory as discussed below.

6.1 The Theory of Locational Advantage.

The theory of locational advantage asserts that certain factors influence decisions of firms (particularly multinational corporations) to invest in a location. These consist of natural or inherent advantages (strategic location, land availability and suitability); acquired advantages (infrastructure development such as roads, communication, and transport); institutional advantages (preferential tax policies and non-fiscal incentives) and other advantages (culture and language).

Locational advantages also influence the types of industry they invest in , in addition to investment motivations and

⁴ www.defenselink.mil/brac/02faqs.htm#07

⁵ <http://www.conferenceboard.ca/ITIC/default.aspx,2012>
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strategies of prospective locators (Dunning and Lundun 2008).

6.2 Resource Base Theory of the Firm ("RBT")

RBT, also known as the Resource Base View Theory ("RBV"), analyzes a firm's resources from inside out. It states that the firm is a bundle of resources consisting of assets and capabilities. Assets are tangible resources e.g. land and its improvements. Capabilities represent the capacity of integrating resources to undertake a task to keep assets together and employ them for an entity's benefit (Dierkx and Cool, 1989). It has five components, namely identification and study of resources; determination of capabilities; determination of competitive advantage; selection and action on strategies; and continuous pursuit of competitive advantage i.e. sustainable competitive advantage.

RBT holds that possessing a certain resource base unique to the market results in superior performance. The challenge is to utilize this resource base to meet market demands. When these become inadequate, they have to be modified and developed, in short, transformed. New resources and capabilities have to be generated and developed to sustain competitiveness.

7 RESEARCH PARADIGM

As demonstrated by CAB's experience, the interplay of resources and capabilities contribute to the transformation of an overseas military base into a global PM-EZD.

Military bases enjoy inherent location advantages. They are strategically located. As military installations, they have accessibility to harbors and airports with natural attributes such as deep sea harbors, natural protection endowments by mountain ranges, typhoon/earthquake free zones, and wide plains, among others. They possess centrality of locations to and proximity to as many numbers of destinations given the response times and logistics demanded in the implementation of military strategy. By their very nature, they occupy large tracts of real estate properties. They are properly demarcated and protected, and as such are free from squatters. Development of the areas they are situated has caught up with them, and as such most of them are surrounded by or are adjacent to urbanized areas.

The land size profiles of the U.S. overseas bases indicate suitability for global PM-EZD. Among the bases, 24.3% occupy areas of up to 32 acres; 17.7% by more than 32 acres up to 80 acres; and 17.1% more than 80 acres up to 160 acres. In other words, more than 50% of all bases belong to the categories of up to 160 acres.

They are also beneficiaries of infrastructure development. They are also equipped with sufficient and well-maintained infrastructure/ utilities. Based on the Base Structure Report

(BSR) FY 2009 on the Reproduction Value, estimated value was as of the estimated Plant Replacement Value ("RPV") of Department of Defense (DOD) real property holdings in overseas bases amounted to \$124.761 billion.

With the bases as a large, if not the largest employer in their area of location, they have developed a work force experienced and exposed to, and adaptable to the demands of an outside culture.

8 RESEARCH METHODOLOGY

The general design of this study is descriptive correlational. Primary data consisted of survey and interviews of investor-locators and officers of Clark Development Corp ("CDC") and Bases Conversion and Development Corp ("BCDC"). Secondary data were culled from BCDA and CDC reports and brochures, published studies, articles and journals.

A survey was conducted from July to October 2012 among members of the Clark Investors and Locators Association ("CILA"), using a structured questionnaire. A total of 70 members of the CILA responded to the survey representing 64.3% of the targeted respondent firms.

Two basic approaches were used in determining the relationship between the applied strategies and transformation results. The first approach employed Multiple Regression and Correlation Analysis on available data related to CAB's transformation. The second approach utilized Structural Equation Model ("SEM") and Confirmatory Factor Analysis ("CFA") to collate and evaluate survey responses.

9 RESULTS AND DISCUSSIONS

Objective Statement 1: The strategies applied in the transformation of CAB include the following: a. Investment incentives; b. competent workforce; c. Zone management and administration; d. Ease of doing business; e. Cost of doing business; and f. Political stability.

A summary of the features of each of the strategies is presented in Annex A.

In its road to transformation, CAB applied the above six strategies in varying degrees of emphasis over the years, depending on resource availability, market thrust and investor locator demands. Based on analysis of CDC Annual Reports and interviews conducted with CDC officers and investor locators, strategy implementation can be broken down into two periods, namely the first covering 2002 to 2005; and the second, covering 2006 to 2012.

The first half of the period can be characterized as a building up process. As a relatively new investor location, CAB had identified its market niche, given available resources and capabilities. Adopting the vision to be the most competitive service and logistics center in the Southeast Asian region, it

prioritized on the strategies of (1) infrastructure rehabilitation and improvement (specifically the airport); (2) greater ease of doing business through utilities and power installation and building on organization competencies and; (3) cost of doing business through favorable leasing terms and conditions, reduction of utility rates, and improvement of telecommunication and power facilities (CDC Annual Reports 2001-2005). Given the challenging investment environment at the time, marketing thrust was on leasing large portions of the areas.

During the second half of the period, with an initial base of as investor locators, it pursued a more balanced development plan beyond logistics hub to an industrial and entertainment/leisure center. It became more aggressive in offering investment incentives with the passage of laws clarifying its status as a freeport and special economic zone. It structured its organization to customer responsiveness. Aware of the need for quality labor, it established tie ups with government agencies and educational institutions. It established active cooperation and coordination with the national and local government units, while continuing to pursue infrastructure improvement, ease of and competitive cost of doing business.

Objective Statement 2: To evaluate the results of CAB' transformation from a military base to global PM-EZD covering the period from 2002 to 2011, using established global PM-EZD success criteria of generated investments, employment generated, export earnings, and net value added.

The ability of CAB to attract investments is confirmed by the investor locators themselves. When asked to compare between amounts originally intended to be invested and amounts actually invested, 47.1 per cent invested approximately equal to what has been originally committed; and 35.7% invested more than what has been originally committed. Only 10.0% responded that they actually invested less than originally intended.

When asked to characterize the patterns of their investments in CAB from the start of operations up to today, 75.5% responded their investments as increasing; and 17.1% as stagnant. When asked whether their companies intended to further increase their investments, 87.1% answered yes, while only 8.6% said otherwise.

a) **Hectares Leased.**

To date, CAB has leased out to investor locators almost its entire Main Zone consisting of 4,400-hectares, with only 90 hectares remaining. It is now embarking on its second stage of major development. Last March 12, 2012, through the Bases Conversion Development Authority ("BCDA"), it bid out Consulting Services related to the preparation of a new Master Development Plan ("MDP") for its Next Frontier covering 36,086 hectares (Clark Freeport Zone Official Website, April 2012).

b). PM-EZD Results

Based on the success criteria used for PM-EZD of (a) Number of Projects Signed / Investor Locators ; (b) Generated Investments;(c) Exports Earned; (d)Employment Generation;(e) Net Value Added; and (f) Taxes Collected, CAB can be considered to have undergone a successful transformation.

For the ten year period covered, all the indicators registered positive increases. Annex B presents a tabularized presentation of the transformational results.

Objective Statement 3: To determine the significance of the applied strategies in relation to data indicative of CAB's transformation

The following data were used as proxies for the different strategies:

- ▶ direct exports as proxy for investment incentives
- ▶ employment generated as proxy for competent workforce
- ▶ number of projects signed as proxy for zone administration and management
- ▶ days required to process or register as proxy for ease of doing business
- ▶ lease payments and license fees collected by CDC as proxy for cost of doing business
- ▶ investments in facilities by CDC as proxy for investment in infrastructure

The relationships between investments generated to the five proxy- strategies (no proxy for political stability) are presented in Table 1 below:

Table 1. Relationship of Investments Generated with Applied Strategies (Using Proxies)*

	Standardized Coefficients	Levels of Significance
Investment Incentives	0.973 0.356	.356a
Competent Workforce	3.764 0.004	.004a
Zone administration and Management	4.401 0.003	.003a
Ease of doing business	-1.761 0.112	.112a
Cost of Doing Business	3.290 0.009	.009a

**no assigned proxy for political stability*

The transformational strategies of competence of employees (R square 0.612) and cost of doing business (R square 0.546) registered "high" relationships. On the other hand, ease of doing business (R square 0.256), and zone administration and management (R square 0.243) had "Moderate" relationships. Investment incentives (R square 0.095) showed "weak" rela-

tionship.

Table 2 below presents the level of significance on the applied strategies.

Table 2. Standardized Coefficients and Levels of Significance of Applied Strategies*

Strategy	R	R Square	Relationship
Investment Incentives*	.309a	0.095	Weak
Competence of Employees	.782a	0.612	High
Zone administration and management	.492a	0.243	Moderate
Ease of Doing Business	.506a	0.256	Moderate
Cost of doing business	.739a	0.546	High

The standardized coefficients indicated that zone administration and management had 4.4010 .003; competent workforce, 3.7640.004; cost of doing business, 3.2900.009; ease of doing business, -1.761 -0.112; and investment incentives, 0.9730.356.

The levels of significance of the strategies applied had Zone administration and management with .003a; competence workforce, .004a; cost of doing business, .009a; ease of doing business .112a and investment incentives (.356a).

Based on the above tables, the two significant strategies are people-oriented, namely zone management and administration, and competent work force with cost of doing business following next. All the three strategies result to lowering costs, especially in the area of productivity.

With derived figures from the previous tables, a cost/benefit analysis was conducted for the strategies, the results of which are presented in Table 3.

For CAB, its thrust has always been to make available quality labor (through close coordination with investor locators, job fairs and placements) and enhancing quality such as providing training (TESDA connection and establishment of schools). The thrust is important as a large number of investor locators are in the industrial, IT, aviation, tourism, electronics and export sectors.

It is to be pointed out that the exposure and experience of available labor to the style and culture of American management have contributed to the quality of this labor. In addition, the inherited infrastructure reduced development and operational costs, resulting in lower leased rates.

The relatively low ranking of the strategy of ease of doing business lies in the fact that this is still work in progress. CDC, as the governing body and administrator of CAB, cannot singlehandedly work in this area as certain aspects of the processes involves cooperation of other government agencies e.g. processing of business permits.

Placing last are the investment incentives. This result corresponds to the research findings in this area. Investor locator decisions are influenced not so much by incentives offered but by strong economic fundamentals of host economies such as market size, level of real income, worker skill levels, availability of infrastructure and other resources that facilitate efficient specialization of production, trade policies, political factors and macroeconomic stability (Blomström and Kokko, 2003). This is supported by empirical studies on the fiscal incentives. In particular, many American critics argue that incentives (and even tax differences) are of too small a magnitude to affect location decisions (Leroy, 2005). Based on the Philippine experience, despite investment policy reforms and opening up of more sectors to foreign investors, and generous tax incentives, FDI inflows to the Philippines have been limited, lagging behind its neighbors in East and Southeast Asia (AldabaR.M. 2006).

Table 3. Cost-Benefit of Strategies

Strategy	Cost
Investment Incentives	P1,100 .00
Competent Workforce	0.08
Zone Administration And Management	800.00
Infrastructure Development	5.04

Cost of Doing business	0.95
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*Ease of doing business and Political Stability excluded

Based on the above Table, a benefit of Philippine pesos ("P") 100,000 would be derived for every P1,100 allocated for investment incentives; or for every P0.08 for competent work force; or for every P800.00 for zone administration and management; or for every P5.04 for infrastructure development or for every P0.095 for cost of doing business.

Objective Statement 4: To determine the extent of effectiveness of the applied strategies to CAB's transformation, based on the perceptions of investor locators;

Aside from the objective basis of determining significance (as shown in Problem Statement 3), another approach was employed, using survey data (subjective perception) of investor locators. Under this, two statistical tools were used, namely the SEM and CFA analysis.

Table 4. SEM Results and Strategies

Strategy	Maximum likelihood results
Investment Incentives	0.29
Competent Workforce	-.016
Zone Administration And Management	-.016
Infrastructure Development	.016
Cost of Doing Business	-.024
Ease of doing business	-.000
Political Stability	

Based on the SEM, the investor locators ranked ease of doing business (.000) first; zone administration and management (-.0007) second; work force (-.016) third; cost of doing business (-.024) following and with investment incentives (-.29) as last.

To further determine effectiveness of the strategies made use of primary data. Based on the results of Confirmatory Factor Analysis ("CFA") on the responses of the survey respondents, all the six strategies applied were significantly effective, as indicated by computed reliability coefficients. Presented below as Table 5 is a summary of the results.

Table 5. CFA Results on Transformational Strategies

Transformational Strategy	Reliability Coefficients
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Work Force	0.948
Ease of Doing Business	0.94
Zone Administration and management	0.911
Investment Incentives	0.818
Political Stability	0.861

As shown in the above Table, work force registered the highest reliability coefficient at 0.948. Investment Incentives stood second to the lowest with 0.818. These findings generally coincide with the results of the correlation analysis (investments generated as related to assigned proxies for each of the applied strategies) where work force came out with a rating of "high"; investment incentives, "weak" and with all the other strategies registering "moderate" ratings.

Eight of the ten registered high ratings from 0.803 to 0.932, with the exception of concerns advanced in two areas: in the application of fair and reasonable labor standards (0.686); and in the supply of skilled and trained labor force (0.627). With regards to the first, a number of investor locators would have preferred that remuneration and pay (which account for a large share of production costs for a number of locators) would be

For a better appreciation of the survey results, statistical processes were run to determine whether the effectiveness or significance of the six strategies applied would differ depending on certain variables affecting investor locators. These variables included the following: (a) type of business; (b) length of operations in CAB; (c) type of ownership; and (d) size of investments.

Overall, the results showed that the above categorizations were indifferent as to the significance of the strategies. This means that there were no particular deviations of significance among the categories. The only exception was in the competence of employees in the type of business category, with level of significance at 0.05. This indicates that whether the business enterprise is industrial, commercial/warehousing, and IT-related and so forth, competence employees appears to be very important consideration.

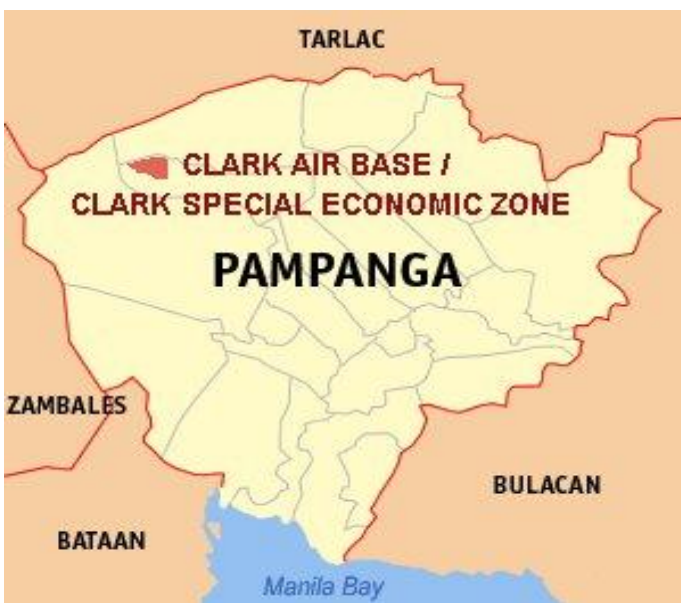
Objective Statement 5: To identify and describe the natural or inherent locational advantages of CAB in terms of its strategic location, land availability and suitability and infrastructure development

9.1 Strategic Location

Successful global PM-EZDs are strategically situated defined as near gateway cities, sources of labor, and large domestic markets (Rimmer and Dick, 2009). CAB meets these criteria.

CAB is strategically located in the Philippines and in Asia, particularly South East Asia. CAB is a critical component in the Central Luzon Triad which consists of Clark, Subic, and Metro Manila. Under this structure, Clark Airport houses the international airport; Subic, the international seaport; and Metro Manila the business and financial enter of the country. It is 60 minutes from Metro Manila; and 30 minutes to deep water container seaport - Subic Bay. CAB is situated at the interchange of two major toll roads namely, Subic-Clark-Tarlac ("SCTEX") and North Luzon Expressway ("NLEX"). With the international airport within it, CAB provides convenient access to all three modes of transportation. Presented below is the map of Region 3.

Figure 1. Location of CAB in relation to Region 3



The geographical location of CAB enhances its position as an economic zone. Together with its surrounding regions, it represents a sizeable market of goods and services for its investor locators. It is also a source of an abundant supply of work

force.

CAB belongs to Pampanga Province of Region 3. Pampanga itself, with its close to 2 million population, accounts about 20% of the region's 10.1 million population.

Based on the Philippine National Statistics Office ("NSO"), Region 3 had the third largest population among the country's regions, accounting for approximately 11% of the country's total population. Centrally located among three regions of the country, it is in a position, in addition to its own, to service about 30 million people (Region 3-10.14 million; NCR-11.9 million; Region1 -4.4 million; and Region 2, 3.2 million).

Central Luzon or Region 3 is also one of the fast growing regions of the country. Based on the 2011 data from the National NSO, it ranked number three in terms of GDP among the regions at 7.5% growth rate (compared to the national average of 3.9%). It also accounted for 9.3% of the national GDP, ranking number 3 among the regions in terms of contribution to the total.

CAB is right at the heart of growing markets in the Asia-Pacific region. It lies at the intersection of the north-south Pacific shipping lanes in the South China Sea connecting Japan, Korea and Taiwan in the north and Singapore and Australia in the south. It also sits on the east-west shipping lanes with the traffic transiting the Straits of Malacca connecting the western ports in the United States and the Panama Canal with Asia while facing the entire eastern seaboard of China.

By air, it is one and a half by air from Taiwan, Hong Kong, and Macau and the eastern provinces of mainland China. It is also approximately three hours to Japan and other parts of China. It is five hours from Singapore, Malaysia, Korea, Thailand and Indonesia. The map of the Philippines relative to its Asian neighbors is shown below:

Figure 2. Location of CAB in the Philippines and Asia



The Free Trade Zone (Main Zone - the former Clark Air Base proper) of 4,400 is now an integrated mixed land use development. Practically all leased out, only 90 hectares remain available for lease. . Of the total area, 2,490 hectares represent the aviation complex; with the balance developed as industrial parks, tourism estates, leisure parks and ICT zones. The aviation complex houses a first class airport, with ample room for expansion. This is important especially given the international trend toward aerotropolis development where urbanization starts with the development of easily accessible airports. Serving as anchor for future developments of the area would be the Freeport Zone and Special Economic Zones.

The Special Economic Zone is subdivided into (1) 10,684 hectares which has already been master planned for development and (2) 27,600 hectares which is eventually to host agro-industrial, tourism-related, industrial estate and ICT parks. Together with the adjacent Sacobia and Crow Valley areas, CAB's total area covers 68,000 hectares.

9.3. Infrastructure Development

Having been the formerly largest U.S. air base outside of the U.S. mainland, CAB had benefited from the remnant facilities (even after Mt. Pinatubo) for aviation, industrial and commercial use as well as infrastructure such as road and bridge network, power plant telecommunication facilities, and water and sewerage system. This infrastructure CAB consistently improved over the years. As the financial statements of CDC indicate, investments in infrastructure development have steadily increased at an annual average rate of 7.5 % per annum. Total infrastructure investments as of 2011 amounted to P5.8 billion.

The investments in infrastructure development and improvement were made in the road network, airport improvements, water and sewerage systems, power utilities, among others.

CAB has a first class road network of 400 kilometers. It has a first class two runway international airport within it.

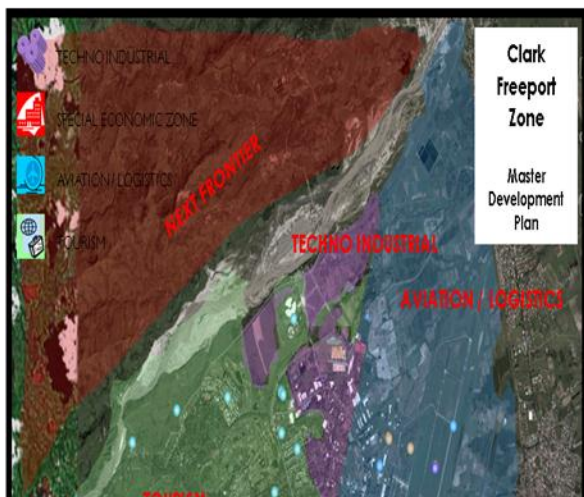
For its power supply, it has recently invested to the tune of P2.6 billion for transmission lines consisting of 2 redundant 69

To service requirements of investor locator who want to take advantage of CAB's strategic location, CAB has a world class airport, with an area of 2200 hectares with two runways, with the possible addition of another one as the demand grows.

9.2. Land Availability and Suitability

CAB covers a vast land area capable to accommodate future planned developments as shown below:

Figure 3. CAB Master Development Plan



KV lines and connected to OLTC. For 2011, it embarked on the enhancement of power utilities through a P594 million for Phase 3A of the Clark Power Transmission line project. Such project included designing, building, furnishing delivery, installing, testing and commissioning of 2x 100 MVA, 230/69 KV at the Clark New Substation and 2x 100 MVA 69/22.9 KV for the Clark Load end Substation. Upon completion of the project, 2-230 KV lines would be upgraded to supply more reliable power and the old 69 KV line retired. This project will help in providing clean, efficient and cost effective power.

Water resource of 52,680 m³/day is available from 13 deep wells; 3 pumping stations, and 5 reservoirs. This is distributed through 13.2 kms piping network, Current production is 16,270 m³/day versus consumption of 14,140 m³/day. The acquisition by Ayala-led Manila Water Corp., which allocated P250 million capital for infrastructure improvement would improve water supply and distribution.

PLDT and Digitel render communication services, made available with High Speed Fiber Optic Cabling and Redundant Fiber Optic Loop. STM1 and Multiple STM1 Available Capacity /Bandwidth. Fuel and POL Depot are also provided.

Objective Statement 6: To evaluate based on the perceptions of investor locators the significance to CAB's transformation of the following inherent locational advantages broken down into strategic location and land availability and suitability; and infrastructure development.

The S.E.M results on the inherent locational advantages are presented below.

Table 6. SEM Results and Locational Advantages

Locational Advantage	Maximum Likelihood Estimates
Strategic Location	-0.061
Land Availability and suitability	-0.032
Infrastructure/utilities/communication facilities	-0.16

Based on the above, infrastructure development ranked the highest relative to the other two locational advantages. This rating also fares well relative to S.E.M. results of the applied strategies.

Table 7 below shows the computed reliability coefficients of the three inherent locational advantages based on CFA analysis.

Table 7. Reliability Coefficients

Locational Advantage	Reliability Coefficient
Strategic Location*	0.922
Land Availability and suitability**	0.882

Infrastructure/utilities/communication facilities***	0.937
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* Kaiser-Meyer-Olkin Measure of Sampling Adequacy= 0.755, Bartlett's Test of Sphericity= 216.593

** Kaiser-Meyer-Olkin Measure of Sampling Adequacy= 0.783, Bartlett's Test of Sphericity= 123.506

*** Kaiser-Meyer-Olkin Measure of Sampling Adequacy= 0.551 Bartlett's Test of Sphericity= 3.490

The figures above confirm the significance of locational inherent locational advantages.

Strategic location which CAB was able to capitalize has been one of the keys to the success of several global PM-EZDs such as (1) the Pearl River Delta in China; (2) the Indonesia-Malaysia-Singapore Growth.

The availability of infrastructure and utilities is considered by investor locators as this affects their cost of production and the delivery of their services.⁶ As a former military base, CAB was in a position to address this issue as this demanded lesser immediate cash outlay and faster turnaround with what has been handed over. In addition, CAB has always continued to pour in investments in this area and therefore would have been much felt by the investor locators.

Admittedly, certain areas are not suitable for certain operations. It remains for the CDC to be resourceful to make full use of available lands.

9.5 Infrastructure/utilities/communication facilities.

The results of the first approach (Multiple Regression/Correlation Analysis) are as follows:

Table 8. Correlations Results and Infrastructures

Dimension	Result
R	.662a
RSquare	0.438
Relationship	Moderate
Standardized Coefficient	2.6510.026
Level of Significance	.026a

When compared to the six strategies, infrastructure comes in

⁶ International Monetary Fund-World Bank Working Group - <http://www.imf.org/external/np/cm/cg/2003/eng/091803.pdf>

third after competent work force and cost of doing business. From interviews conducted with investor locators, the importance of infrastructure—especially the availability of electricity, water, transportation, and telecommunication, rather than their costs in influencing FDI location decisions was emphasized. This supports research findings that investment locations are best prepared to address these needs will secure greater amounts of investments.

10. CONCLUSIONS AND RECOMMENDATIONS

By and large, CAB can be considered successful in its transformation from a former military base to a global PM-EZD. All the results using global PMD-EZD criteria point to satisfactory performance. Presented below are the conclusions and recommendations which can serve as inputs for prospective military base conversions;

- As indicated by the CAB experience and confirmed by its locator investors, military bases have the built-in locational advantages (strategic quality, land availability and suitability and infrastructure development) which are required for successful PM-EZDs. Capitalizing on these resources provides military bases with initial competitive edge over other "regular" global PM-EZD competitors in terms of capital outlay, operational and maintenance costs, and project gestation period. However, these inherent advantages do not guarantee success. These resources have to be combined with certain strategies (capabilities) to enable the global PM-EZD venture to be truly competitive in the global market place on a sustained basis. To bring this about, it is not enough that the right combination of resources and capabilities be determined, but it is also necessary to determine the timing of the application of these strategies.
- The challenge in the transformation from a military base to global PM-EZD comes in three phases. Firstly, identifying and planning competitive advantage(s) out of such inherent resources. Secondly, creating such advantages in the face of competition from existing as well as prospective competitors. Thirdly, sustaining such competitive advantages.
 - A prerequisite condition during the first stage (identification of resources and capabilities) is to involve all stakeholders. As demonstrated in the cases of CAB and also successful BRAC cases, their cooperation is necessary. Once harnessed, cooperation and support leads to two beneficial effects: timing of implementation

and trust from prospective clients. In a fast changing environment, there has to be timely introduction of resources in the market place in order to take advantage of market opportunities. Without a united front among stakeholders, it is difficult for the undertaking to take off, move forward, and react quickly.

This united front is also important in marketing the project. As the project entails long term commitment from locator investors, it is important to apply the so-called trust based marketing which generates predictability. Locator investors are interested in a location where there is harmonious relationship among stakeholders and must be assured that plans adopted are long term in nature.

As much as possible, same aspirations and directions must be pursued by all stakeholders. There has to be a firm commitment to pursue and support a clear vision for the location among all stakeholders- from the national government to local government, to the local population. This must be mustered from the very beginning because missteps can be costly. This is critical to the success of the project because huge resources are to be invested possibly with no clear immediate returns. Besides, investor locators will require it as they themselves will have to commit their resources on a long term basis.

- In the preparation of the development plan, capabilities (which will serve as foundations of transformational strategies) that are country specific are to be identified and harnessed. This approach not only taps areas where the country is competitive. It also ensures that their application can be quickly adopted and sustained on a long term basis. For CAB, it focused on its available quality labor at reasonable cost, and customer care servicing. Attention should also be given to the nuances of the strategies. As demonstrated by CAB, a single strategy has multiple dimensions each of which must be properly considered and taken care of in order to ensure its effectiveness.

Target markets have to be identified,

matching the location's distinctive competence as starting base with their needs. There are no set formulas on the combination of strategies to be applied with inherent or natural location advantages. It remains for the proponent to identify the possible combination of such inherent advantages and the strategies to push as priority. Based on CAB's experience, investor locators have varying preferences. However, the more enhancements that can be introduced, the more competitive the prospective project becomes.

Added to this is the pre-selling of the development plan not only to test the market but also to gather feedback from investor requirements in terms of resources and expertise.

In the preparation of the plan, projects of similar nature in the country must be considered so that they may not cannibalize one another, especially in the case of certain strategies that may not be cost effective, e.g. granting investment incentives.

While the development plan adopts the long term perspective, it must be flexible enough to take advantage of opportunities that may arise. A review of CAB's experience bears this out. There is a master plan but along the way adjustments were made to take advantage of a given situation. For example, it has been successful in catering to the needs of IT-related sectors, which is a recent occurrence. It is now in the process of developing the tourism sector given the global development in travel/tourism.

- In implementing the plan, timing of application of appropriate strategies is vital. This conserves limited resources. It also makes selected strategies effective given the focus it generates. This has been demonstrated in CAB's case when the first five years of the study were concentrated on developing it as a logistics hub, with appropriate strategies of infrastructure, for example, given priority.

Proponents of military conversions must be creative in mobilizing resources for development. Depending on the government's resources alone may not only

slow down rate of development but its direction. There are resourceful ways to do it as CAB has done.

One is through private partnership arrangement where the private sector joins the government in the development of certain specific projects.

Another route which CAB has undertaken is the so-called franchising. Under this arrangement, a sizeable portion is leased out on a long term basis to one party-lessor who develops it and subleases it to sub-lessee- investor locators. While there are criticisms to this especially in the area of raising leasing rates, there are advantages to this arrangement such as the acceleration of development without outlay of resources from the government, assurance of proper development of the leased area as the developer has to market it to sub-lessees, lowering the upfront costs of sub-lessees, thereby expediting the entry of more investor locators and availing of the marketing expertise of these main lessor-developers.

Opening up the project location to 100% foreign ownership and management, coupled with long term leases, accelerate FDI, as shown by CAB.

Tapping local investors to complement foreign investors can be considered as good implementation strategy. In the past twenty years of its development, CAB was able to tap local and foreign investors (broken down into approximately 50-50 basis in terms of number of locators). This is important not only in being able to share to the locals the benefits of the development, but also lessens dependence on foreign clients for the viability and sustainability of the project. Besides, locals may be faster in making their investment locating decisions.

Focusing also on big ticket anchor projects may accelerate implementation of the location. An anchor project may not be interpreted as a vote of confidence for the location but it may trigger linkages in investments in the location especially among suppliers of the anchor tenant. This was demonstrated by CAB's experience with Texas Instruments with its ex-

pansion project.

- To sustain the location's competitiveness, the project must see to it that investor locator decisions must be based commercially based. This means that investor locators invest in the location mainly because it is profitable for them. As this study has shown, specific industries have their own specific requirements, and they go where they get the highest return.
- The road to transformation is a long one, with initial stages getting a slow start. Judging by the experience of CAB, the first ten years (1993-2002) yielded only an average of 31.3 projects signed. It was only in the next ten years (2003-2011) that signing of projects accelerated, averaging 71.4 per year. As such proponents of prospective military conversions must be ready for the long haul. By character, undertakings of this nature are long term brought about by both the supply side (development time and costs) and demand side (decision time for investment locators, funding requirements, etc). On the positive side, military bases slated for conversion may have advantage relative to other competitors in terms of lesser investment outlays and shorter gestation periods, bringing their development and carrying costs lower than those having to start all over .On the negative side, with these advantages ,there may be pressures especially on the part of the government to shorten and accelerate the process, jeopardizing whatever advantages the location may have because of the lure of short term gains.
- The government plays a critical role in the success of any project of this nature. It bears major portions of project costs. It dispenses with the investment incentives. It ensures a favorable regime, especially in the ease of doing business. For the national government, there must be political will to pursue and support it, with minimal political accommodate in the process. As much as possible, legal mechanisms (through legislations) must be established to insulate the prospective project from political pressures.

Aside from all these, the government has to ensure continuity of policies and appointment of qualified personnel to manage the project.

- Whatever the inherent or natural advantages, there must be concerted efforts to preserve them

even if benefits cannot be immediately derived. In a sense, they should be considered part of a nation's patrimony. All other strategies applied must be considered in the nature of enhancements to these inherent assets. In the case of CAB, for example, its strategic location is tied up with its infrastructure improvements, particularly its large and first class airport. Efforts must be exerted to preserve it and make it competitive. It has to be continuously upgraded .The areas it covers must not be encroached upon with developments unrelated to it. A myopic view for short term returns that may affect the advantages must not be adopted.

- In this connection, proponents of military bases conversion should make the most of the infrastructure left behind. This is one of the reasons why even in BRAC cases it was advised that as soon as possible when the decision is made and the base is abandoned; proponents must take over the facilities to preserve them. There are savings in time and resources derived in doing this.

Infrastructure still remains to be one of the major factors influencing investor locators due to their efficiency impact. That is why development has to start soonest upon turnover. This is important to preserve whatever improvements are turned over and which could be used for prospective development. In conjunction with this, plans would be to be set out even before turnover.

Annex A

APPLIED TRANSFORMATIONAL STRATEGIES

STRATEGIES	FEATURES
Investment Incentives	Prudential tax of 5% of gross income; All import for as from all taxes and duties; 100% of foreign equity allowed; Impartation of foreign investments allowed; Importation of consigned equipment for unlimited period allowed, subject to posting of export bond
Competent Workforce	High levels of training and skills; Availability of 35,000 college graduates annually; 160 colleges and universities offering ICF related courses; English speaking ability; Compatibility with western and American cultures; Tie-up with technical and skills development authority (TESDA) arrangements with university of the Philippines and other educational institutions
Zone Management and Administration	Managed by Clerk Development Corporation district, excellent relevant long term development plan; Quality costumer can competency at pas with global standard "after sales" support services; Regular training for CDC management and staff; Adequate security measures
Ease of Doing Business	Electronic transit admission permit system (e-TAPS); Electronic export Presentation System (e-EPS); e-Payment System; ACR I-card processing; 24/7 customs/ by stics services and warehousing; Multi model connectivity in terms of air, land, sea transport
Cost of Doing Business	Lease rates from US \$1.00 per square meter/ monthly to US \$4.00/ per month available for short terms, medium term, and long term; Fixed for first 3 years, with 10% inverse on the fourth year. Average power rate- ₱5.47 kwh; Water rates-just 0-10cu. M (₱215.21); Next 11-20 cu. M (₱23.49); next 21-30 cu. M (₱24.88) and above 31cu. M (₱26.26). Fewer changes are 40% total water bill; Telecom rates are ₱936.41 per month; national rate ₱3.75 per minute and international US \$0.36 per minute
Political Stability	Member of the WTO - World Trade Organization. It is an active participant in the AFTA-ASEAN Free Trade Agreement and the GATT-General Agreement on Tariff and Trade. CAB's legal position is well established as it has been created under Philippine laws in 1992 under Republic Act 7227 or the Base Conversion Development Act (BCDA) and Executive Order No.62 and Republic Act 9400 in 2007. It is operated, administered, lead-managed and developed by Clark Development Corp. ("CDC") In addition, CAB's strength in weathering political pressures lies in its significant economic contributions to the province and region in particular and to the country in general. In the words of an investor locator, CAB's "best defense in this area rests on its value to the economy. It is too important to be meddled with."

Annex B

YEAR	TRANSFORMTIONAL RESULTS						
	NO. OF PROJECTS SIGNED	INVESTMENT GENERATED	EXPORTS	DIRECT EMPLOYMENT	NET VALUE ADDED	LEASE RENTAL COLLECTIVES	TAXES GENERATED
2002	45	24,626.06	291.5	22,046	-73.5	325.6	n.a
2003	65	33,044.14	339.6	26,307	42.3	261.4	n.a
2004	65	30,960.30	613.9	28,409	59.9	341.1	n.a.
2005	86	31,668.23	894.3	33,504	227	352	n.a.
2006	94	37,797.14	1029	36,883	310	362.6	
2007	101	42,279.21	1160	47,481	409	393.3	1,654
2008	67	50,926.85	884	51,936	51.8	439.7	1,846
2009	66	62,704.64	950	57,790	22.4	511.5	1,736
2010	74	65,338.01	1030	58,027	-76.4	801.3	2,170
2011	73	65,262.16	1453.8	60,162	61.1	538.8	
2012	91	35,718.54	2258.0*	64,055		590.4	

Annex C

INHERENT LOCATIONAL ADVANTAGES

Strategic Location	<ul style="list-style-type: none">• Critical component in Central Luzon triad (Clark, Subic, Metro Manila); 60 minute from Metro Manila; 30 minute from deep water container port; situated at interchange of two major fall roads (SCTEX and NLEX)• Located in Region 3, one of the contagious most populated and fastest growing regions• Right at the heart growing markets in the Asia Pacific Region (1 1/2 hours by air from Hong Kong; Taiwan, Macaw and Eastern provinces of Manilad; 3 hours from Japan and other parts of China; Few hours from Singapore, Malaysia, Korea, Thailand and Indonesia• Lies at intersection of the north - south Pacific shipping lanes
Land Availability and Stability	<ul style="list-style-type: none">• Total land area of 68,000 hectares• Main zone of 4,400 hectares; special economic zone of 10,684 hectares and 27,600 hectares for agro - industrials tourism - oriental, industrials estate and ICI parks, and additional areas from adjacent Sacobia and Crow Valley areas
Infrastructure Development	World class airport with an area of 2,200 hectares with two runways; 400 kilometer of first class road network; available power and water supply made available; communication faculties with high speed fiber optical cabling and redundant fiber optic; allocation for infrastructure investment at an average of 7.5% per comm write total investment at ₱5.8 billion on 2011

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