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A Study On Municipal Asset Management System With Reference To Kumbakonam Municipality

N.Banumathi, Assistant Professor, Department of Commerce, Govt.College for Women, Kumbakonam, Tamil Nadu.

Dr.K.Desh, Assistant Professor & Head, Department of Commerce, Dr.PT. M.G.R.Govt. Arts & Science College, Kudavasal, Tamil Nadu – 612601.

ABSTRACT

The strategic analysis of asset management to provide a proactive support for a municipality is an important function of a municipal government. Real asset management of a municipal, regional or state property lacks focus and is majorly considered as a sunken cost in providing better services by the process of privatization. Various attempts to handle the issues related to asset management have resulted in budgetary problems. This paper proposes an empirical approach in support of a Municipal Asset Management with respect to Kumbakonam Municipality.

Key words: Asset Management, Decision making, Municipality, Natural Assets, Economic Development

1. INTRODUCTION

Municipal property is a significant financial classification. It is an essential precondition for the presence and working of municipal government. Municipalities manage and control significant measures of budgetary, physical and intangible assets. Asset management is a coordinated approach that includes all municipal departments, to making arrangements for and overseeing existing and new assets so as to amplify benefits, decrease risks and give suitable services to the community in a practical way. Great Asset Management practices are major to accomplishing supportable and versatile networks.

Asset management includes the adjusting of costs, openings and risks against the ideal execution of assets, to accomplish the region's destinations over the long term. This is accomplished by utilizing logical ways to deal with the assets over the various phases of their

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life cycles, which can begin with the origination of the requirement for the asset, and keeps going through its creation, activity and upkeep, recovery and transfer or decommissioning.

Local governments give a wide scope of administrations that are basic to our communities' personal satisfaction, namely clean drinking water, waste management, transportation systems, drainage, protection from natural resources, parks, public art and other entertainment services. The services they convey rely upon physical infrastructure assets like water treatment plants, wastewater maintenance lakes, roads, transports, structures and emergency vehicles. Normal assets additionally support delivery of municipal administration. For instance, wetlands can support filtration and flood control, while springs can give safe drinking water to certain communities, with insignificant treatment prerequisites.

Municipal Asset Management

Municipal assets are property claimed, controlled or utilized by the local governments. They can be overseen straightforwardly or by implication to assist their constituents in the fulfillment of local help conveyance objectives. Municipal asset management is the procedure of stock, valuation, use, vital portfolio surveys, announcing and Municipal assets auditing and, at times, state properties as a component of the basic leadership procedure of local governments.

Benefits of asset management system

The principle advantages of an efficient asset management system are to support local governments: a) Provide local occupants with improved administrations dependent on municipal asset use, (water systems, parking, infrastructure etc) b) Increase incomes c) Improve the general credit assessment for the Municipal Government d) Attract progressively local and foreign financial investors e) Improve land valuation (for instance, through migration of public properties, sale and rents, and upgrades in infrastructure such as roads and railways) that make land assets alluring for beneficial and land purposes f) Enhance nature and improve personal satisfaction (for instance through public parks and greenways) An efficient asset management system can give helpful data to employers of the regional government just as different stakeholders, about the potential and actual total assets and asset base of a city.

ISSN:2277-2995
Vol-8-Issue-11-November-2019

Asset Management Strategy

The asset management methodology ought to characterize how the region's unique situation and key targets mean Asset Management goals, (for example, service levels) and connected decision making criteria. The asset management technique will enable your municipality to make the act of Asset Management genuine and substantial, and is the reason for driving genuine upgrades in proof based basic leadership and increasingly dependable financial forecasts and planning.

Importance of Asset Management Strategies

An Asset Management Plan highlights the condition and appraisal of assets the Municipality claims. These assets incorporate everything from structures and furniture to sewer lines and street signs. This methodology encourages us to gauge, and schedule, our restoration and rebuilding activities. An Asset Management Plan encourages us to:

- protect the Municipality's framework speculations
- monitor current degrees of administration, life cycle patterns and decay models
- produce an increasingly precise capital spending plan every year
- prepare a long range, capital spending plan
- plan and build up a definite five year capital spending plan

Preparation of these sorts of procedures the municipality evaluates the present and anticipated asset conditions. The Municipal Fixed Assets Management includes the following segments:

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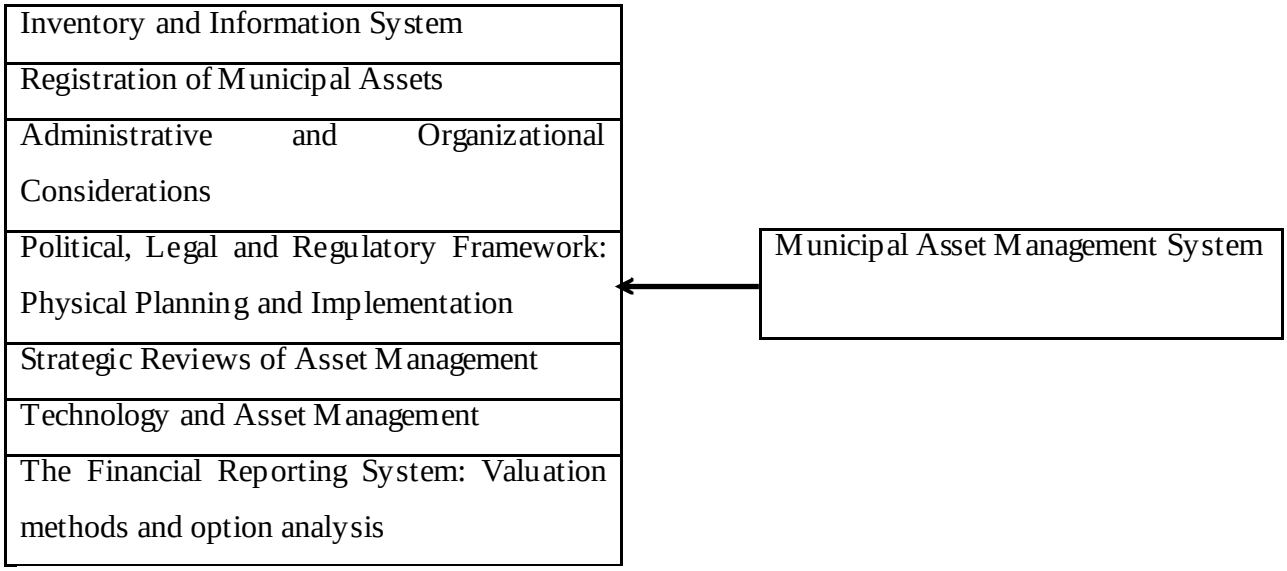
Figure - 1



Source: Fernholz, F. and R.M. Fernholz (2007)

Management plan

An asset management plan is basically a long term plan for a community. It is a preview of the condition of a municipality and plan for the future. An asset management plan should not be an incredibly long report. However, the plan must show the normal upcoming framework (recoveries, substitutions and new assets) including both the planning and the normal expense of the work. An asset management plan ought to likewise incorporate the present subsidizing set up, assuming any, for upcoming work. Asset management designs likewise incorporate discourses about the degrees of administration furnished and the risks related with offering services.

Municipal Natural asset

The term Municipal Natural Assets alludes to the loads of common assets or ecosystems that add to the arrangement of at least one service required for the wellbeing, prosperity, and long term supportability of a network and its inhabitants. The Municipal Natural Asset Management approach sees municipal characteristic assets through a framework asset management focal point and by and large considers those municipal common assets that would some way or another should be given by a municipality, provincial government, or

ISSN:2277-2995
Vol-8-Issue-11-November-2019

other type of local government. Vegetation and soil absorb water, reviving springs, streams, and lakes that give drinking water sources to many. Forests, cool urban regions and evacuate air contaminations, helping city people inhale better while likewise lessening vitality utilization.[1]

Infrastructure asset management:

Infrastructure asset management is the incorporated, multidisciplinary set of methodologies in supporting public framework assets, for example, water treatment facilities, sewer lines, streets, utility matrices, extensions, and railroads. For the most part, the procedure focuses the later phases of amenities life cycle, explicitly upkeep, recovery, and substitution. Asset management explicitly utilizes programming apparatuses to sort out and execute these techniques with the central objective to protect and broaden the administration life of long haul framework assets which are crucial fundamental parts in keeping up the personal satisfaction in the public eye and proficiency in the economy.[2]

Civic Facilities

The customary role of municipal bodies had been one of giving fundamental courtesies of urban life. Administrations, for example, sanitation and water supply, streets and channels, road lights, accumulation and dumping of waste, maintenance of public spots, graveyard and crematoria, enrollment of births and deaths, support of business sectors have for quite some time been viewed as the capacity of municipal bodies. Likewise, they played out certain administrative capacities relating development of structures, general wellbeing zones, for example, eating places, tanneries, slaughter houses, etc.

Transportation

Asset management is a significant idea to transportation experts working at various government levels. Transportation asset management has been characterized by a wide range of ways. Basically, it is a vital way to deal with reviewing, observing, and managing at wanted degrees of execution at the various assets that establish a transportation system**.**

[1] Roy Brooke (2018) towards a collaborative strategy for municipal natural asset management: private lands february 2018
[2] Cagle, R. F. (2003). "Infrastructure Asset Management: An Emerging Direction". AACE International Transactions.

ISSN:2277-2995
Vol-8-Issue-11-November-2019

2. REVIEW OF LITERATURE

Olga Kaganova et al (2018)[3] expressed that there is a developing acknowledgment of the significance of government-claimed capital assets, both thoughtfully and by and by, in huge part due to the 2008 worldwide budgetary emergency. However, a sizeable gap stays between the scholastic and expert universe of information encompassing government asset management, and the real asset management practiced by governments. Specifically, most of governments around the globe are completely clueless with regards to great asset management. The reason for this paper is to lessen this gap and recommend an instrument explicitly for local governments, for the assessment of their asset management, so as to assist them with identifying the weakest components of asset management and hence spotlight restricted assets on improving these components.

Roy Brooke et al (2017)[4] mentioned about the rising procedure to oversee regular assets, for example, forests, wetlands, and springs in urban zones as a component of a reasonable framework system. In particular, the paper investigates Canadian local government experience through the Municipal Natural Assets Initiative (MNAI) to recognize, value, and record for common assets' commitment to municipal administering organization delivery, benefits that would some way be conveyed by designed assets. Substantiation from MNAI recommends that an organized, asset management-based methodology holds extraordinary guarantee to handle the twin difficulties of declining urban foundation quality and declining ecosystem wellbeing and could have materialness well past Canada.

3. RESEARCH GAP

Studies about Asset Management are very rare and researches conducted on Municipality Asset Management are scarce. The present study emphasizes on Kumbakonam Municipality and the significance of Asset Management policies which is essential for development and growth of a Municipality, Kumbakonam in particular. The present study proposes a

[3] Olga Kaganova and Jeffrey TELGARSKY (2018) Management of capital assets by local governments: An assessment and benchmarking survey International Journal of Strategic Property Management 22(2):143-156 · March 2018
[4] Roy Brooke, Stephanie Cairns, Emanuel Machado, Michelle Molnar, Sara Jane O'Neill (2017)Municipal Natural Asset Management as a Sustainable Infrastructure Strategy: The emerging evidence, ULY 2017

ISSN:2277-2995
Vol-8-Issue-11-November-2019

framework with working variables which is new to the study topic. These gaps are identified as the research gap and hence the present study is carried out with strong empirical evidence.

4. STATEMENT OF THE PROBLEM

At present most municipalities own various assets with respect to civil infrastructure. They are maintained and operated to provide significant services to support the wellbeing and prosperity of the community. In order to maintain an efficient management, a wide range of actions need to be allocated to safeguard the assets. This requires complex decision making with unfamiliar measurement units. Optimization of multiple assets such as vehicles, equipment, buildings, civil infrastructure and machineries lack a proper approach. This problem is currently identified in Kumbakonam Municipality. Hence, there is a need of a strategy to combine all the significant assets of Kumbakonam Municipality within a framework that can support optimal decision making.

5. OBJECTIVES

1. To know the significance of Asset Management for a Municipality
2. To analyze the need for Asset Management for Kumbakonam Municipality
3. To provide recommendations to improve Municipality Asset Management of Kumbakonam

6. NULL HYPOTHESIS

H_{01} – There is no significant difference between Age of the respondents with respect to infrastructure, Civic Facilities, Transportation, Natural Resources, Asset management strategy and Economic Development.

H_{02} – There is no significant difference between Transportation and Asset management Strategy.

H_{03} – There is no significant difference between Infrastructure and Asset management Strategy.

$H_{04:}$ There is no significant relationship between Asset management Strategy and Economic Development.

ISSN:2277-2995
Vol-8-Issue-11-November-2019

7. RESEARCH METHODOLOGY

This fundamentally is an experimental investigation which can give ends dependent on perception. To the extent the methodology is concerned, it is both subjective just as quantitative in nature. Literature relating to municipal asset management system have been concentrated to comprehend the importance of every single one of them, and furthermore, to consider their predecessors and results of the equivalent and utilized in the detailing of the working theory.

Sample population: The respondents are general public who are residing in Kumbakonam town and the employees working in municipality office in Kumbakonam of Tanjavur district.

Sample size: Around 147 respondents were selected through simple random sampling technique for the current research

Questionnaire: The questionnaire consists of two parts the Demographic factors and the conceptual factors with 6 variables. The scaling values are 1- Strongly Agree; 2- Agree; 3- Neutral; 4- Disagree; 5- Strongly Disagree. The study has employed Cronbach alpha coefficient for assessing the reliability of the scale it is above 0.7 which is considered to be acceptable for construct.

Statistical Tools: the collected data has been analyzed using the statistical package AMOS and SPSS 20 and hypothesis were tested using the statistical tool Correlation, Anova and regression.

8. DATA ANALYSIS AND INTERPRETATION

TABLE - 1

ONE WAY ANOVA BETWEEN AGE AND STUDY VARIABLES

H_{01} – There is no significant difference between Age of the respondents with respect to infrastructure, Civic Facilities, Transportation, Natural Resources, Asset management strategy and Economic Development

ISSN:2277-2995
Vol-8-Issue-11-November-2019

Factors	F-value	Significant	Inference
Infrastructure	0.326	0.806	Accepted
Civic Facilities	5.479	0.001	Rejected
Transportation	1.934	0.127	Accepted
Natural Resources	1.887	0.135	Accepted
Asset Management Strategy	3.903	0.010	Rejected
Economic Development	6.767	0.000	Rejected

***5% Significant Level**

Interpretation

There is no significant relationship between age factor and the study variables Infrastructure, Transportation, and Natural Resources. Since the significant value is lesser than 5% level for Civic Facilities, Asset management Strategy and Economic Development, the null Hypothesis is rejected for age factor. Therefore it implies that age of the respondents has significant variation in Civic Facilities, Asset management Strategy and Economic Development.

TABLE – 2

REGRESSION ANALYSIS

H_{02} – There is no significant difference between Transportation and Asset management Strategy.

H_{03} – There is no significant difference between Infrastructure and Asset management Strategy.

Variables	B	SE	Beta	P- Value
Transportation	0.629	0.51	0.714	0.000
Infrastructure	0.182	0.56	0.189	0.001

***5% Significant Level**

ISSN:2277-2995
Vol-8-Issue-11-November-2019

INFERENCE:

Transportation is an independent variable and Asset management Strategy is a dependent variable. From the table - 2 it is found that the P Value is 0.000, Therefore it is found that Transportation influence the Asset management Strategy, as the P value (0.000) is lesser than 0.05(Significant level). Thus null hypothesis is rejected.

Infrastructure is an independent variable and Asset management Strategy is a dependent variable. From the above table it is found that the P Value is 0.001. Therefore it is found that Infrastructure influence the Asset management Strategy, as the P value (0.000) is lesser than 0.05(Significant level). Thus null hypothesis is rejected.

CORRELATION BETWEEN ASSET MANAGEMENT STRATEGY AND ECONOMIC DEVELOPMENT

H_{04}: There is no significant relationship between Asset management Strategy and Economic Development.

"To study the relationship between Asset management Strategy and Economic Development of the respondents", the coefficient of correlation of the sample calculated by employing Pearson's correlation Method is shown in table - 3

Table No - 3

Asset Management Strategy and Economic Development

		Asset Management Strategy	Economic Development
Asset Management Strategy	**Pearson Correlation**	1	.364**
	Sig. (2-tailed)		.000
	N	151	147
Economic Development	**Pearson Correlation**	.364**	1
	Sig. (2-tailed)	.000	
	N	147	147

****Correlation is significant at the 0.01 level (2-tailed)**

ISSN:2277-2995
Vol-8-Issue-11-November-2019

Analysis and Interpretation

It may be perceived from the table - 3 that the value of coefficient of correlation between Asset management Strategy and Economic Development is 0.364. It represents a positive correlation between two variables. The obtained coefficient of correlation is found to be significant at .01level of significance. Thus the null hypothesis, i.e. "There is no significant relationship between Asset management Strategy and Economic Development" is rejected. It seems fair to interpret that the Asset management Strategy and Economic Development are related to each other. It implies that significant bond of correlation exists between these two sets of variables, i.e., Asset management Strategy and Economic Development.

9. LIMITATION

- This study is restricted to asset management of municipality with different variables like organization set up, administration quality and so on were not considered.
- The study is limited to Kumbakonam town of Tanjavur region where the aftereffect of the discoveries cannot be summed up for every one of the municipalities.

10. KEY FINDINGS

- Correlation test perceived that the value of coefficient of correlation between Asset management Strategy and Economic Development is 0.364. It represents a positive correlation between two variables. The obtained coefficient of correlation is found to be significant at .01level of significance. Thus the null hypothesis, i.e. "There is no significant relationship between Asset management Strategy and Economic Development" is rejected. It seems fair to interpret that the Asset management Strategy and Economic Development are related to each other. It implies that significant bond of correlation exists between these two sets of variables, i.e., Asset management Strategy and Economic Development.
- From the Regression analysis researcher found that, the transportation is an independent variable and Asset management Strategy is a dependent variable. From the table - 2 it is found that the P Value is 0.000, Therefore it is found that Transportation influence the Asset management Strategy, as the P value (0.000) is lesser than 0.05 (Significant level). Thus null hypothesis is rejected.

ISSN:2277-2995
Vol-8-Issue-11-November-2019

- From Regression analysis it is clear that the infrastructure is an independent variable and Asset management Strategy is a dependent variable. From the above table it is found that the P Value is 0.001. Therefore it is found that Infrastructure influence the Asset management Strategy, as the P value (0.000) is lesser than 0.05(Significant level). Thus null hypothesis is rejected.
- From the ANOVA test we found that, there is no significant relationship between age factor and the study variables Infrastructure, Transportation, and Natural Resources. Since the significant value is lesser than 5% level for Civic Facilities, Asset management Strategy and Economic Development, the null Hypothesis is rejected for age factor. Therefore it implies that age of the respondents has significant variation in Civic Facilities, Asset management Strategy and Economic Development.

11. SUGGESTION

- Kumbakonam municipality ought to create, actualize and make changes in Asset Management approach. The approach will express the responsibility of the council to Asset Management and give statement of policy to guide staff in doing business methodologies, plans and operations in urbanization of Kumbakonam.
- The powerful asset management of local bodies leads to the monetary enhancement of their community which prompts financial development.

12. CONCLUSION

An asset management approach is a valuable device to regulate asset management inside a municipality. A decent strategy can obviously explain a committee's duty to asset management and be utilized to guide staff in incorporating and organizing crafted by asset management to improve its adequacy. The municipality can approach the improvement and usage of its Asset Management strategy in different manners. Asset Management approaches ought to be custom-made to the size, multifaceted nature, and nature of Kumbakonam town. All the more critically, by utilizing sound asset management rehearses that outcomes from a decent asset management approach, chambers and networks can be guaranteed that the assets meet execution levels, are utilized to convey the ideal assistance in the long haul and are overseen for present and future clients.

ISSN:2277-2995
Vol-8-Issue-11-November-2019

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