

SOCIAL IMPACT ASSESSMENT OF MEASURES FOR CITY'S SUSTAINABLE DEVELOPMENT BY THANE MUNICIPAL CORPORATION (TMC)

LINA R. THATTE¹ & H. A. CHANDE²

¹Associate Professor and Head, Department of Economics, K.E.T.'s V.G.Vaze College of Arts, Science and Commerce,
Mumbai, Maharashtra, India

²Assistant Professor, Department of Economics, Sheth N.K.T.T. College of Commerce and Sheth J.T.T. College of Arts,
Thane, Maharashtra, India

ABSTRACT

The world is currently exploring the concept of sustainable development. This can be attained by making a paradigm shift in the process of planning and implementing of various development projects. Accommodative and inclusive growth is to be attained for development to be socially sustainable. The planning authority for the city of Thane in Maharashtra state, India, is the Thane Municipal Corporation (TMC) being established in 1982.

Paper attempts to outline selective measures taken by TMC to ensure sustainable development for the city and also to study the social impact of these measures. TMC's proactive measures in areas of slum improvement, health, education and its cost effectiveness by emerging partnerships with other stakeholders are discussed and the social impact of these measures is assessed through level of resident's awareness and the level of satisfaction derived by them from TMC's projects and services obtaining primary data from residents. The Social impact evaluation of TMC's measures for sustainable development is found to be participative and also proactive. Analysis of satisfaction score and awareness score from primary data collected however, shows that these scores are lower. Effective governance on part of TMC and participatory approach however are recommended to ensure sustainable development for the city.

KEYWORDS: Analysis of Satisfaction, Thane Municipal Corporation (TMC)

INTRODUCTION

Sustainability is about simultaneously looking after the three Es: the Environment, the Economy and Everyone. The difficult challenge facing planners comes with the implementation of sustainability visions, policy and programs, and in the midst of doing so, the need to modify institutions to achieve these goals. Sustaining high growth will require substantial expenditure on physical and social infrastructure, and on urban amenities. The 74th Amendment to the constitution has enlarged the roles and responsibilities of municipalities, with a focus on protection of the environment and promotion of ecological aspects. Policy makers need to view efficient urban development and management as a critical pre-requisite to sustainable growth. Accommodative and inclusive growth is to be attained for development to be socially sustainable.

Appropriate policy making, implementation and efficiency of delivery systems needs to be evaluated by identifying and assessing the impacts of various measures undertaken by the urban local bodies. Social impact assessment of measures undertaken by Thane Municipal Corporation (TMC) can assist in reducing the potential adverse impacts of a

project, can help identify implementation gaps and positive impact assessment can enhance the measures and reinforce an Urban Local Body to further efforts for the city's sustainable development.

RESEARCH METHODOLOGY

Objectives

- To delineate the selective measures taken by TMC to ensure sustainable development for the city.
- To study the social impact of the selected measures for sustainable development taken by TMC.

Hypotheses

- TMC has taken active measures to ensure sustainable development for a city.
- Measures taken up by TMC have positive social impact.

Data Collection and Analysis

Secondary data from TMC's website was obtained to identify measures taken by TMC in ensuring sustainable development for a city. Sources like TMC's City Development Plan, Environmental Status Reports (ESR), City Sanitation Plan and newspaper reports were also referred. Information was also obtained from websites of JNNURM and MPCB. Primary data was collected by making stratified random sample survey of 705 resident's from all nine wards of Thane City regarding their satisfaction about TMC's social infrastructural provisioning and maintenance measures and their awareness regarding TMC's projects and services. Qualitative analysis of data and social impact evaluation was carried out.

MEASURES FOR SUSTAINABLE DEVELOPMENT BY TMC

Here, we look at TMC's proactive measures in areas of slum improvement, health, education and its cost effectiveness by emerging partnerships with other stakeholders.

Slum Improvement

Thane has been one of the foremost Municipal Corporations in India that has tried to implement sustainable community development programmes for the urban poor. A preliminary survey indicates that about 35% population of the city of Thane live in slums. Since the year 2000, TMC has taken a holistic approach in implementing such schemes. These include National Slum Development Programme (NSDP), Integrated Slum Development Programme (ISDP), and Improvement in Backward class areas and Leprosy Colony Improvement Schemes. The redevelopment scheme includes WAMBAY and SRD Schemes.

The various services and amenities provided in these slums includes pathways, storm water drains, waste water drains, community toilets, water supply, street lights and social infrastructure such as ground, garden, crematory, gymnasium, reading room, social centre etc. Thane CSP mentions that in the past five years more than 100 slums have been covered under this programme. In the last three years about 268528 sq. mt. of pathways, 49591 Rmt of storm & waste water drains, 283 seats of public toilets, 24261 Rmt of water supply lines and 37 bore wells were provided in these slums. The Corporation is receiving overwhelming response for the SRD schemes. Up till now plane table survey of 60 slums has been completed. The TMC has submitted 45 proposals to the state committee, which has cleared 38 proposals, and Corporation has given commencement certificate to 24 such schemes. Six schemes are on the verge of

completion while the work of 18 schemes is in full swing. About 5000 slum dwellers are expected to be benefited from these schemes, out of which 2000 have already been rehabilitated. Other than this, corporation has been able to avail 1300 sq mt constructed market, 1300 sq mt land of garden reservation and 1300 sq mt land under road reservation. These reservations are available to Corporation free of cost. Developers have shown least interest in underdeveloped areas where Thane Municipal Corporation is planning to implement schemes on PPP basis.

Health Care Facility

Thane Municipal Corporation provides public health services through 28 health centers, 1 Diagnostic centre, 5 Maternity Homes, 1 Pediatric Hospital and one 500 bedded Chatrapati Shivaji Maharaj Hospital. Total Private Hospitals in TMC areas are 308 with 3322 Bed facility. Standard norms for number of beds in hospitals are one bed for 550 persons. Hence as per norms there should be 3636 beds for 20 lacks Population. It shows that TMC has good medical facility as total beds are 3822 including private and public hospitals. But as far as Government facility is considered ratio comes to 0.14 beds for 550 persons.

IPD and OPD status of CSM Hospital shows great stress on Government facility as total number of IPD and OPD cases from April 2007 to March 2008 were 151151 and these were 220478 from April 2009 to March 2010. Health Department of TMC carries out health survey every year for controlling infectious disease, family planning, women & child health care issues. Infectious diseases status shows that there is twofold increase in diahoriya. This indicates TMC has to pay more attention towards public health care facility by improving relevant infrastructure.

Education

Thane Municipal Corporation runs pre-primary and secondary schools. Educational Board runs primary schools. Ward wise nurseries run by TMC are as shown in Table 1:

Table 1: Ward Wise Nurseries Run by TMC

Kopari	Naupada	Uthalsar	Kalwa	Mumbra	Rayala Devi	Wagale Estate	Vartak Nagar	Manpada
5	4	4	4	14	3	5	11	11

(Source: TMC, ESR 2012)

Number of primary and secondary schools in Thane are as shown in table 2 below.

Table 2: Primary and Secondary Schools in Thane

No. of Schools	Thane Municipal Corporation's Schools.	Private Granted Schools	Private non-Granted Schools	Total
Primary 1 st to 4 th	7	31	36	74
Higher Primary 1 st to 7 th and 5 th to 7 th	117	54	158	329
Secondary Schools	15	91	146	252
Total	139	176	340	655

(Source: TMC, ESR 2012)

Thane Municipal Corporation celebrates World Environment Day each year. Students also participate in it and tree plantation is carried out. Every year science exhibitions are organised by TMC to develop scientific approach among students. In the year 2011-12 a public enlightenment program on right to education was run by TMC. In place of old building of school number 70/71 at Kalwa, a new spacious building was constructed by TMC in collaboration with

Sarva Shiksha Abhiyan. At School number 87 Dasai Pada a spacious school building is constructed by TMC. An awareness march was organized for antismoking under tobacco free educational campus program. Educational facility is also provided to the children of Brick kiln employees.

Development of Social Infrastructure by Emerging Partnerships

ESR 2008-09 mentions that TMC has initiated the program of development of social infrastructure for the city by invoking Public-Private-Partnership instruments. The program comprises of 57 projects.

TMC has formulated strategy of holistic and sustainable development of the city by planning and initiating projects through PPP in the sphere of education, health, housing, sports, entertainment and art.

- **Education:** 9 projects - school building, boy's hostel, nursing college and hostel or 008
- **Health:** 4 projects - Primary Health Centers (PHC), Dispensary, Maternity home
- **Housing:** 6 projects
- **Welfare:** 12 projects consisting of Community center, Library, Mahila Udyog Kendra, Multipurpose hall
- **Administrative:** 6 projects - Ward offices, fire station, administrative building
- **Commercial:** 8 projects - Shopping center, Market
- **Traffic and Transport:** 3 projects - Parking plaza, Parking Zones
- **Art and Environment:** 3 projects - Art gallery, drama theater, convention center, art center
- **Sport and Recreation:** 6 projects - Sports complex, play ground, garden, and parks

Partnerships are emerging of TMC with different stakeholders, which further will make cost saving and improvement in overall infrastructure in future.

SOCIAL IMPACT ASSESSMENT

The social impact of the TMC's measures mentioned in earlier section can be assessed through level of resident's awareness and the level of satisfaction derived by them from TMC's projects and services.

Awareness among Stakeholders

The level of their awareness is analyzed on the basis of responses of 705 residents obtained from a stratified random sample survey in Thane city giving equal representation to all the wards of the city. 11 different projects and services related to sustainable development measures offered by TMC were presented to the resident respondents and their awareness about same was ascertained which include questions like.

- Whether they know that Dry and wet garbage is separated at household level,
- Collection and transportation of garbage is done by private contractors,
- There is dumping ground at Diva and Kopari in Thane,
- TMC provides tree saplings to citizens and schools for tree plantation,

- Artificial ponds are created by TMC for idol immersion during Ganpati festival,
- There are some NGOs like Hariyali, Paryavaran Dakshata Manch,
- TMC gives rebate of 10% on property tax on installation of solar water heating system to existing residential buildings,
- TMC gives 5% discount in property tax to the societies recycling solid waste by 50 %
- An environmental status report for Thane and various projects taken up by TMC are published on TMC website (www.thanecity.gov.in) every year,
- The Commissioner along with officers from various service departments attend the complaints of the citizens personally on 1st and 3rd Monday of every month,
- TMC encourages private sector participation for projects like road building, improvement of traffic islands, development of Nature Park, conservation of creeks, lakes and its beautification.

Awareness among stakeholder's will help determine reach of TMC's projects and programmes. It was found that the entire resident sample was aware on an average of 5 of these activities. TMC thus has to play more active role in making people aware of its various projects and services and to raise their participation as it will improve reach of their programmes.

Satisfaction Level of Residents

As noted earlier, on the basis of stratified random sample survey of 705 resident's primary data was collected regarding satisfaction of residents for social infrastructure provision measures by TMC in Thane city. These measures included quality of education in municipal schools, availability of Super specialty services in municipal hospitals and progress of slum redevelopment and improvement programme. Resident's were asked to rate their satisfaction regarding social infrastructure on a 5 point scale such as excellent, very good, good, average and poor.

Table 3: Satisfaction Level of Residents for Social Infrastructure Provision by TMC

Rating	Excellent	Very Good	Good	Average	Poor	Total
Percentage of Resident's Responses	3.12	9.74	25.01	33.67	28.46	100

It is observed from table 3, that maximum number of resident's (33.67 %) have rated TMC's social infrastructure provision measures as average. 28.46 percent of the resident's have rated it as poor. Only about 13 percent of the total resident's surveyed have rated social infrastructure as excellent and very good. This clearly brings out the inadequacy of provision of good quality social infrastructure by TMC. Further development of health and education infrastructure along with effective governance is the urgent need of the city.

CONCLUSIONS

The Social impact evaluation of TMC's measures for sustainable development is found to be participative and also proactive. Analysis of TMC's measures in areas of slum redevelopment, health and education initiatives and its cost effectiveness by emerging partnerships with other stakeholders validates the first hypothesis that was made ie TMC has taken active measures to ensure sustainable development for a city. Analysis of satisfaction score and awareness score

from primary data collected however, shows that these scores are lower, emphasising on need to further development efforts on part of TMC, partially validating our second hypothesis that measures taken up by TMC have positive social impact. Effective governance on part of TMC and participatory approach can together ensure sustainable development for the city in the future.

REFERENCES

1. Cedric, P (ed.) 1996, Sustainability, the environment and urbanization, Earthscan, London.
2. City Development Plan, TMC (www.thanecity.gov.in/uploadpdf/5-NURM-CDP-3-41345638666.pdf)
3. City Sanitation Plan, TMC (www.urbanindia.nic.in/programme/uwss/csp/draft_csp/thane_csp.pdf)
4. Environmental Status Report, TMC, 2008-09
5. Environmental Status Report, TMC, 2012 (www.thanecity.gov.in/uploadpdf/ESR%202012%20English.pdf)
6. Government of India (2007), 'Maharashtra Development Report', Planning Commission, GOI, Academic Foundation, New Delhi.
7. Gupta, A & Asher, MG 1998, Environment and the developing world: Principles, policies and management, John Wiley & sons Ltd, Chichester.
8. Kahneman, D, Knetsch, JL 1992, 'Valuing public-goods - the purchase of moral satisfaction', Journal of environmental economics and management, vol. 22, No.1, pp. 57-70.
9. Kundu A., Bagchi S., and Kundu D. (1999), 'Regional Distribution of Infrastructure and Basic Amenities in Urban India: Issues concerning Empowerment of Local Bodies', Economic and Political Weekly, vol -34, No 28, (July 10-16, 1999), pp 1893-1906.
10. Maiti, S & Agrawal, PK 2005, 'Environmental Degradation in the context of growing Urbanisation: A focus on the metropolitan cities of India', Journal of human ecology, vol.17, no.4, pp. 277-287.
11. Ministry of Urban Development, Govt. of India, New Delhi (2001): 'Good Urban Governance Campaign',-India (www.urbanindia.nic.in).
12. Mitchell, RC and Carson, RT 1989, Using Surveys to Value Public Goods: The Contingent Valuation Method, Resources for the Future, www.econ.ucsd.edu/papers/UsingSurveysToValuePublicGoods.pdf
13. Pethe A. M. and Lalwani Mala (2006), 'Towards Economic Empowerment of ULBs in Maharashtra', Economic and Political Weekly, 7 Feb. pp.18-24.
14. Stavins, RN 2000, Environmental economics and public policy, selected papers: 1988-1999, Edward Elgar publishing Ltd, Cheltenham, UK.
15. www.thanecity.gov.in
16. www.undp.org
17. www.unhabitat.org