

## **STATUS AND IMPLICATIONS OF NOISE POLLUTION IN TEMPLES OF TAMIL NADU-SRIRANGAM TEMPLE**

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### **ABSTRACT**

Tamil Nadu has a rich cultural heritage and has many temples which are not only places of worship but also places of historical importance. Many forms of cultural and social activities were once practiced. Now everything has been commercialized and these have now become places of exploitation of sentiments and religious values of people, and exploration of new possibilities for extortion of money. Temples have now turned places of pollution rather than peace. In many temples in Tamil Nadu, noise pollution has become a routine, not only in small temples, which are in villages, but also a routine affair in big and famous temples. Srirangam temple, an important temple famous for its sculptures and its presiding deity, is considered as the first 'Divya Desa' for vaishnavites, and has been taken as an example in this study on noise pollution levels. The effect of noise pollution is analysed and its implications viewed. Remedial measures are also discussed.

### **INTRODUCTION**

Undesired sound is defined as noise. There are two types of noise which can be classified as productive and unproductive noise. Noise from an industry is considered as productive noise as there is some production or some useful result behind the production of noise. Unproductive noise has no useful result behind the production of noise, its growing menace has been observed in recent years (Shastri & Trivedi 1988). Several studies have been conducted in different parts of India and it has been established that the noise levels reach undesired levels (Bhaskara Rao et al. 1987, Rao & Rao 1991, Ravichandran et al. 1997a, 1997b, 2000, Tandon & Pandey 1998, Naik & Purohit 1999, Gupta & Chakraborty 2003). Use of speakers in public places comes under this category. Noise pollution has adverse effects on human beings. It is both hazardous to physical and mental health (Job 1988, Dutta et al. 2000). Noise levels in Indian cities soar during festivals. This work focuses noise pollution in temples of Tamil Nadu in general, and Srirangam temple in particular for their contribution to noise pollution.

### **Temples of Tamil Nadu**

Temples are holy worshipping places of cultural, religious and moral importance for Hindus. There are many temples in Tamil Nadu, some having history for more than 2000 years and some newly built. There are many temples, which are big and famous. They were built by Kings, Lords and philanthropic people. Many temples were built by Cholas, Pallavas, Cheras and Pandya dynasties, which were ruling Tamil Nadu for more than hundreds of years. Nayak Kings built and contributed for the development of temples. Many invading emperors also contributed for the development of temples, especially Hoysalan dynasty contributed many things for the development and maintenance of these temples.

There are many temples which have many acres of fertile cultivating land, which was gifted by Emperors and devotees for maintenance of temples. Though the purpose of these temples is only worship, some kind of cultural activities are also undertaken such as dance and drama during festive seasons. Sculptural evidence shows the rich heritage behind these temples, which were centres of exploration of art. The construction of these temples would have given employment for hundreds of persons which shows the advancement in architectural design.

Srirangam temple is one of the oldest, big and beautiful temples in Tamil Nadu, situated near Tiruchirappalli. It is the first “Divya Desa” for Srivaishnavaites. Lord Ranganatha is the presiding deity, worshipped by Kausalya mother of Lord Rama. The idol of Lord Ranganatha is said to have come to Srirangam in Ramayana period. There is a temple in Tiruchirappalli for Lord Ganesa situated on the top of rock fort in the centre of the city, which has mythological connection with Srirangam temple. As such Srirangam temple is rich and famous for attracting tourists from all over the world.

There are many festivals celebrated in this temple. “Vaikunta Ekadasi” festival is one of the important festivals, which is celebrated with enthusiasm in this temple. It is celebrated in the Tamil month of “Markali” which starts in mid December and ends in mid January. The whole month is considered auspicious and many forms of religious activities can be seen in whole of Tamil Nadu.

### **Usage of Speakers in Temples**

Almost all the temples in Tamil Nadu have speakers, which are fixed on towers. If the temple earns more money, it will have more number of powerful speakers. But, there will be no festival without speakers. There are many temples where there is no worship daily, it will be locked for months together but when a festival is celebrated, the organizers of the festival will fix speakers.

The temple authorities are using these loudspeakers for repeatedly banging religious mantra “Om Namo Narayanaya”, a highly precious mantra for vaishnavaites in Vishnu temples and “Om Namah Sivaya”, in Siva temples. There are many temples, which are small and they will be using the hired loudspeakers, which will be used for playing songs. In the Tamil month of “Markali”, many persons go to Sabarimala, situated in Kerala, for the worship of Ayyappan, a famous diety, they will also be hiring loudspeakers. These loudspeakers are not only used for the broadcast of religious songs, but in some cases cinema songs are also broadcasted. Hence, the usage of loudspeakers in Tamil Nadu for worshipping god has not only increased, but the temples which are governed by HR & CE have also started following the common practice of using loudspeakers in the places of religious importance.

There are on an average about five temples in each and every village and around ten temples in a small town, all these temples will be using loudspeakers, and at many times simultaneously.

### **Management of Temples**

Temples of Tamil Nadu are managed by Hindu Religious and Charitable Endowment Board (HR & CE), which is governed by the Government. Each temple has an Executive Officer, who will be a State Government employee, normally a law graduate. If the temple comes under HR & CE and is small, there will be an Executive Officer for four or five small temples. There are temples which come under individual trusts and managed by board of trustees of that particular temple. There are hundreds of small temples which have no specific mode of management, normally managed by devotees worshipping in that particular temple. Srirangam temple comes under the governance of HR & CE.

### **Loudspeakers in Srirangam Temple**

There are many loudspeakers which are permanently fixed inside the temple. Also, the temple authorities have fixed cone type of loudspeakers on the top of eastern side tower. They use loudspeakers throughout the year without any break from 5 a.m. to 9 p.m. At times they start loudspeakers from 4 a.m. and extend till 10 p.m. in night. The sound level will be unbearable and disturb all the residents of the locality. It was not possible for the residents to speak to one another and the effect is unbearable that one will not be able to attend even a phone call. The sound of calling bell will be masked by the use of loudspeakers, harming hundreds of residents who are aged, diseased. Students are also affected because of the noise pollution. After much representation and publication in news papers, things improved, and now they are using speakers on the eastern tower only in the Tamil month of "Markali" reducing the hours of usage, which at present is from 5 a.m. to 7 a.m. in the morning and from 5 p.m. to 7 p.m. in the evening. They have fixed speakers in the "Raja Gopuram", in the south side of the temple, which is the main entrance. Here, they use loudspeaker throughout the year, with some time gap in the afternoon.

### **MATERIALS AND METHODS**

Noise measurement in db were made with digital sound level meter (Lutron SL-4010 model), when the speakers were on, in the eastern tower, southern tower and inside the temple. The sound levels were measured for analysing the background noise level at various intervals in early morning (6-7a.m.), forenoon (10-11 a.m.), afternoon (5-6 p.m.) and night (10-11p.m.), when the loudspeakers are off. The measurements were made at 100 meters from the eastern tower, 10 meters from the southern tower and 10 meters from the speakers which are fixed inside the temple. The average readings were measured for 15 consecutive days, during the Tamil month.

### **RESULTS**

The average sound levels measured at a distance of 100 meters from the eastern tower are tabulated in Table 1. From the table it is clear that the noise level due to the use of loud speakers is very high. The measurements were not made at the time interval from 10-11 a.m. and 10-11p.m., when the speakers are on, since, the speakers will be off at these time interval in the eastern tower. In the morning hours 6-7a.m. when the speakers are on, the noise level in db ranges from 83 to 95, on an average, against the background noise level of 52 to 58 db. The noise levels in the time interval 5-6p.m. can also be seen alarming. From the Table 2 and Table 3, the noise levels in the Southern tower and the noise levels inside the temple can be seen, which is also alarming. The difference between the background noise level in the southern tower when compared with the noise level, when the speaker is on is much less because it is the main entrance of the temple and also it is a business area. The background noise is due to the vehicular traffic and also due to the busy market near the southern tower.

### **DISCUSSION**

The results of the study are shown in Tables 1, 2 and 3. It is clear that there is a huge noise pollution due to the use of speakers in the Srirangam temple. This is very hazardous to the residents and also the temple. Many persons are forced from their bed, to get early in the morning at around 4 a.m. to 5 a.m. due to loudspeakers. This is a great health hazard, for heart patients, elderly persons and weak individuals. There is no need for the temple authorities to play songs at that time. It is a known fact

Table 1: Comparison of noise levels when the speaker is on and when speaker is off in the eastern tower of Srirangam temple.

S.No.	Time of observation	Noise level in db when the speaker is on	Noise level in db when the speaker is off
1.	6-7 a.m.	83 to 95	52 to 58
2.	10-11 a.m.	-	65 to 71
3.	5-6 p.m.	85 to 95	68 to 73
4.	10-11 p.m.	-	45 to 55

Table 2: Comparison of noise levels when the speaker is on and when speaker is off in the southern tower of Srirangam temple.

S.No.	Time of observation	Noise level in db when the speaker is on	Noise level in db when the speaker is off
1.	6-7 a.m.	75 to 80	72 to 78
2.	10-11 a.m.	75 to 82	73 to 79
3.	5-6 p.m.	76 to 85	75 to 82
4.	10-11 p.m.	-	71 to 73

Table 3: Comparison of noise levels when the speaker is on and when speaker is off inside Srirangam temple.

S.No.	Time of observation	Noise level in db when the speaker is on	Noise level in db when the speaker is off
1.	6-7 a.m.	86 to 98	45 to 48
2.	10-11 a.m.	86 to 98	59 to 65
3.	5-6 p.m.	88 to 96	60 to 68
4.	10-11 p.m.	-	47 to 52

that sound has the devastating effect of destruction. Recently, usage of speakers has been banned near all the places of historical importance, since it will be harmful to the architecture itself. But the usage of speakers is there in Srirangam temple, which is old with historical importance. Also, the practice of using speakers in all the temples, governed by HR & CE, or in temples which are owned by Trusts, has become a dangerous and regular practice. There are many small temples, which have only meagre income but there will be a speaker attached to it, which would most probably be donated by a devotee for running throughout the day.

Government has included noise pollution under air pollution and strict norms have been laid for the use of loudspeakers. It has also specified the time limits and also the noise levels for the loudspeakers. But, no one cares for the law for the control of noise pollution. Even HR & CE, which has to respect the law to protect the structure of temples from loud noise, and for the sake of the residents around temples, religious harmony, persons who are not having any belief in the temples or have some other religious faith and belief.

Many places in Tamil Nadu are affected due to noise pollution, especially due to the unwanted use of loudspeakers in the places of worship. When one place of worship has a loudspeaker attached to it, other place of worship will see to it that they also have a loudspeaker. This happens even within the same religion. There is an unhealthy race for sound and for the disruption of harmony in many places in Tamil Nadu. This has to change and the Government has to curb this menace with iron hands.

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