



## **TACKLING NOISE POLLUTION:**

### **Contexts and Issues:**

#### **Shahram Taherzadeh**

I am Shahram Taherzadeh. I am a lecturer in Environmental Engineering at the Open University at the Faculty of Mathematics Computing and Technology, involved in the courses to do with environmental protection and general engineering. I've been at Open University for about 20 years in various guises.

This course is about pollution control and public health. Noise pollution has one of the four main polluting aspects, that's the water quality, air quality and waste control and management, is an important issue in our modern society which we have to deal with, study, and look at it.

Noise is one of the plights of modern life, specially modern urban life. It is one of the consequences of industrial society. Although some people take it as one of the inevitable consequences of modern way of life, we can do so much about it. We can make it much less impacting on our society. And there is also a lot of evidence that excessive noise levels not only cause annoyance, but also disturbance in sleep and through that causing stress and perhaps even worse.

Studies have shown that excessive traffic noise by the car or aircraft noise, has an adverse effect on capability of young children and their concentration levels. So it is important that people who are learning about environmental control and pollution control have some understanding of the issues involved and various means that help to reduce this type of pollution.

We chose this particular case study because it both embodied one of the largest causes of noise which was traffic noise. And also how much impact it has on an area where there was none before. Although there are lots of efforts and research has been done to reduce noise from cars and vehicles as the case study shows, but there's still unfortunately the number of vehicles on our roads is going up all the time and that negates the advances in making the cars quieter.

Case study is trying to show( that all) research and efforts by manufacturers to make the car produce less noise, even since making that video, the modern cars are very quiet, the engine noise is almost in audible. What that has done, of course, in addition to making cars quieter,

has made us more aware of the other source of car noise, which is the road noise, and the tyre noise.

The progress in developing quieter road surfaces is still ongoing. There have been some progress made since the videos were produced. Certain sections of the motorway which are adjacent to noise sensitive areas have been surfaced by these new quiet, porous surfaces. There are some cost and maintenance and use for life issues that are still to be resolved. Research is still ongoing in this country and other European research institutions to produce and develop cost effective, longer lasting, quiet road surfaces.

In the past few years there has been a number of directives from European Union who has taken lead in environmental protection. A lot of directives on reducing the noise levels both at workplace and in our living areas have come out, which forces governments to try to reduce noise levels.

One of the means of monitoring that is that now governments are obliged to produce noise maps of large cities and towns and which is available now from government internet websites.

So in that sense we have moved some step ahead but all the issues that are addressed in the case study are still valid, still noise from highway is a problem. Now governments and public authorities are trying to take steps to address that and reduce the disturbance to the public.

Couple of new issues that perhaps weren't quite explicit in the video we made. One was idea of soundscape in urban areas. Well we cannot make city centres completely quiet, this is impractical. So instead, why don't we make them sound pleasant by maybe adding sounds of waterfalls or other types of sounds that are pleasant and soothing for us. To basically mask certain unpleasant sounds, like sounds of cars or other types of noises. That's where concept of soundscape is developed, which is mostly for urban areas.

The other issue is concept of tranquil spaces. We all love to preserve beauty of countryside, natural beauty. Preserving the sonic quiet state and their tranquillity is equally important. I hope students who watch these videos take away with them the idea that the noise as one of the polluting aspects of modern society is an important issue and how much the efforts to reduce the noise can increase the quality of our life.

This manifest as not only in better designed vehicles, better designed or better manufactured aircraft, but also better insulated homes and living spaces.

A lot of modern issues like wind turbines have with them not only the issues regarding visual aspects of impact on the countryside, but also the issue of noise from these wind turbines, which always comes up in public enquiries. And if students become familiar with concept of noise and what the levels are, what the decibel level is, I'm sure they'll make a much more informed contribution to public discussions about these issues.

**Voice Over**

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