

Setting up a Nuclear Plant;

will it be Beneficial or Harmful

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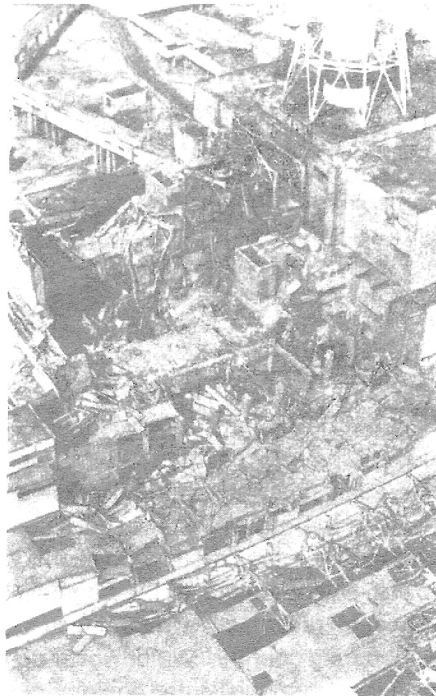
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It is no secret that science and technology has reached its zenith in the 21st century. This being such an age, the use of advanced technology for the construction of a nuclear plant can be considered a common occurrence. Do we have in our countries, such technology and such a high level of industrial discipline.

All the nuclear plants found in the world today have been established according to the process known as "nuclear fission". The two nuclear bombs which were dropped on the areas of Hiroshima and Nagasaki in 1945 were also built on the same principle. However the nuclear missiles which exist today have been built using the process called nuclear fission. It provides more energy than the nuclear fission system. However, upto now it has not been possible to use the nuclear fission process for nuclear power plants. It is therefore clear that the system in operation all over the world still is a low efficiency high risk process. During the fission process, a sudden and powerful explosion takes place inside a bomb. However inside a power plant there is provision to control the energy released in this way. Yet it should be reiterated that there is a high risk of massive accidents taking place inside power plants which rely on the fission process. The by products of this process are highly radio active. Any sudden leakage from such a power plant will result in large quanti-

ties of radio active material entering the atmosphere outside the power plant. Several such unexpected events have ended up in vast disasters.

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Chernobyl Nuclear Plant

ple of Chernobile. To be exact, everyone within a 30 k.m. radius from Chernobile had to be evacuated immediately. However every thing did not end with that. Through out Europe levels of radioactivity were raised. Various problems cropped up.

Further, some radio active materials which escaped during the Chernobile explosion were found in Japan and in the United states of America. Isn't this an indication of the scale of the destruction caused? What caused this disaster which took place at Chernobile in the Soviet Union to have an effect on such distant countries. This was caused mainly by the wind. The radio active material which entered the atmosphere at Chernobile was blown by the wind, not only into countries such as Norway and England but even to states which were further away.

It needs no mention that if such an accident were to take place in Tamil Nadu which is a mere 20 miles away from Sri Lanka, and radio active material is released from a power plant in Tamil Nadu, we in Sri Lanka would be severely affected. On that day, Sri Lankans will suffer a tragic fate. The Winsco power plant in England met with such a fate. The power plant located in the Three Mile Island in Pennysylvania in the U.S.A. too suffered a radio active leakage causing harm to a large number of lives. More

than all these, it is the Chernobile tragedy that has left the strongest impression in our minds.

According to nuclear scientists, in the event of such a sudden leakage, people living within a minimum range of a 90 mile radius from the plant should be evacuated immediately. However, this can only lower the risk. It is no secret that due to the accident at Chernobile, radio activity affected agricultural products, and livestock, not only in Russia but even in Northern Europe. It is also no secret that for a considerable period of time thereafter, not only in Russia but even in Sri Lanka food items (powdered milk, jams etc.) had to be referred to laboratories. The direct result of nuclear radio active leakages affect a minimum of 100 miles and it could spread further according to the nature of the blowing.

Further, when a nuclear plant is in operation diverse waste products are generated. These are radio active materials. Therefore such wastes cannot be dumped haphazardly. Because of these, European Countries are facing a serious problem even today. This waste material is normally stored in barrels made of concrete. Thereafter the barrels are sunk to the bottom of the sea. Yet who can think that the problem will end with that? Is it not possible for this radio active material to escape from the barrels some day? In these circumstances how will such nuclear waste from the power plant in Tamil Nadu be stored? Will it be in the Indian ocean which surrounds us? We should know about it. Why? Because this waste material is dangerous. Furthermore, many countries generally attempt to hush up accidents causing radio active releases without anyone's knowledge. We come to know only about accidents which cannot be kept secret like the Chernobile disaster.

Generally, European countries are constantly on the alert regarding this type of

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accident. They have highly sophisticated equipment which can record even a very slight change in the level of radio activity in the atmosphere. Therefore European countries are in a position to know it, even if there is the slightest release of radio active material in a neighbouring country. We however do not have such sophisticated equipment. Nor do we make an effort to identify the constant changes in the level of radio activity.

Therefore even if such an accident were to take place in India, we have no way of knowing it. Even at a moment when the whole of Sri Lanka is in danger, we could still be unaware of it. Our fate may be sealed without even knowing it. Isn't that an extremely dangerous proposition?

Today the storage of nuclear waste has become a problem even to European countries. They use a splendid strategy to solve this problem. They despatch this waste to third world countries on the sly. These are stored in third world countries with the knowledge of some of the citizens of those countries. The developed countries are prepared to pay in millions to those who help them to do this. Marshal Islands provides a good example for this. Nuclear waste from various countries have already been deposited there. This remains a secret.

It is in this context that the voice of our scientists is raised against the establishment of a nuclear power plant in Sri Lanka. It is a myth to think that we too should go in for nuclear power plants simply because developed countries are using it. Even Sweden which is at the forefront of high-tech has decided to get rid of nuclear power plants before the end of this century. Although Australia is naturally endowed with large amounts of Uranium required for nuclear power plants it has no nuclear plants. The amount of money received by islanders per year is a hundred million dollars. That is for helping to store nuclear waste on their mother land. Who could predict whether the day when Sri Lankans too will be interested in such short cuts to making money, will not dawn? It becomes easier, because the waste material could be obtained from Tamil Nadu. It has to be transported only over a distance of 20 miles. What would we do when this day arrives?