Statement by Mr. Asrat Bulbula
Head of the Ethiopian Delegation
to the 44th Session of the IAEA General Conference

First of all, please allow me, on behalf of the Ethiopian Delegation, to extend my warm congratulations on your election, Dr. Othman, to the presidency of the current General Conference. Your rich experience and wisdom, I am sure, will lead this conference to a successful conclusion.

May I also take this opportunity to present the compliments of my Delegation to the Director General, Dr. Mohammed El Baradei and the Distinguished Delegates of member states and sister organizations. I would also like to take this opportunity to welcome the delegations of the new member states of Azerbaijan, the Central African Republic and Tajikistan.

Mr. President,

It is to be noted that, the recently concluded United Nations Millennium Summit reached the consensus on the need to eradicate the scourge of poverty. Nuclear Science and Technology can make a significant contribution to that end.

The programs of Ethiopia based on Nuclear Technologies are directed to the various sectors of the national economy that demand the top most attention and highest priorities.

Our part of Africa's economy is primarily based on agriculture. Livestock is extremely important in the agricultural sector not only as a source of milk, meat and other products but as major power source of traction. The potential for livestock development is immense. But this potential is hampered by diseases, among which trypanosomosis is one of the few in the forefront.

The utilization of fertile lands to their full potential is constrained by trypanosomosis, leaving most of the population in Sub Sahara Africa to a precarious livelihood.

The disease trypanosomosis is transmitted by tsetse flies and cyclically maintained between inflected hosts and healthy ones.

Tsetse flies infest an area of over I billion hectares (10 million sq. kin) in 36 African countries. Some 260 million people live in this tsetse fly belt. In addition to the risk of trypanosomosis to the 44 million cattle and enormous other livestock population, about 55 million people are also at risk of contracting human sleeping sickness which is also transmitted by tsetse flies.

Large expanses of land are under populated and under developed whereas there is severe pressure on the limited areas outside of the tsetse fly belt.

The limitations imposed by the tsetse and trypanosomosis problem continue to hamper progress in development in tropical and subtropical Africa. The fly infested belt is therefore, seriously underutilized for the production and productivity of livestock and crops.

Mr. President,

About 80% of the livestock and 90% of the human population in Ethiopia live in the highlands that constitute only 55% the total land area of the country. This has resulted in very heavy human and livestock pressure in the Ethiopian highlands, which have become increasingly less productive. People in these highlands, therefore, would most likely move to the fertile areas in the lower parts of the country if a few of the major hindrances that discourage them from doing so are removed.

Tsetse infestation and animal trypanosomosis is one of the most significant diseases in the fertile lowlands of Ethiopia. Major Ethiopian river basins and watersheds are in tsetse-infested areas.

In Africa, efforts to deal with the disease date back about 100 years. Measures focused on the application of trypanocidal drugs. Other control measures ranged from attempts to eliminate tsetse habitat, extermination of wild games, blanket application of insecticides and traps. Some of these measures had grave environmental consequences.

Tsetse fly control with traps and insecticides has mainly been aimed at reducing the fly population in relatively small areas. These approaches, therefore, have not resulted in the eradication of tsetse flies or trypanosomosis, let alone from large areas, even from the small areas. The feed back on the performance of these approaches has always been questionable, for accountability could not be assured.

More recently, the Sterile Insect Technique (SIT) has been successfully employed in the eradication of Mediterranean fruit flies, and screwworms. This SIT technology has now been successfully used on the eradication of tsetse from Zanzibar.

The government of Ethiopia has, for nearly 30 years, attempted to control animal trypanosomosis. These measures did not bring any lasting solution.

The existing control measures require expensive imports of drugs and insecticides on a continuous and sustainable manner. Unfortunately, this result in both government, donor and farmer fatigue. To circumvent this, the Ethiopian Government decided and committed itself to the introduction and national capacity and capability building for the application of the SIT Technology.

As this problem is Africa — wide, an Africa-wide approach is only logical. A good beginning has already been made. A pan African SIT Forum has been established with the highest political visibility and backing by the recent most summit of the Heads of State at Organization of African Unity.

The SIT Technology is of also of potential utility in the area of malaria control.

The Ethiopian Government and people are highly indebted to the IAEA for its meaningful and extraordinary cooperation in this area.

Following the SIT project, Ethiopia attaches the second highest priority to Isotope Hydrology.

Isotope Hydrology is a scientific and technical tool that in complement to conventional

techniques has served as means to understand and elucidate the various past and present regimes of occurrence of water at and beneath the surface of the earth. Over the last six years we have used the technique to study surface and ground water resources.

Around Addis Ababa, the capital of the country, isotope techniques are being employed to understand the exchange rate and direction of a major groundwater field that is to contribute about 35% of the water supply of the city. The ground water field being down-stream of the city. This study also envisages to study the susceptibility of the field to environmental pollution. This study has attracted the attention of HABITAT and the French Government, which is also involved in the study through its bilateral technical cooperation programme.

The technique is also being used for the management of a geothermal power plant that has been earlier developed through the UNDP and EEC assistance.

The technique has also been used successfully to understand, in conjunction with conventional techniques, the cause for the water level rise of the Beseka Lake that threatened to submerge a rail-way link to the port of Djibouti.

Having seen practically the effectiveness of the use of Isotope Hydrology in Water Resources Development, the government of Ethiopia in cooperation with the IAEA is initiating a programme that aims to map and assess ground water resources in the entire country. This multi-year programme is believed to attract over-seas funding particularly from the USA. Through arrangements made by the Agency, the United States Geological Survey is to send next month four senior scientists to conduct a National Workshop that would develop a comprehensive National ground-Water Resources Assessment Programme for Ethiopia. Given the recurrent drought in the country and the transboundary nature of almost all the major rivers of the country, this programme has an important implication in the optimal utilization of our water resources, poverty alleviation and development strategy of Ethiopia.

Technical cooperation in the various important fields is also well in place. That is in the area of human health, agriculture, radiation protection, and instrumentation. The IAEA's support in human resources development, infrastructure building and experience sharing in technical management has been extremely invaluable.

Mr. President,

Ethiopia has been actively involved in various projects under AFRA. AFRA programmes have been providing a wide range of opportunities for sharing experiences, expertise and resources on a regional basis. Not only does Ethiopia share the aims and goals of the IAEA, but will continue to make positive contributions and cooperate with the Agency in every possible way.

In conclusion, I wish to reaffirm that my country, Ethiopia, has greatly benefited from the cooperation with the IAEA and looks forward to further fruitful cooperation through the Technical cooperation programme.

Please allow me to thank those who made most of our success wishes realized. These are the Officials, Departments, Divisions and relevant sections of the IAEA.

Thank You.