It is my honour and privilege to address you today at the inauguration ceremony of the irradiator and the digester.

Today’s ceremony is another testimonial of our endeavour in taking proactive measures in adopting an integrated approach to handle the problem caused by insect pests which is in line with Government’s vision in aiming at encouraging sustainable agriculture.

The absence of appropriate control measures constitute a limiting factor to the expansion and development of a profitable and diversified fruit and vegetable industry with the result that large quantities of fruits are being imported, and also limiting our exports to other countries.

The most direct economic impact of pests or diseases is the direct loss to agricultural produce - which reduces farmers’ income.

At times, the burden may be severe and local food security may be impaired.

Pests and diseases often have significant negative impacts on food security and nutrition in developing countries which is of major concern to policy-makers and
provides one of the main arguments in favour of international assistance for control programmes.

- There are 8 species of fruit flies in Mauritius, 4 of them attacking vegetables and 4 species attacking fleshy fruits.

  The peach fruit fly (*Bactrocera zonata*) is a major pest of fleshy fruits such as mango, peach, guava, papaya etc which are mostly grown in backyards.

  The melon fly (*Zeugodacus cucurbitae*) is the most important insect pest of cucurbits namely: cucumber, pumpkin, squash, bittergourd, snakegourd, *courgette* among others.

- The annual production of cucurbits is around 24,000 Tons. It is estimated that 30 % of the production is lost in the field due to fruit fly attack.

  In the absence of fruit flies, our cucurbit production should have been 32,000 Tons a year.

  It is estimated that Rs 160 M are lost annually as a result of damage caused by fruit flies.

- An environment friendly package for fruit fly control which involves the use of protein bait and mass trapping of males is being recommended by the Entomology Division.

- In order to make fruit fly control sustainable, the Sterile Insect Technique (SIT) has been included.
SIT involves the mass rearing of fruit flies in the laboratory, sterilization of males by irradiation of pupae and field release of the sterile males.

In this way the life cycle of the insect is disrupted and the population is suppressed without the use of pesticides.

- The Entomology Division has already started releases of the sterile peach fruit flies at Poudre d'Or village in the north and promising results have been obtained.

- The irradiator was purchased on a cost sharing basis by the International Atomic Energy Agency (IAEA) and the Government of Mauritius, to the tune of € 163,500 and € 75,000, respectively.

- I would seize this opportunity to thank the IAEA for its constant support and the long collaboration with the different institutions in Mauritius.

The experience gained and technical expertise developed by national counterparts through the implementation of past and present IAEA supported technical cooperation projects are enabling us to achieve the objectives of my Ministry.

- We have met today on the occasion of the inauguration of a Gamma irradiator.

The self-shielded Gamma irradiator will be used by various institutions namely the Ministry of Agro-Industry and Food Security for the sterilisation of insects and mutation breeding of plants, the Ministry of Health and Quality of Life for the sterilisation of
mosquitoes, the University of Mauritius for the sterilisation of seeds and other materials for research purposes and the Mauritius Sugar Industry Research Institute for sugar cane breeding.

- The Entomology Division of my Ministry will be using this irradiator for the sterilization of fruit fly pupae in order to implement the Sterile Insect Technique for the area wide control of fruit flies in farmers’ fields and in fruit orchards.

- Besides inaugurating the irradiator, I am also inaugurating the plant for the modification of waste brewery yeast into fruit fly bait. This plant can produce 2000 litres of protein bait within one week.
- So far fruit fly bait is being imported and it constitutes an important cost in fruit fly control.
  Preliminary studies have shown that the modified bait from waste brewery yeast is as good as the imported protein bait.

- It is planned that the prepared bait will be sold to growers at a minimum price so as to encourage them to apply protein bait for fruit fly control.

- For the last 35 years or so, the Entomology Division of the Agricultural Services has been working in collaboration with the FAO and IAEA to implement several Technical Cooperation projects and Coordinated Research Programmes to come up with new and more efficient techniques to alleviate the problem of fruit flies.
We have greatly benefitted from the financial support and technical expertise provided by the FAO and IAEA.

I would like here to name a few:

(i). the purchase of the Gamma irradiator

(ii). enabling Mauritius to become a “centre of excellence” in Fruit Fly control in the region

(iii). facilitating the setting up of the “Regional Postgraduate Certificate Course in Sterile Insect Technique for Fruit Fly Management” in collaboration with the University of Mauritius, and

(iv). sponsoring 2 Officers of the Entomology Division in their MPhil/PhD studies at the University of Mauritius

I would here extend a special thanks to Mr. Kiza, Programme Management Officer, who has been instrumental in these endeavour.

With these words, I wish to re-iterate my thanks to the FAO and the International Atomic Energy Agency of the United Nations for their valuable support and assistance. I am confident that this cooperation and collaboration will continue in future also.

Thank you.