ZIKA: New Technologies and Approaches

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Recently, the Caribbean Public Health Agency (CARPHA) and the International Atomic Energy Agency (IAEA) signed a partnership agreement to provide a framework for joint work on the use of nuclear science to prevent disease and promote and protect the health of people and the environment.

A component of the Agreement is to build alliances in the use of insect pest management practices, which includes innovative approaches to control mosquito vectors for Dengue and Zika.

The IAEA, through its technical cooperation programme, will contribute to efforts to address Zika virus disease outbreaks in the Caribbean region, supporting both detection of Zika virus and control of the mosquito population. Support will include:

The technical cooperation (TC) programme, will aim to strengthen national capacities for the population control of *Aedes* mosquito species transmitting dengue, chikungunya and particularly Zika in the Latin America and the Caribbean region using integrated vector management (IVM) approaches with a sterile insect technique (SIT) component, through:

- Training local staff on all aspects required for the development and application of IVM approaches with a SIT component;
- Provision of equipment needed for the development and application of IVM approaches with a SIT component; and
- Strengthening national and regional mechanisms for *Aedes* mosquito population control (networking, coordination and information exchange).

SIT is a proven and robust technology which has been applied successfully in an area-wide integrated pest management approach against several pest and disease vector insect species. It is environment friendly and affects only the target population without adverse effects on the environment or the human population.