SUBMISSION BY THE REPUBLIC OF CUBA

on

Adaptation approaches, strategies, practices and technologies for adaptation

In the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change' (FCCC/SBSTA/2006/L.26), SBSTA invited Parties and relevant organizations to submit to the secretariat, structured information on adaptation approaches, strategies, practices and technologies for adaptation at regional, national and local levels in different sectors, as well as on experiences, needs and concerns.

The Republic of Cuba welcomes the opportunity to present views on the above issue and follow the main aspects of the structure developed by the secretariat.

1) A Framework for Disaster Reduction in Cuba.

This action which could be classified as **strategy** is an **ongoing** adaptation action which is based on the well structure National Civil Defence (NCD) and the more recent experiences addressing extreme climate events in Cuba. The framework is supported by Directive No. 1 of the Vice-president of the National Council of Defence, adopted in 2005. Although the scope of is national, its implementation occurs at **national, provincial, municipality and institutional levels.**

In order to successfully implementation the adaptation action the framework considers the inclusion of activities like: prevention, preparedness, response and restoration. The development of detailed disasters reductions plans at national, local and institutional levels, and its integration with economic and social development plans, is a key component of this strategy. A very important piece is also the knowledge increase on hazards, vulnerabilities and risks throughout the results of studies oriented to produce detailed temporal and spatial information.

Experiences of the Cuba response system for tropical storm and hurricane impacts is being improved, including other extreme events with the aim to strength institutional, individual and systemic capacity, for a potential increase of extreme weather intensity and frequency. Among other actions, annual exercises called METEORO are developed in the country to review the degree of implementation of the different elements of the disasters reductions plans. Thus the framework **involves the entire Cuban society**.

2) Cuban Vaccination Program.

This **strategic** and **ongoing** action was not primarily oriented for adaptation to climate change; however, the benefits of the program are crucial to increase the adaptation capacity of the Cuban population. By this program an important number of the diseases related with climate change influence have been eradicated at **national** and **local levels**.

3) Cuban Program for Education

This could be classified as an "**ongoing** infinite campaign" oriented to increase the culture and knowledge of Cuban population on a continuous basis. In fact the education strategy in Cuba incorporates various programs that incorporate all the Cuban society from **national to municipalities.** A better and well structured education system could increase the capacity for adaptation and to reduce vulnerabilities, creating an enabling environment for the incorporation of the climate change dimension.

References on this experience could be finding in <u>http://www.cip.cu</u>

3) Beach restoration technology.

Based on the scientific results and experiences in coastal management Cuba developed a technology for **Beach Restoration**, which classify as a hard adaptation option. The technology **has been implemented** in some Cuban beaches with very good results, restoring the natural and functional values of the beaches.

Reference Trista E., José L. Juanes, Hermes Salazar y Kenia Hernández 2004, Evaluación de las actuaciones costeras en las playas interiores de Cuba, Ingeniería Civil, No 135, pp. 125-128.