THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

This country has 2 million inhabitants on a mostly hilly and mountainous landlocked territory in south-eastern Europe, spreading over 25 000 km^2. According to climate change scenarios the average increase in temperature could reach 3.8 °C in 2100, and the average decrease in precipitation could be up to -13% compared with 1970–1990 averages. More frequent and more intense heat-waves, droughts and flood events are expected[1].

CLIMATE CHANGE AND HEALTH

Over the next decades, a substantial decrease in excess deaths in the colder months is expected (i.e. a 4% decrease in January and October). On the other hand, there could be an increase in excess deaths between 4% and 11% in some summer months (mostly in April, May and June) with an average increase of 10% compared to 1996–2000. People with chronic diseases, especially cardiovascular and respiratory conditions, are at higher risk of increased mortality during heat-waves, compared to healthier groups. Deprived communities that lack wealth, social institutions, environmental security and good health conditions, are likely to suffer more from the adverse health effects of climate and other environmental changes.

More frequent floods in the last years (five registered in 2003–2009) resulted in infrastructural damage to houses, roads and bridges as well as to agricultural facilities and water supply systems, with an indirect influence on the occurrence of climate change-related infectious diseases, particularly through contaminated water.

PROTECTING HEALTH FROM CLIMATE CHANGE IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

To address and prevent potential health threats from climate change, the project *Protecting health from climate change in the former Yugoslav Republic of Macedonia* undertakes an assessment of the health impact, vulnerability and adaptation to climate change, as a basis for the development of a national health adaptation strategy.

Specific action aims at implementing heat-health action plans and piloting energy-efficient health services, through investments and technology transfer as a means to develop early information on climate-related infectious disease risks and to protect health from heat.

Activities also include a contribution to WHO information platforms by sharing data, tools, results and lessons learnt.

This project fills an important gap in knowledge about the health effects of climate change and adaptation mechanisms. The first workshop on developing a climate change health protection strategy in the former Yugoslav Republic of Macedonia gave direction to policy action and strengthened the responsibilities of decision-makers and key technical experts.

1 Azievska M et al. *Second national communication on climate change.* Skopje, Ministry of Environment and Physical Planning, 2008 (http://unfccc.int/resource/docs/natc/macnc2.pdf, accessed 17 November 2009).

Photo: WHO Country Office, the former Yugoslav Republic of Macedonia

Assessment of energy efficiency is conducted in pilot hospitals to reduce emissions and adapt to climate change.

BUILDING MEDIA CAPACITY TO IMPROVE THE QUALITY AND QUANTITY OF STORIES ON CLIMATE CHANGE AND HEALTH

The quality of information on climate change and health in the countries of the south-eastern European Region has a role in raising public awareness and increasing participation in these issues.

The project aims to contribute to the improvement of media coverage on climate change and health in the country by engaging journalists in increasing the quality and quantity of their reporting and stimulating networking. In particular it aims to:

- train journalists on climate change and health including through an on-line resource centre;
- organize field trips and press conferences for journalists to facilitate the production of analytical stories and videos;
- establish a journalists' network on environment and health in the south-eastern part of the Region including through an on-line forum.

GREENING THE HEALTH SECTOR THROUGH REDUCTION OF GREENHOUSE GAS EMISSIONS IN HEALTH INSTITUTIONS: A TOOL FOR HEALTH ADAPTATION

The general hospitals in Shtip and Gostivar are piloting the implementation of measures to reduce greenhouse gas emissions by the health sector. This is achieved by improving energy efficiency and introducing renewable sources of energy.

An energy efficiency assessment of the two health institutions identified the best ways to increase energy efficiency and the most suitable equipment to generate energy from renewable sources. This includes the safety of plant operators, hospital personnel and patients; plant operation and maintenance; and energy efficiency and atmospheric emissions. Appropriate measures are evaluated based on savings in energy use, emissions and running costs, and the overall benefit for hospital patients and personnel.

These measures will help reduce greenhouse gas emissions at municipal level and raise awareness of health managers and staff on the effects on climate change. Training of hospital staff is expected to change their behaviour towards energy saving and protection of the environment.

This pilot initiative can in turn promote private and public partnerships in the country. Lessons learnt have a potential large-scale application helping reduce government expenditure; adapting to heat and cold; and providing a model for the government to carry out independent measures and programmes.

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

WORLD HEALTH ORGANIZATION EUROPE