Food and Agriculture Organization of the United Nations

REDUCING VULNERABILITY OF AGRICULTURE TO CLIMATE CHANGE IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Agricultural production is inextricably tied to climate, making agriculture one of the most climate-sensitive of all economic sectors. In countries such as the former Yugoslav Republic of Macedonia, the risks of climate change for the agricultural sector are a particularly pressing problem, because the majority of the rural population depends either directly or indirectly on agriculture for their livelihoods. Against this background, the project aimed to increase the institutional capacity of the Government and other entities to assess climate-change impacts and identify adaptation options, and to provide improved extension and education material to farmers, secondary schoolteachers and scout leaders.

WHAT DID THE PROJECT DO?

The project provided a clear plan for aligning agricultural policies with climate change, and enabled informed decision-making needed for improving infrastructure and on-farm investments. Ministry of Agriculture, Forestry and Water Economy (MAFWE) sectoral departments at national and local level and extension agents were trained on climate risk analysis and climate-change adaptation. As a result, government institutional capacity and awareness on assessing climate-change impacts and identifying adaptation options were significantly increased. The project was also successful in developing capacity and institutionalizing agrometeorology tools and services in the Hydrometeorological Service (HMS). In addition, a set of modules related to climate change were developed for secondary agricultural schools, and it was agreed with the Ministry of Education and Science that these would be included in the new school curricula from 1 September 2018.

IMPACT

The project contributed to increasing agricultural productivity, and to making people and their livelihoods more resilient to the impacts of climate change and extreme weather events. Agricultural practices were promoted to help farmers adapt to climate change, as well as to increase agricultural yields, contributing to the food security of the beneficiaries. These practices were also introduced for the protection and preservation of the environment, biodiversity and ecosystems.

KEY FACTS

Contribution
USD 396 000

Duration
May 2016 – December 2017

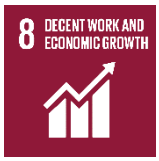
Resource Partner
FAO

Partner
Ministry of Agriculture, Forestry and Water Economy (MAFWE)

Beneficiaries
MAFWE, Hydrometeorological Service (HMS), agricultural secondary schools and National Extension Agency (NEA), farmers and other stakeholders in rural communities involved in agricultural production processes

ACTIVITIES

- Three pilot sites identified (in Gradsko, Kocani and Strumica), where three Automated Weather Stations were installed, enabling HMS to collect climate and agroclimatic data.
- Home page of HMS website created to show climate data and climate information for agricultural purposes; and database for phenology established.
- Alerts developed for fruit diseases, as well as a notification system for good and bad conditions for spraying and fertilizing.
- Study tour organized for three technical staff members of HMS to several specialized institutions in Rome, Italy, to learn about different methods and protocols for data collection, treatment and analysis, and agrometeorological modelling and forecasting.
- Users' manual produced on downloading and processing satellite images and obtaining useful information, such as the Normalized Difference Vegetation Index (NDVI), to monitor the status of drought.
- Training course organized for agricultural secondary school teachers to validate the modules developed on climate change, soils and livestock.
- Two national scout events organized to increase knowledge on environment, climate change and disaster risk reduction issues; as well as training courses for selected scout leaders.
- Awareness raised on climate change through the dissemination of educational videos and messages, and the organization of small workshops in schools.



SUSTAINABLE DEVELOPMENT GOALS

Project Code
TCP/MCD/3503

Project Title
Reducing Vulnerability of Agriculture to Climate Change

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