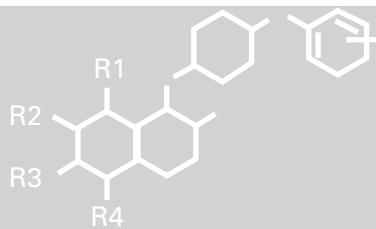


# New Technologies for Adapting Agriculture to Climate Change

Agriculture faces the challenge of providing food in sufficient quality and quantity to satisfy the demands of a population that will keep growing and whose purchasing power will continue to rise, in the context of climate change and greater social and environmental awareness.

Biotechnology is one of the pillars of the agricultural and food revolution

## Biotechnology



- > In recent decades, biotechnology has intensified its contribution with advances such as the biofortification of crops and resistance to plagues, disease and herbicides, among others.
- > Currently, it is used to produce enzymes, probiotics, pigments, vitamins and amino acids, as well as to fortify food, prolong its shelf life, and improve its flavor and nutritional value, among other things.
- > In light of climate change, biotechnology has been promoted as an adaptation tool in cases such as the development of strains adjusted to drought and heat.

Nanotechnology could bring benefits all along the agricultural chain

## Nanotechnology



- > Among the benefits of nanotechnology is the improving of diagnosis and treatment of disease in plants and animals.
- > A more efficient management of fertilizers and agrochemicals.
- > And progress in water desalination, purification and decontamination, among others.

Information and Communication Technologies (ICTs)

## ICTs



- > ICTs can contribute to developing agriculture, consolidating agricultural markets, improving services, and strengthening the links in regional and global value chains.
- > ICTs play a central role in generating, systematizing and disseminating information that allows farmers to make production decisions that are better adapted to climate change.

To achieve these goals, public-private cooperation, stronger regulatory frameworks, investment in training, and direct work with farmers are needed.

The new technologies applied to agriculture and the food industry contribute to fostering structural change.