

## English summary

The idea of establishing penicillin production in Eastern Europe originated in the summer of 1945, when the Czechoslovaks asked the United Nations Relief and Rehabilitation Administration (UNRRA) to provide them with the means to make the drug at home instead of having to rely on deliveries from abroad. UNRRA agreed to this and also extended the offer to other European nations, including Czechoslovakia, Poland, Yugoslavia, Belarus and Ukraine. The so-called penicillin plant programme, an ambitious rehabilitation scheme had launched in January 1946. Each package included the delivery of a complete set of factory-new technical equipment and machinery, the strains used to grow the *Penicillium* culture and the raw materials needed for six months of operation. The offer also included fellowships for two trainees from each country, a chemical engineer and a microbiologist, who would oversee the launch of the production process. All fellows were to be trained at Connaught Laboratories at the University of Toronto under the supervision of Norman L. Macpherson, the chief designer and manager of a plant operating at the lab. The blueprints that also came as part of the offer were drawn up based on this particular plant.

UNRRA relied heavily on the mutual cooperation of the population being assisted, which suggests that its approach was much more innovative than many of the international aid programmes of the time, and even of today. This 'local component' was embedded in how the Administration actually worked: the supply division in Washington was empowered to arrange procurements and shipments only at the request of the UNRRA mission operating in each country. The mission, in turn, responded to specific needs articulated by local authorities, whether they were responsible for health, welfare, agriculture, transportation or industry. However, when the United Nations assumed many of

UNRRA's duties after it was disbanded in 1947, it broke with this tradition of drawing on local expertise in defining its programmes, with most of its aid programmes being subsequently built on a 'top-down' approach. This change was unfavourable, as in general 'top-down' schemes are liable to specific deviations that render the assistance provided less effective and not as well targeted, and thus less effective overall than they could be. It was only after disappointing results from these initiatives that the 'bottom-up' attitude was again adopted by the UN agencies.

The history of the programme is a good example of what skilled and eager local experts can do in formulating relief schemes. This programme was unique in the sense that apart from its humanitarian aspect, it was in fact a complex industrial rehabilitation project involving the changing hands of a highly advanced technology of potential military importance. The complex political situation on the brink of the Cold War did not make planning and carrying out the programme any easier.

As it appears, the dual nature of the penicillin plant programme – partly health, partly industrial – caused substantial difficulties in the initial stages of its management in the recipient countries. At first, all the arrangements were carried out through the respective ministries of health of Czechoslovakia, Poland, and Yugoslavia. Only later was handling of the investment transferred to their ministries of industry, which were deemed capable of completing the quite sophisticated industrial setups. Because the success of the health component of the programme was dependant on the practical, developmental part, final evaluation of the entire undertaking remained ambiguous for a long time, and this fuelled the propaganda machines of the communist regimes in these countries. The main line of argument was that by deliberately postponing delivery of technical equipment, the United States was torpedoing the national health improvement initiatives undertaken in these countries, particularly the campaigns to eradicate sexually transmitted diseases.

When the representatives of the 44 nations that met in Atlantic City in November 1943 decided to form an organization to coordinate post-war relief and reconstruction efforts, their main message was helping people in the soon-to-be-liberated countries so that they could help

themselves. In spite of tremendous difficulties, and not without major setbacks, UNRRA largely fulfilled this task. In the case of its penicillin plant programme, however, this slogan should have been expanded with 'let them help you to help themselves'.

Within the quite extensive historiography on UNRRA activities, only very few works have even looked at its largest single rehabilitation project – the penicillin plant programme – let alone used it as a focal point. Works on penicillin's general history do much better in this respect. This book explains the role of local experts in raising the question of Eastern Europe's independence from Western penicillin supplies, and their part in the formulation of this special rehabilitation programme's principles. Using previously unpublished sources, this book sheds new light on how the programme was conceived, negotiated, and then painstakingly carried out. It traces interventions by key figures, both world-famous and those less recognized internationally, but still important in national historiographies, as well as some who have been entirely forgotten, such as the engineers and UNRRA officers.