

## **WP 6: Assessing the economic implications of different models for implementing the requirement to protect plant varieties**

**Objective:** The objective of this Workpackage is to assess the effectiveness of the regulatory measures employed by EU candidate countries and developing countries to implement Article 27.3(b) as it relates to the protection of plant varieties. The analysis treats plant variety protection as not being an end in itself but as part of a larger policy framework related to economic growth in the agricultural sector. In addition, 'effectiveness' is considered from multiple perspectives and not only as a requirement for compliance with international agreements. It will achieve this assessment by conducting country case studies of the impact of plant variety protection and related regulations in selected candidate and developing countries.

**Research Design:** A rich and growing literature on 'how best to implement Article 27.3(b)' exists, where differing legal interpretations have been advanced and TRIPS-compliant exceptions and models presented. The wide variety of recommendations and models suggests a degree of disharmony in practices concerning Article 27.3(b). Useful work by the International Plant Genetic Resources Institute collates some of this literature; however this work is limited and urgently requires updating to capture more recent contributions.

Most EU candidate countries have already joined the UPOV Convention and are therefore bound by its provisions. The question arises, will implementation of the UPOV model be effective to meet a diverse set of national objectives that include compliance with TRIPS obligation, stimulating the domestic plant breeding industry, promoting technology transfer and securing the interests of all users of plant genetic resources (seed merchants and traders, farmers, public breeders, biotech and seed companies)?

Economic analyses of plant variety protection have largely focused on developed countries – with the exception of a substantial study focusing on certain Latin American countries. The latter provides a methodological approach that can be modified and used in our study of EU candidate countries. Useful insights and stylised facts can be found in this literature that can guide and inform policy formulations in EU candidate countries, but these are not enough.

The first task will be to collate and review the relevant literature on the economic impact of intellectual property rights with respect to plant genetic material. It is

important to bear in mind here that in many countries, the legal and policy framework governing the formal and informal seed sectors is not limited to plant variety protection regimes. It also includes regulations relevant to seed production, seed trade including certification, phytosanitary measures, and other IPRs especially patents. Since the effectiveness of the IP system is likely to be affected by these other regulations, the analysis will need to consider these as well.

The second and most important task is for the research team to conduct detailed case studies of select candidate countries, i.e. Bulgaria, Romania and Turkey, and of a range of countries in the Global South (e.g. India, China, Kenya, Ethiopia and Costa Rica; see below). This task will assess the experience of a selection of these countries and present evidence of the economic impact of plant variety protection. It will focus on the impacts on the relevant interest groups (see above), and on the wider economy. The task will be accomplished using diverse research tools, viz. existing research literature, field trips and interviews in the selected countries, economic and data analysis of plant variety protection (using UPOV data), economic statistics (firm size, investments, etc.) and other agricultural statistics (e.g. yields, acreage, prices, etc.). Testable hypothesis of the data will be used to complement our qualitative research results.

The research will be useful both for the EU candidate countries and also for developing countries, many of which are joining UPOV. It should also help to clarify whether international harmonisation in the protection of new varieties of plants is appropriate.

	<b>IP Bulgaria</b>	<b>QMIPRI</b>	<b>CSGR/Warwick</b>
<b>Field Work Country</b>	Bulgaria	Ethiopia	Kenya
<b>Country study, secondary literature</b>	Turkey	China	India