

## **ENVIRONMENTAL IMPACT ASSESSMENT OF IRRIGATION SYSTEMS USING SUSTAINABILITY INDICES**

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### **ABSTRACT**

A methodology is presented for the assessment of irrigation projects during systems operation. Indices based on sustainability related criteria are used to describe divergence of original system's performance due to scarcity of water and its competing and conflicting use. These indices refer to systems adequacy, equity, reliability and resources sustainability. The data used are routinely collected during irrigation systems operation from irrigation projects in Greece. The variations of these indices in time and space recorded high resulting in poor systems performance. The results are compared to assessment studies referenced in developing countries. Conclusively, the methodology can be incorporated in environmental impact assessment studies during systems operation.