

Conditions of Acceptance and Appropriation of Drip Irrigation in Burkina Faso: Benefits and Constraints

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Traditional irrigation systems are not well suited for arid Sahelian countries with low water availability, such as Burkina Faso. This justifies the introduction of drip irrigation systems by actors in Burkina Faso and in other countries in the Sahel.

Despite the relevance, and strong demand for this technology, its adoption is often limited by certain obstacles and constraints.

Assessments of drip irrigation systems have so far focused on its agronomic performance, without considering the social, cultural and economic factors that may explain why its adoption remains limited.

To make up for this, we conducted informal (by individual interviews and focus group interviews) and formal investigations (covering about a hundred irrigation kits situated across different agro-ecological areas of Burkina Faso). These studies have been supplemented by investigations into the production and sale of drip irrigated products, and by direct observations on farms utilizing the drip irrigation system.

The current paper summarizes results in terms of benefits and advantages, including the most cited by users of drip kits. These are among others: savings in terms of water, but also in terms of time, which makes it possible to engage in other activities; the reduction in work load as well as in the arduous nature of the work; increased yields and improved quality of products; extension of cultivated areas, social prestige, etc.

Constraints limiting the adoptability and sustainability of drip irrigation systems include the high capital costs of the drip equipment (pump, pipes, sinks, etc.); high running costs (fuel, maintenance and repair of the pump, etc.); low availability and sometimes even inaccessibility of the kits; the technical complexity of the systems (including the manufacturing of plates, the maintenance of drippers, etc.); the inadequacy of the system for the production of some vegetable crops, such as salad, tomato and potato etc.

However, despite such constraints, producers believe that the irrigation system represents enough advantages and strengths to justify a strong demand by stakeholders in the field of irrigation, as well as the current interest that the state shows in this technology.

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