

Table 10.1 Strengths and weaknesses of the different approaches for analysing trade-offs in agricultural systems

Aspect	Research Approach									
	Empirical		Econometric		Simulation		Optimization		Participatory	
	Act	Pot	Act	Pot	Act	Pot	Act	Pot	Act	Pot
Integration of interdisciplinary content	-	+	+	+	-	+	-	-	-	+
Assessment across different time horizons	-	-	+	+	+	+	+	+	-	+
Assessment across spatial scales and integration levels	-	+	-	+	+/-	+/-	+/-	+	-	+
Takes into account qualitative information	-	+	-	-	-	-	-	-	+	+
Appropriate representation of uncertainty	-	+	-	+	-	+	-	+	-	+
Identification of possibilities to alleviate the observed trade-offs	-	-	-	-	+	+	+	+	-	-
Ability to deal with real-life system complexity	+	+	-	+	-	-	-	-	+	+
Applicability to real-life decision-making	+	+	+	+	-	-	+/-	+/-	+	+

Act actual or current use in the scientific literature, *Pot* potential usefulness of technique