

Supplementary material-Table S1. Description of the BCM and BMEC components and corresponding questions in the survey. Source: own elaboration

	Component	Definition (Daou et al., 2020)	Questions in the survey
BCM	Customer segment	It is based on the division of the company into different market shares	1 → sales channels or contracts with employees
	Value proposition	Differentiation of the product or service to attract consumers	3,4 → farmers' experience 8, 9 → certifications. 21, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 →value of these businesses
	Channel	Channels of communication and sale of services or products	1,7 → channels and closest population
	Customer relationship	The farm's relationship with stakeholders (buyers, consumers, etc.)	1,7 → channels and closest population
	Source of income	From where the profits created by value-added and market sales come from	11 → sources of income 19, 20 → turnover and net annual income 21, 22 → percentage of income of each activity 24 → subsidies
	Key resource	The physical, human, financial and natural capital needed by the farm to carry out its activity	3, 4 → farmers' experience 5, 6, 12, 13, 14, 16 → physical resources 2, 18 →farm's human resources 23, 24 → financial resources or information
	Key activities and circular innovation	The activities carried out, in addition to activities that help to create a circular business model	3→ farmers' experience 5→ physical resources 21, 22 → percentage of income of each activity

Supplementary material to the article "Can agroecology transform agricultural business models? A case study in a semi-arid area of southern Spain", by Laura Sanchez-Mata, Macario Rodríguez-Entrena, María J. Aguilera-Salido and Melania Salazar-Ordóñez. Spanish Journal of Agricultural Research, Vol. 23, No. 3, 2025 (https://doi.org/10.5424/sjar/2025233-21412)

BMEC	Key partnership	All the relationships that take place in the activity from raw material vendors to social network relationships	10 → where agricultural product processing was done 1 → sales channels or contracts with employees 10 → where agricultural product processing was done
	Cost structure	The costs incurred in carrying out the activity or service	23, 24 → financial resources or information 10 → where agricultural product processing was done 13, 14, 16 → physical resources 15 → food products consumed 17 → inputs in term of production cost 18 → farm's human resources 20 → net annual income 26 → environmental situation 27 → soil health
	Environmental foresight Needs and challenges	Negative or positive environmental effects of the activity To determine what the farm needs to be more sustainable, what problems exist and what changes are possible	1 → sales channels or contracts with employees 8, 9 → certifications 21, 22 → percentage of income of each activity 24 → subsidies 28 → market conditions 29, 30, 31 → biodiversity 32, 33, 34 → efficiency 35 → integration of productive activities 36, 37 → recycling practices 38, 39 → women's involvement 40, 41 → young people's involvement
	Social foresight	Positive or negative impacts of the activity on the development of new habits, values, etc	38, 39 → women's involvement 40, 41 → young people's involvement