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Altri autori (Persone)	GascuelChantal Tixier-BoichardMichèle
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Nota di contenuto	Intro Contents Foreword Introduction Founding principles National and international societal expectations Research based on new paradigms and new approaches References 1. Integrating agroecology into agri-food systems Products resulting from agroecology and their properties Actors' strategies Spatial organization of markets Dynamics and coherence of the agri-food system Research questions References 2. The agroecological transition of farms Recent scientific advances Some examples Research questions Developing the necessary transdisciplinarity References 3. Leveraging regulation processes in multifunctional landscapes Recent scientific advances Some examples Research questions References 4. Leveraging genetic diversity in plant and animal breeding Recent scientific advances Some examples Research questions References 5. Modelling interactions between living organisms in their environments and socio-economic contexts Recent scientific advances Some examples Research issues References 6. Contribution of agricultural equipment and digital technology to agroecology: considering living organisms better Recent scientific advances Some examples Research questions References Conclusions Diversity and diversification: observe, translate, direct Fro m massive acquisition of biological data to new types of experiments Und erstanding risk and uncertainty: modelling and sharing of experiences

	Scaling up and changing agri-food organization for agroecology Outlook Contributors.
Sommario/riassunto	Agroecology was chosen by INRAE as one of its interdisciplinary scientific foresight studies designed to identify research fronts in response to major societal challenges. Eighty researchers drew up an assessment and proposed research avenues for agroecology. This book summarizes their main conclusions. Agroecology, as a scientific discipline that puts ecology back at the centre of agricultural system design, is now well established. Diversification of living organisms in agroecosystems is a broad objective that is intended to make these systems more robust and resilient. Research in genetics and landscape ecology must be mobilized so that agroecology can use mechanisms from the field to landscape scales. Progress is being made in modelling agroecological systems to better understand the many biotic and abiotic interactions, to predict them, and to begin to manage some of them. Diversification of living organisms in agricultural production (species, varieties, crop rotations, etc.) leads to more varied products. The consequences will be significant on the commodity chains, and more precisely on agri-food systems, from production methods to product consumption. These changes are long-term. The agroecological transition, which is adaptive, co-constructed with all actors, is in itself a research subject, and will rely on experimental devices, farms, and 'Territories of innovation'.