

teaching strategies (such as the CaC model), creation of demonstration farms or centres, reviving traditional systems and reconfiguring whole territories under agroecological management, all with a focus on sharing experiences and strengthening local innovation and problem-solving capacities.

Developing equitable local and regional market opportunities would make it more economically viable for the adoption of agroecology to grow. Experience shows that policies can be supportive of the agroecological transition if they ensure that agroecological alternatives are adopted broadly, and that the resulting production finds guaranteed outlets in local or solidarity markets.

Simple practices that give quick, visible results may appeal to farmers for early adoption, which has been the basis of the CaC methodology. However, the goal is to transition farmers to more integrated systems which lower production costs and enhance farmers' autonomy. Although more complex agroecological management depends on a deeper understanding of ecological relationships, lighthouse farms can unravel the complexity by focusing on the principles that underpin such systems rather than on the practices and technologies.

Transitioning towards agroecology for a more socially just, culturally diverse, economically viable and environmentally sound agriculture will be the result of the coordinated action of emerging social movements in alliance with civil society members and researchers committed to support the goals of farmers' movements.

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- 1 www.agassessment-watch.org/www.ipes-food.org
- 2 www.etcgroup.org/whowillfeedus
- 3 Altieri, M.A. and C.I. Nicholls 2012 Agroecology: scaling up for food sovereignty and resiliency. Sustainable Agriculture Reviews Sustainable Agriculture Reviews 11, DOI 10.1007/978-94-007-5449-2_1
- 4 http://www.bib.uia.mx/tesis/pdf/014848/014848_06.pdf
- 5 Altieri, M.A. and C.I. Nicholls. 2013. The adaptation and mitigation potential of traditional agriculture in a changing climate. Climatic Change DOI 10.1007/s10584-013-0909-y
- 6 Stigter C et al (2005) Using traditional methods and indigenous technologies for coping with climate variability. Clim Chang 70:255-271
- 7 Holt-Giménez, E. 2006. Campesino a Campesino: Voices from Latin America's Farmer to Farmer Movement for Sustainable Agriculture. Oakland, CA, USA: Food First Books
- 8 <https://www.idrc.ca/en/book/cover-crops-hillside-agriculture-farmer-innovation-mucuna>
- 9 Rosset, P. M. et al 2011. The Campesino-to-Campesino agroecology movement of ANAP in Cuba: social process methodology in the construction of sustainable peasant agriculture and food sovereignty. Journal of Peasant Studies 38(1): 161-191
- 10 <https://hdl-bnc-idrc.dspace.org/bitstream/handle/10625/34376/IDL-34376.pdf?>
- 11 Murgueitio E, et al (2011) Native trees and shrubs for the productive rehabilitation of tropical cattle ranching lands. For Ecol Manag 261:1654-1663. doi:10.1016/j
- 12 <http://ecovida.org.br>
- 13 Koohafkan, P. M. A. Altieri. 2017. Forgotten agricultural heritage: reconnecting food systems and sustainable development. Earthscan, London. Also see www.fao.org/giahs/en/
- 14 <http://www.mst.org.br>
- 15 Wittman, H, and J. Blesh. 2017. Food Sovereignty and Fome Zero: Connecting Public Food Procurement Programmes to Sustainable Rural Development in Brazil. Journal of Agrarian Change 17 (1): 81-105

Measuring farming outcomes for the public good

Steve McLean, Head of Agriculture & Fisheries, Marks & Spencer

Our priority is to develop a supply base fit for the future that drives innovative products and profitability, and allows everyone to reinvest in their communities. We don't own the farms and factories that make the products we sell in our stores, therefore our reputation for quality, innovation and sustainability is built on long-term relationships. One way we increasingly build and maintain these relationships is through collaborative data collection.

The centrepiece of this approach is to focus on 'outcome measures.'

These provide us with an objective tool to quantify, monitor and manage our impact on people, animals and our shared planet, regardless of the production system, climate and location. Having developed and refined both the measures and the bespoke collection system with our friends at FAI Farms, we are now regularly collecting data at critical points in our supply chain in close partnership with our suppliers.

The data is extremely beneficial to us for benchmarking and identifying best practices as well as areas for

improvement. However, more importantly, the data is providing direct feedback to the farmers and suppliers that produce our food on how they themselves can improve animal welfare, economic, social and environmental performance of their farm and operations.

A sustainable food future is the public good we are all working towards. We are beginning to see the signs of how collaborative data collection with our suppliers can help get us there.