ECODRY

CATEGORY:

POLICY **RESEARCH** FIELD CLIMATE

LOCATION/SCALE:

Spain, Jordan, South Africa, Mexico and other countries (International)

IMPLEMENTING ORGANISATION:

Coventry University

PERIOD:

2014 - 2017

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The Centre for Agroecology, Water and Resilience (CAWR) at Coventry University is leading the project Eco-Dry that aims to enhance understanding and share knowledge on agroecological strategies to build the resilience of farming systems in dryland and drought situations that includes improved water management in general. The project brings together partners from the UK, Spain, Mexico, South Africa and Jordan.

The EcoDry project is about cooperation and exchange between the different research centres, allowing testing different agroecological practices and research and extension techniques in different contexts. These will enable the construction of common methodologies and approaches to address the challenges of dry lands and drought in the context global climate change.

The project contributed to a bank of knowledge about innovative best practices for adapting to drought or flooding conditions and develop methods for working with farmers to implement these practices.

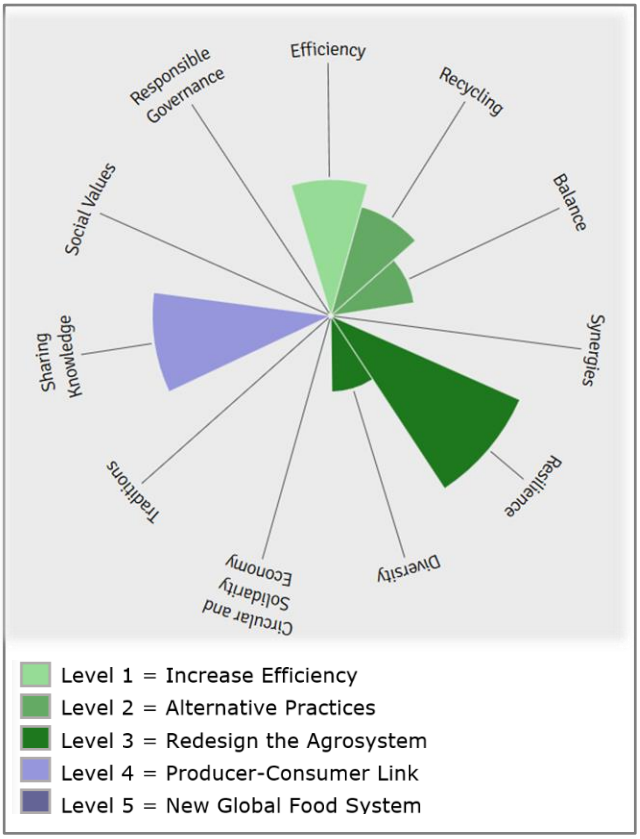

Figure: Assessment of EcoDry based on FAO Elements of Agroecology and Gliessman's five levels of food system change

CONTEXT

Drought is one of the major constraints affecting food security and livelihoods of more than two billion people that reside on dry areas which constitute 41% of the world's land surface. In dry areas, the integration between farming practices and water management is a key point to enhance the resilience of production system to drought.

OBJECTIVE

The Eco-Dry joint exchange project aims to enhance understanding and share knowledge on strategies to build the resilience of farming systems to natural and man-made impacts in dryland and drought situations, including climate change, through collaboration of joint research and capacity building activities between participating universities.

In particular, the sub-objectives of the project is 1) to identify and build a body of knowledge on innovative agroecological strategies to mitigate threats of natural and man-made nature for drylands and drought, 2) to build a network of expertise on agroecological innovations through workshops, conferences and seminars, 3) to provide opportunities for research on cutting-edge agroecological approaches in the natural and social sciences for postgraduate students.

KEY RESEARCH

FARM LEVEL:

- Carbon farming to mitigate climate change, eco-intensification, energy efficient agriculture, evolutionary plant breeding,
- Rainwater harvesting, agroforestry, permaculture
- Organic and biodynamic production techniques
- Peri-urban agriculture to meet food and livelihood needs
- Commercial cattle production as a resilient livelihood option for smallholders
- Resilience of Agricultural Ecosystems to Biological Invasion
- Compost and foliar sprays for improved rooibos tea growth and yield

REGIONAL/NATIONAL LEVEL:

- Rituals for Resilience: Reviving Food and Arts Practices for Socio-ecological Restoration
- Human water governance
- Knowledge exchange between researchers: seminar, exchange trips, teaching

LESSONS LEARNED/CHALLENGES

The close exchange between hundreds of researchers, multiple research groups and universities had a substantial impact on existing research and teaching facilities, consolidated by training programs and mobility programs for talented researchers. One of the key lesson of the project is on the importance of building a community of practices and enhancing networks among researchers that contributed significantly to promoting frameworks agroecological strategies for drought mitigation. The pooling of evidence and experience contributed to building sustainable drought mitigation that influence both policy and practice.

RELEVANT LINKS & REFERENCES

- Coventry University: "EcoDry" Website. https://www.coventry.ac.uk/research/research-directories/current-projects/2014/ecodry/?theme=main
- European Commission: "EcoDry Report Summary". CORDIS projects https://cordis.europa.eu/result/rcn/208492_en.html

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