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PROGRAMON
Dryland Systems

*Food security and better
livelihoods for rural dryland
communities*

Gender – Inclusion – Systems

Systemic Gender Approach to Research

Gender & Youth Dryland Systems

August/September 2015

www.drylandsystems.cgiar.org

Typology of people in farming

Work in Progress

Is this possible? Is it useful?



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Why Typology of people on farming?

- For the better **targeting** of research and development interventions:
- The objective for producing a typology lies in finding the variables which differentiate the access to resources of one type of women in farming from another type.
- It is hypothesised that types of people depend on their position in the system and the social role determined by this position. A person's position in the system and social role determines their options and trade-offs.



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Why Typology of people on farming??

- As a **basis of systems modelling**
- Typology can help to put socio-cultural variables into systems modeling. The challenge to do that is to define the relationship between socio-cultural systems elements (with ecological and other socio-cultural, economic systems elements).



Definition

Aspects of the notion of types:

- Types are generally defined by some detectable features of the agents in the population
- Many other dimensions of variety in the population might persist in the population without being recognized by the agents themselves
- The features that distinguish types usually only provide an imperfect indicator of the actual differences (in action between the agents of a population)
- Types are often endogenous in complex systems – agents detect types and act conditionally (and even change type definitions, if the system is adaptive)
- Types can be exogenous as well – existing only in the minds of those analysing a system from the outside
- Robert Axelrod, Michael D. Cohen: Harnassing Complexity, Organizational Implications of a Scientific Frontier; New York, 2000



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Characterization of types

- Farm types: Farm size, land use, family size, access to resources, labour use and time
- Typical options and behaviour (decision making) - deconstruct, make rule
- A grouping of people into types is possible by finding the elements and drivers of their position in the system and role differentiating them from 'similar' groups.



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Methodologies could include

- Researching and using data from WEAI (5 empowerment domains relative to men), and expanding on them through in-depth qualitative research
- Using data from impact studies and expanding it through in-depth qualitative research
- Participatory qualitative systems research of systems elements and drivers determining women's (in agriculture) endowment with and access to resources, and driving change regarding these (use codes)
- Qualitative systems research to identify trade-offs typical for a tentative typology (use codes e.g. Atlas.ti)



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Methodologies could include

- Econometric analyses can identify connections between socio-cultural, economic and ecological variables. Connections between variables which qualitative research suggests and which are tested in econometric analyses.
- Utility functions boil down behavior into quantified variables.
- Using existing (survey, landscape) data in the CGIAR system and beyond
- Collecting data throughout the CGIAR system to fill gaps of calibration or validation (same context)
- Connect to Randomized control trial impact studies (esp. validation of data)
- Building simplified test models on the basis of hypotheses of connections between socio-cultural, economic, ecological elements



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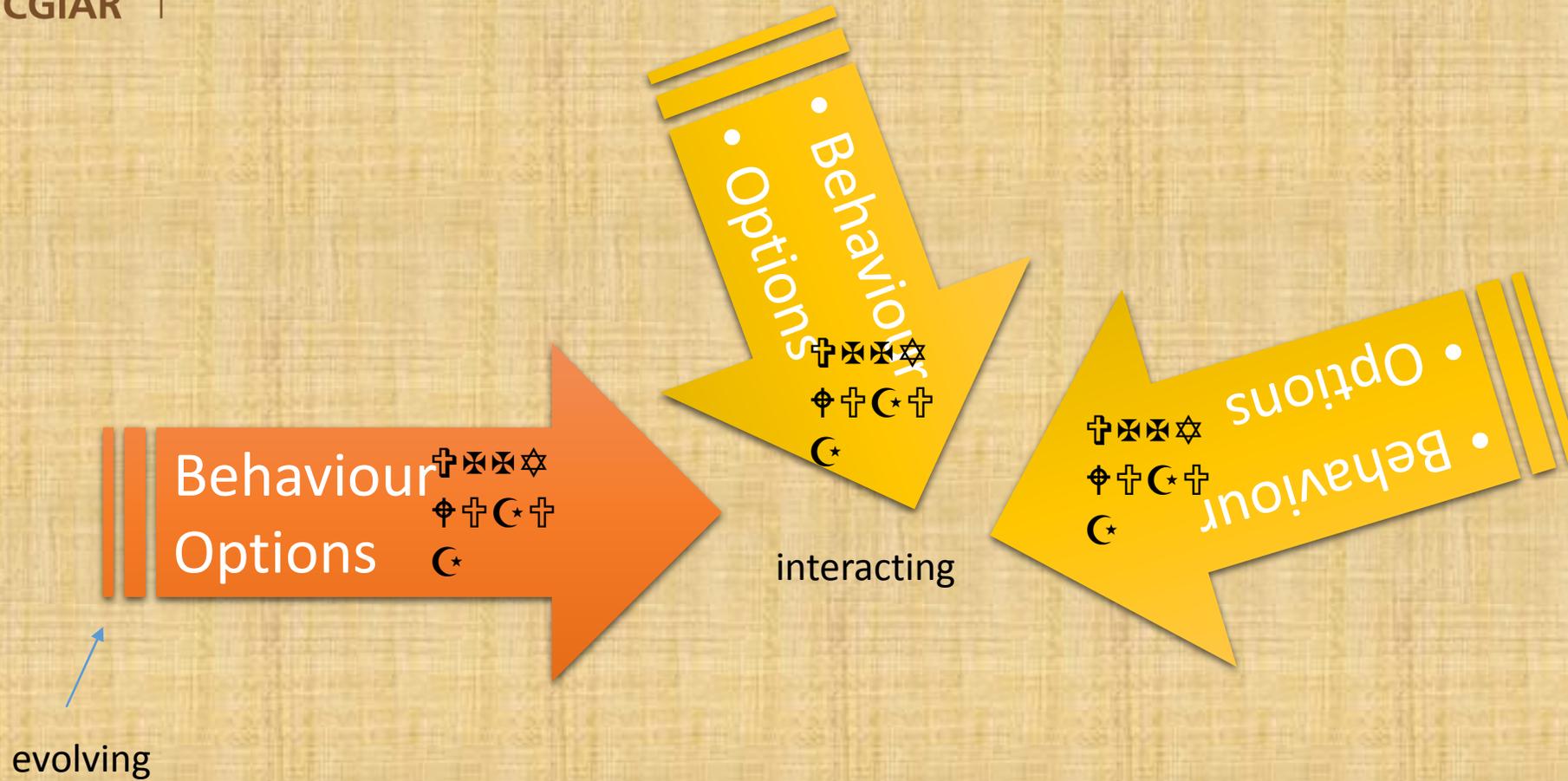
Challenges

- Heterogeneity: finding the defining variables (options, behaviour)
- Evolution of farm typology difficult to capture
- Types interact – difficult to capture
- Models are limited to specific social systems, as hardly any variable connection is global



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Dynamic types





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Group Work

- Is typology of people in farming possible? Is it useful?
- **How would you approach a typology of people in farming?**
- Can WEAI index be used for typology of people in farming? How would you approach this?