Does knowing where ‘climate change’ sits in decision-systems theory (DST) add clarity or confusion?

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November 2009

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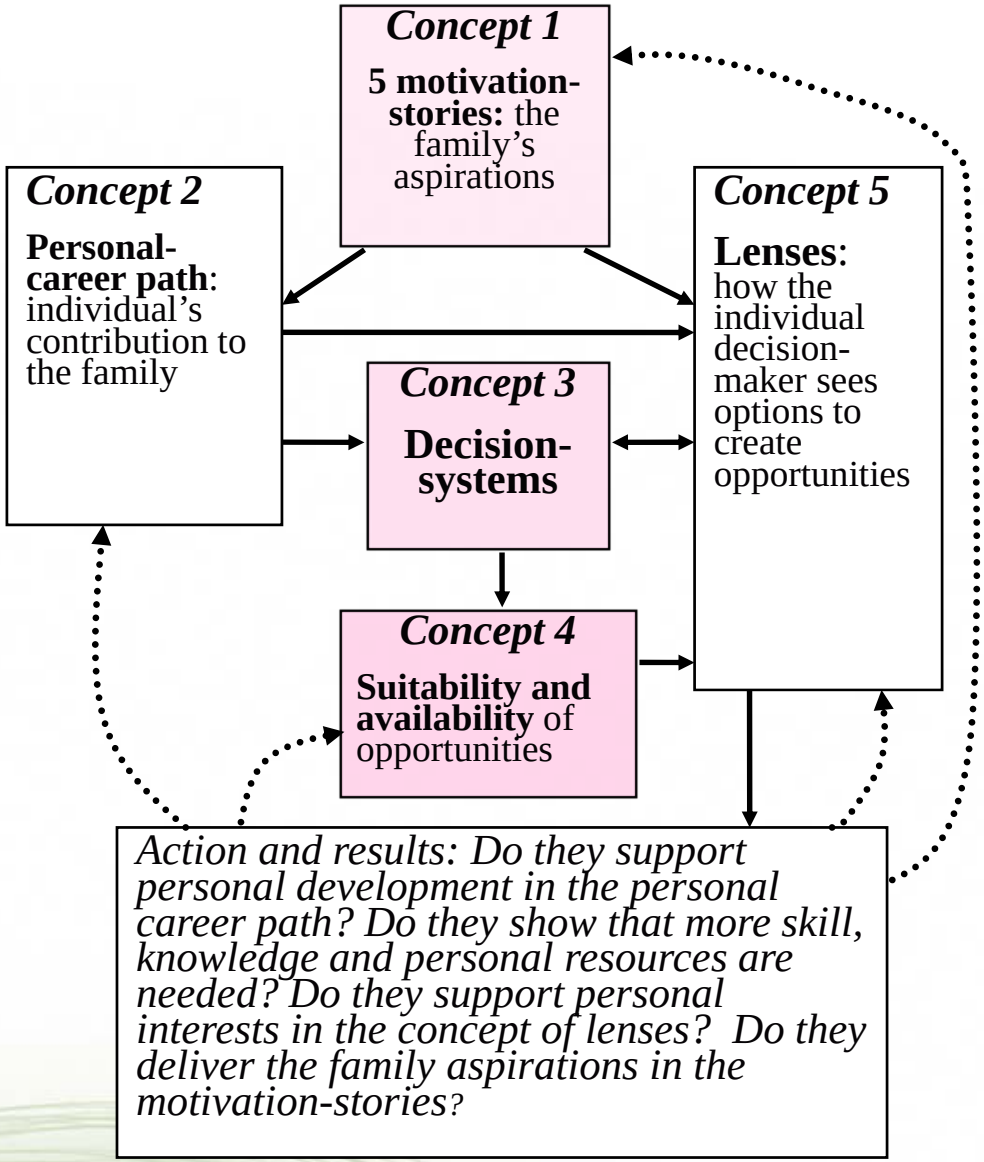
- **DST is an interpretation of how farming families make strategic decisions**
- **The 4-Group stakeholder model refers to the roles people have in society**
- **Both DST and the model can be related to Sustainable development ideals (SDIs)**

Decision-systems theory (DST)



"*Suitability and availability of opportunities*"

- Farming families use 2 criteria in creating opportunities
  - **Suitability** is when the opportunities they create satisfy some part of their aspirations (motivation-stories)
  - **Availability** is the ability to create practical opportunities and farming families can do this when:
    - They have the necessary *personal components*
    - They can access the necessary *external components*
    - When *random components* are favourable

Climate change – it is part of which component?

- Farming families may see climate change among the:
  - **Random components of opportunities or**
  - **External components of opportunities or**
  - **Personal components of opportunities**

If climate change is seen as a Random component

- Source of information for farming families
  - Personal observations
- It does not change the opportunities they create, but it does change the frequency of success
- Outcome
  - Same cropping but fewer good harvests
  - Underutilization of farming family assets
  - Underutilization of external provider assets

If climate change is seen as an External component

- Source of information for farming families
  - What organisations controlling external components do (what is on offer) as a result of climate change
- It will prevent farming families creating the opportunities that they have the personal components for.
- Outcome
  - Higher prices for inputs, lower profits
  - Underutilisation of farming family assets
  - External provider assets written off or used for a different purpose

If climate change is seen as a Personal component

- Information source for farming families
  - Training, knowledge, personal interest, networks, groups, research
- It will alter what opportunities farmers seek to create
- Outcome
  - New enterprises and industries
  - New assets to be created
  - Existing farming family and external provider assets used for the new opportunity or written off

"Decision-systems"

- Different topics fall into different decision-systems
- Farmers make decisions as family members or as business people
- There is a hierarchy of decisions in every decision-system:

Top tier decisions

'why are we doing it' (**Why for**) decisions = care criteria

Lower tier decisions

'how are we doing it' (**How to**) decisions = technical and business criteria

Combining Components and Decision-systems

- When climate change is seen as ‘random & external components’ it leads to new ‘how to’ decisions:
  - Farmers want $ as compensate / adapt
  - Looking for ways around climate change

- When climate change is seen as ‘personal components’ it leads to new ‘why for’ decisions which are then followed by new ‘how to’ decisions
  - Farmers want information to develop new opportunities
  - Looking for ways to use new climate change

4-Group Stakeholder model

Group 1 ●● Role: family member satisfying family aspirations (5 motivation stories)	**Group 2** Role: employed person (people job) fulfilling organisation's objectives of power / profit
Group 4 Role: future people	**Group 3** ● Role: employed person (nature job) fulfilling organisation's objectives of power / profit

Sustainable development ideals (SDIs) & Climate change policy

- SDIs = (1) All people's welfare + wellbeing (2) Integrity of global ecosystems.
- Governments / corporations can make climate change policy:

Separate from SDIs – for example

- as a special case that need not advance everybody's welfare nor maintain ecosystems

As a way of advancing SDIs – for example

- Improve equity by redistributing $ from the sale of emissions permits
- Maintain biodiversity as part of carbon sequestration

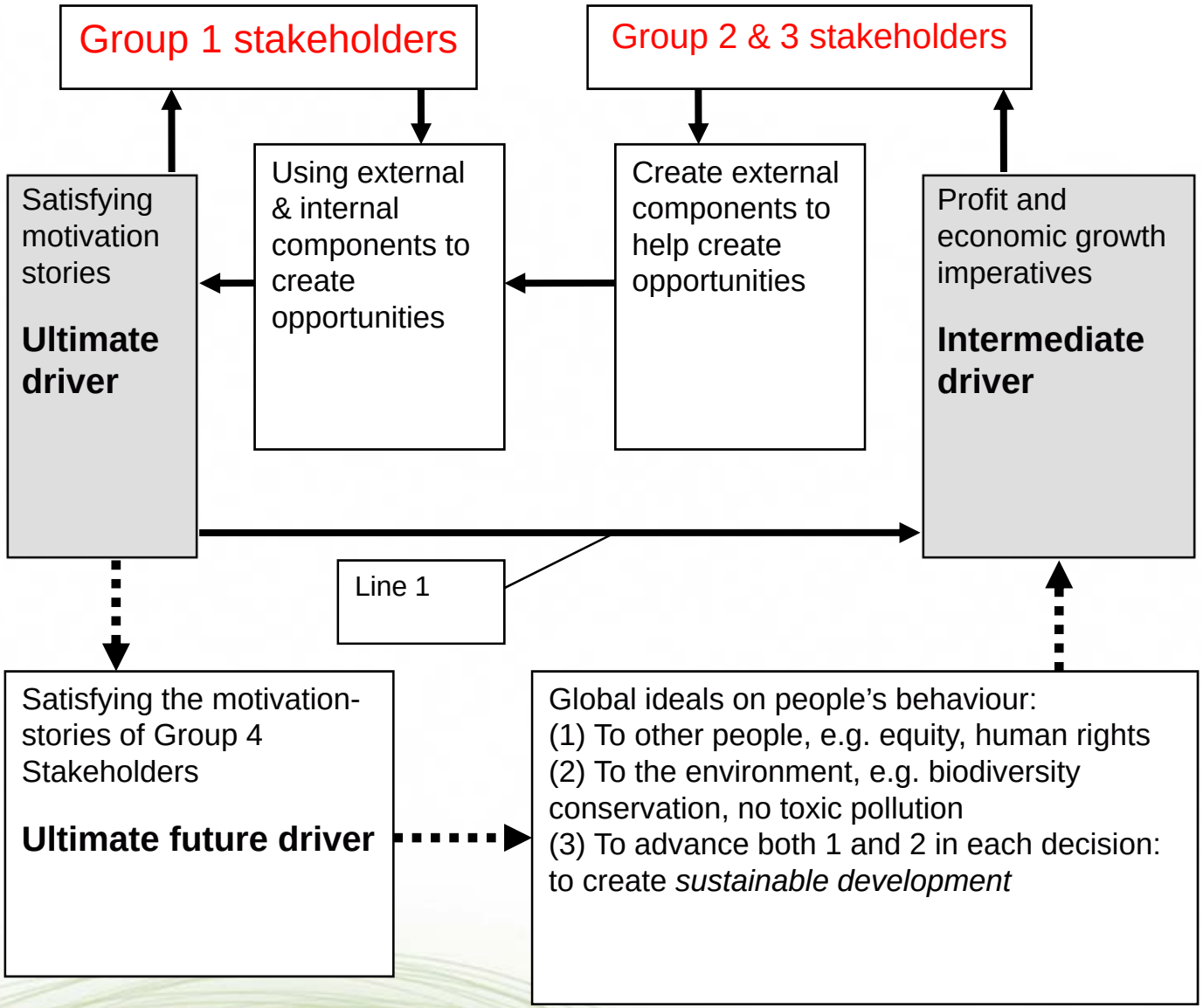
“Five motivation-stories”

- The 5 motivation-stories resonate with sustainable development Ideals (SDIs)

DST		SDI
Family’s future welfare	=	all people’s welfare
Farm’s sustainability	=	sustainability of global ecosystems

- But they will not reach SDIs because existing external components of opportunities are not adequate for this
- Might achieve SDIs if Group 2 & 3 stakeholders are guided by Group 1 stakeholder’s aspirations
  - New external components can be used to make suitable opportunities available to families (group 1 stakeholders)

The 4-Group Stakeholder model and the drivers of development



Farming family – Government + corporation cooperation !

- Farming families work (Group 1 stakeholders) – life long – to satisfy their motivation-stories (family aspirations)
- Have to tell government / corporations what opportunities are (1) suitable and (2) what would make them available
- Government / corporations will have modify existing external components in the light of SDIs
- Progress can be made on climate change and SDIs via cooperation

Conclusion

- DST suggests that farming families' aspirations resonate with SDIs
- They won't get there without different external components of opportunities
- Climate change policies can be made to help move towards SDIs
- Farming family research can inform governments' / corporations' climate change policies within a SDIs framework

Thank You