

# Simulation Exercise:

## ***Fish Banks, Ltd.***

Facilitated by George Richardson

November 18, 2011 – Brasilia, BRAZIL

IX Congreso Latinoamericano de Dinámica de Sistemas

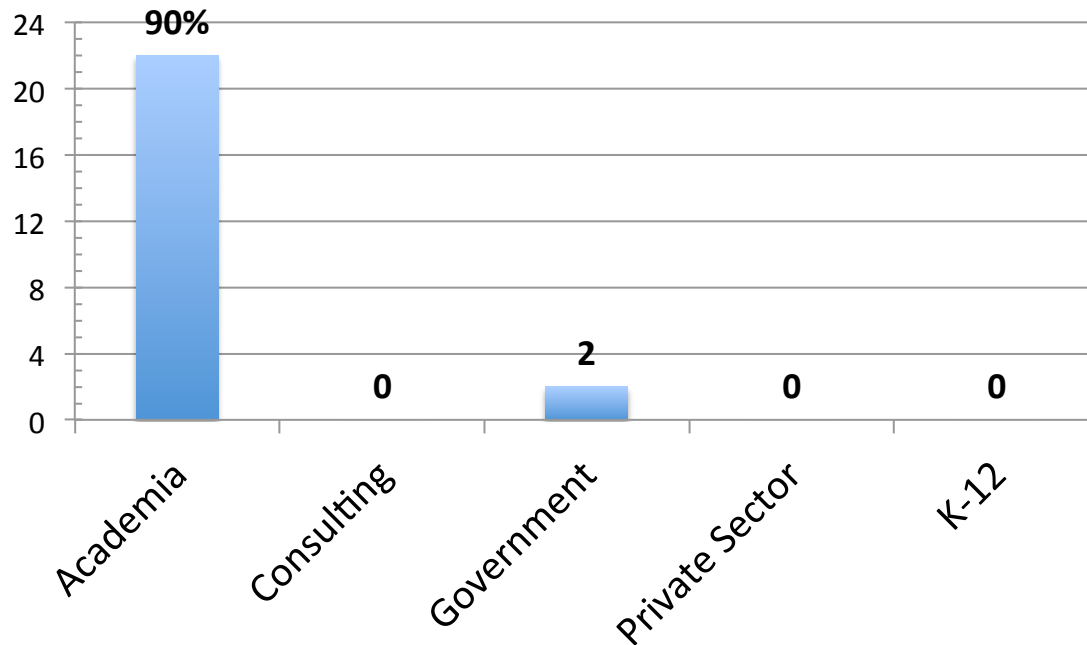
II Congresso Brasileiro de Dinâmica de Sistemas

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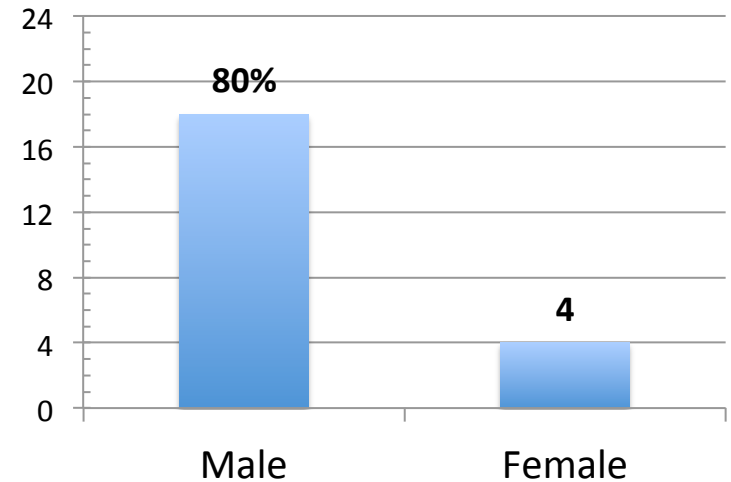
# Number of participants

Almost 40 people signed up in advance  
There were 6 groups of ~5 people/each  
24 participants answered evaluation  
questionnaires

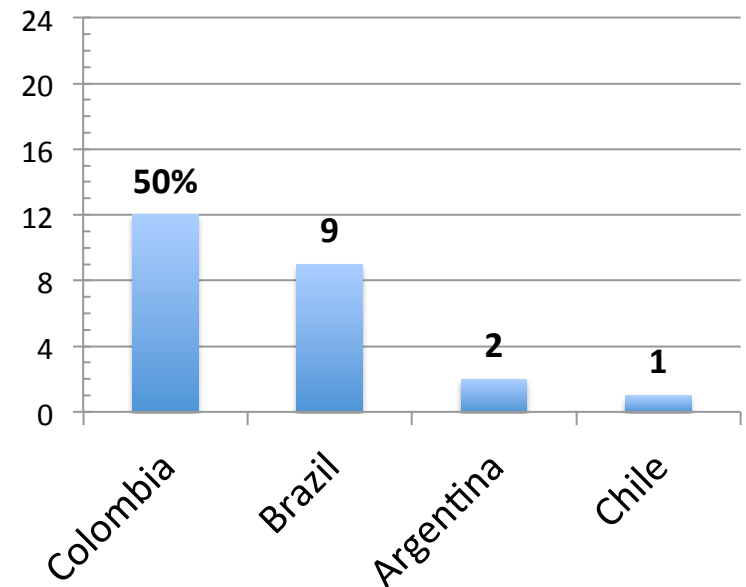
## Sector



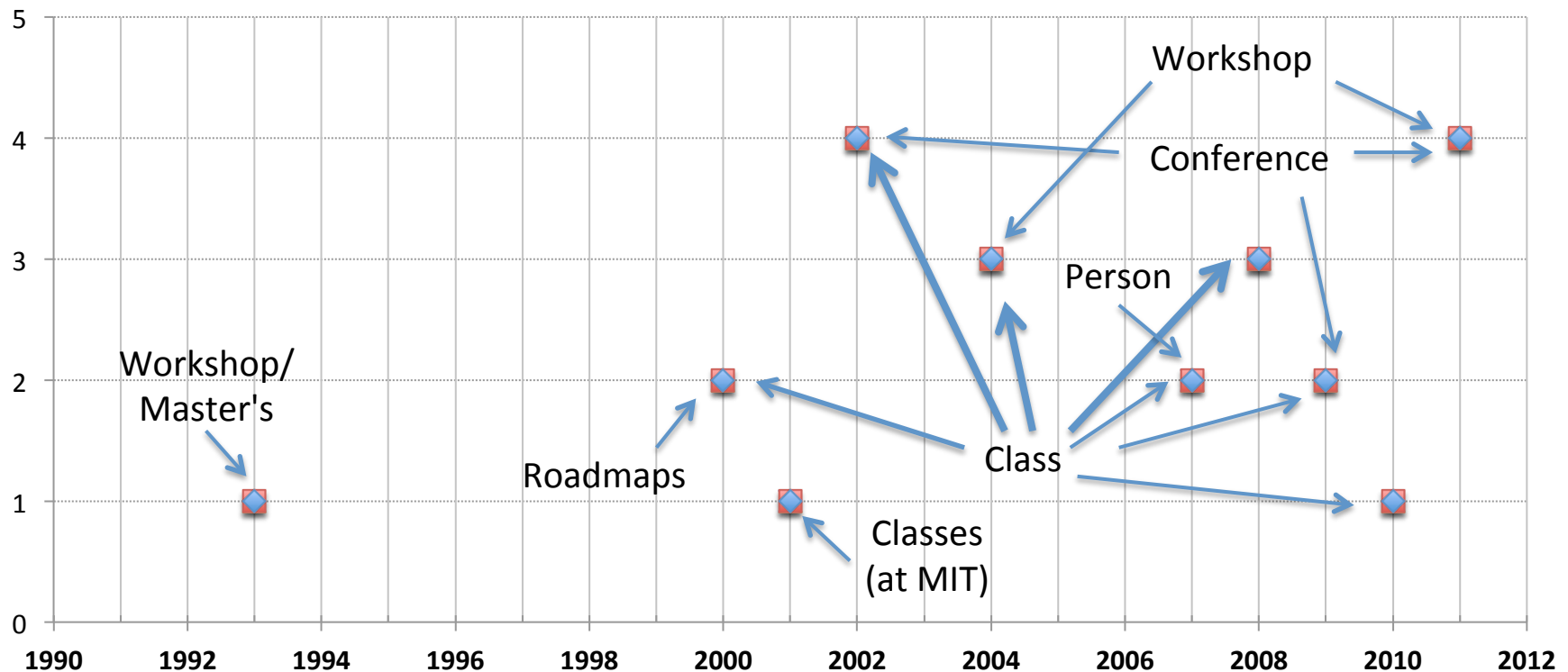
## Gender



## Location

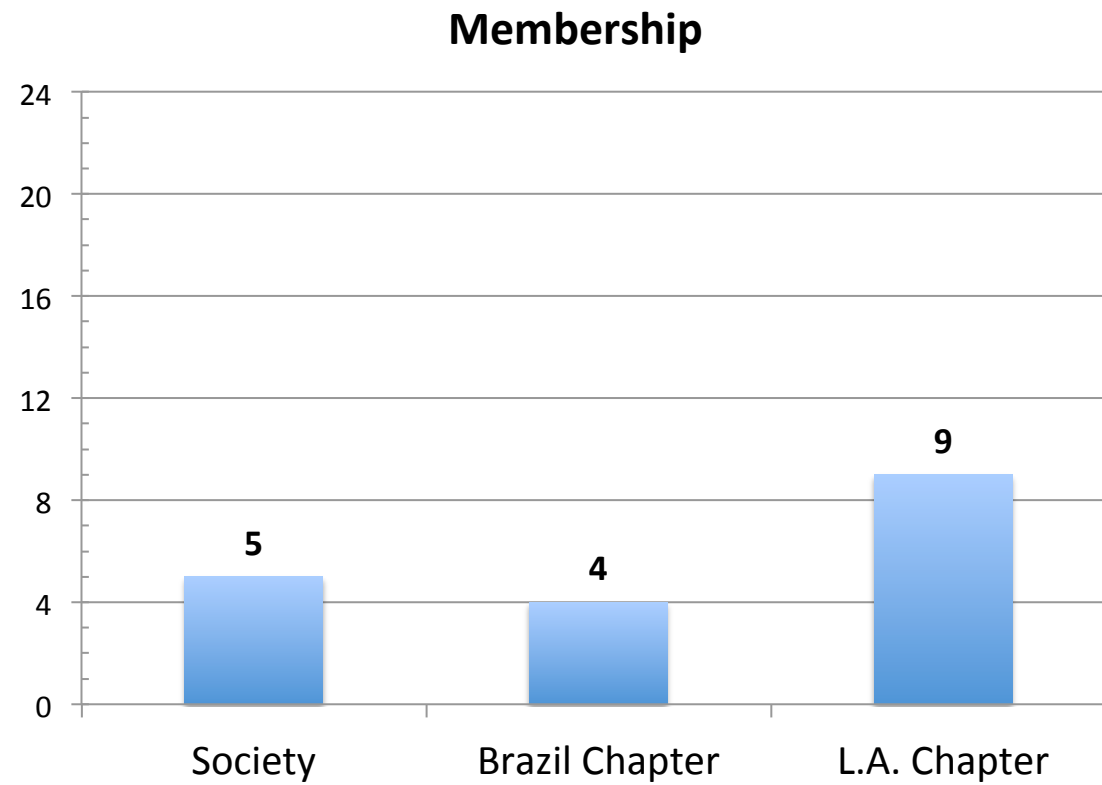


# How/when introduced to SD?



(\*) One other participant took an SD class but he did not specify when he started his studies

# Society membership & affiliations



# Participant evaluations

Results from exit questionnaires

# Were expectations met? Any surprises?

- Yes – Very positive – Well organized and run – Ran nicely and smoothly – Interesting experience – Interesting issue – I intended only to observe but ended up playing the game – Absolutely, It was a great workshop and met all my expectations – Glad to have been able to play this game
- I was surprised with the dynamics of the game and the high degree of participation
- I was surprised with people's behaviors – Winning criteria structures behaviors
- I was surprised with the difficulty in negotiating between groups
- The game is always different
- The rules seemed a bit different than I am used to
- It reveals the complexity and the causality in the variables that must be addressed
- I was surprised that SD models can be used in different areas of application

# Five scores

## Instructor knowledge & experience

Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
0	0	0	0	24

## Choice of Fishbanks

Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
0	0	0	8	16

## Part 1 - Simulation / game play

Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
0	0	0	6	18

## Part 2 - Debriefing

Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
0	0	1	3	20

## Amount of instruction delivered

Very unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
0	0	0	5	19

# Praise

- The endogenous view offers an interesting perspective – The model captures the reality of the fishing industry
- I enjoyed the entire experience and the opportunity to listen to, interact with, and learn from George Richardson
- Well organized and clear rules – Very interesting analysis – I enjoyed the debriefing – The conceptual models presented during debriefing were clear and easy to understand
- I liked the game approach because it allows to change misperceptions about System Dynamics – I have a better understanding of SD and of human behavior – This simulation is useful in teaching SD
- I enjoyed the cooperation and interactions – I enjoyed learning about the group dynamics while playing
- I liked that this opportunity can be used in different countries – I enjoyed interacting with people speaking other languages
- I enjoy the diversity of topics approached with System Dynamics
- I liked everything in this workshop!



# Critique & suggestions

- All of it was very good – The workshop was interesting, good experience and had an excellent method
- I suggest playing the game longer and adding a 2<sup>nd</sup> phase with cooperative agreement
- I would like to see the groups create and share their conceptual models
- Have players input decisions on their own computer – Use less printed paper
- Condensing the debriefing a bit
- Bring in a local perspective based upon the place that the workshop is delivered
- I'd like for the groups to be able to buy additional information
- Provide an initial tutorial

# Did workshop add to your knowledge or skill?

- Improved my understanding about the game – It showed me how to use the game with my students and deal with the group dynamics – Better understanding of the group dynamics and the whole system behavior – A new way to do it more graphical and enjoyable
- It helped me better understand the development of mental models – I learned that people rarely act in a positive way in the tragedy of the commons situation
- Better understanding of the process of model conceptualization – I was able to see how SD can be used in practice
- Improved my analytical capacity – Improved and deepened my systemic thinking, provided that I am still new to this discipline
- Gave visibility to the importance of multidisciplinary perspective and team decision-making
- This workshop did not add to my knowledge or skill

# How can the Society Chapters be most useful?

- Enhancing interactions within the Latin American community – Increasing collaborative initiatives – Promoting student exchanges
- Academically – Professionally – Serving as a publication outlet – Promoting training (courses/workshops) – Providing case studies that can be used professionally – Promoting opportunities for knowledge exchange
- Generating business and work opportunities
- Helping me with my research (in transportation, natural disasters, ...) – Promoting applications in industry and government
- I am not a member of the SDS but I would like very much to become a member

# Desired activities for upcoming year

- Promoting workshops like this one and contacts among practitioners – Carry out a simulation like this using the *Beefeaters Restaurants Microworld*
- Promoting courses (model conceptualization and formulation, how to build generic models, how to build games, ...)
- Open the regional conference with a workshop like this to help “break the ice” among the participants
- Work on synergetic cross-fertilization exchanges and on external diffusion – Better integration – Have an impact on the community
- Promote student exchanges
- I’d like to assist in next year’s conference