

2nd QUEST-Fish PI meeting, 20 March 2008 QHotels, Norton park, Winchester, SO213NB

Attendees: Icarus Allen (PML), Manuel Barange (PML), Ben Drakeford (CEMARE), Nick Dulvy (CEFAS), Graham Pilling (CEFAS), Gorka Merino (UoP), Jason Holt (POL), Emma Tompkins (Leeds)

Record of meeting

The QUEST_Fish meeting followed on the annual QUEST ASM. In his closing statement, Will Steffen, chair of QUEST's international advisory group, specifically identified QUEST_Fish as a very exciting project, and one of the few in the QUEST family dealing with both gradual climate change as well as the impacts of economic globalisation on natural resources. He particularly remarked on our efforts to link natural and social sciences and placed great expectations on our work - now we have to deliver!

At the meeting we had updates from each Module. The ppt will be posted on the web shortly for your use and information. The items below are my own notes of the meeting and actions:

- Emma Tompkins introduced herself and discussed her areas of expertise relevant to QUEST_Fish, particularly issues of adaptation and vulnerability to climate change, including governance
- Jason presented the first GCOMS runs for the Humboldt LME and the Patagonian shelf LME and discussed issues related to boundary conditions and vertical resolution. He also presented some HadRCM results (up to 2100) for the NW European Shelf, to give us an idea of the data that would be provided. He noted that the next steps involved getting HadCM3 data from the Met office (possibly involving Rob Holmes physically fetching it from exeter - requires security clearance) and work on validating simulations. He also informed that Graham Tattersalls has left POL and will be replaced (in this project) by James Harle. Jason, please pass on his email details for our updates (and forward this email to him). He reiterated his hope to have all the GCOMS runs completed by March 2009. It was suggested to use 1750 as the pre-industrial slice rather than 1800.
- Nick presented an update of Module 2. He reported that he was attending a SAFARI meeting in Halifax this week, where two other teams working on linking 1ary production and fish production would also be presenting their work. Good opportunity for contact and to determine who is ahead! He noted that the basic size-based model for estimating fish production from temperature and 1ary production was complete and tested.
- A paper reviewing PPMR estimates across the globe was submitted at Ecology (Barnes, Jennings et al.), and a paper estimating potential global fish production for 2002 based on ecological theory has been published (Jennings et al.). He reviewed the results in terms of what is expected under QUEST_Fish.
- Gorka presented his progress on Module 3, and in particular regarding the fishmeal/oil modelling framework. He presented initial results of a modelling involving 1 producer (Humboldt) and 4 users (China fishmeal, Europe fishmeal/oil and Chile fish oil), noting how a decline in carrying capacity differentially affects trading quantities and prices.

He noted how parameterising externalities (e.g. substitutes prices, biofuel influences, etc.) will be an important future consideration, and stressed the need to get a handle on "future

scenarios". His work will be presented at the AMEMR symposium. Ben continued to report that the review paper on (among other topics) the economic and ecological substitution of fishmeal in Scottish aquaculture, is near completion.

- Eddie (in the absence of Marie Badjeck, who had to withdraw at the last minute) presented some of the ideas behind Module 4, and how the work will build on previous vulnerability efforts (his paper submitted to Fish and Fisheries, based on Atmospheric Temperature as an index of exposure to climate change). He identified "scenarios" as an important component of the work - requires coordination with Module 3 and other QUEST projects. We discussed (and in principle rejected) handling extreme events in QUEST_Fish.

ACTIONS:

1. Rob Holmes to get security clearance at the MET office to get HADCM3 data from the MET office.
2. It is recommended that representatives of Modules 1 and 2 meet in Plymouth (during the AMEMR symposium, 23-26 June 2008) to agree on delivery dates and types (e.g. priority LMEs, priority time slices, resolution, etc), as this depends on Module 2 preferences. Allen, Holt, Barange will be there. Could Pilling or/and Jennings, Blanchard join us? This meeting will be informal and short (2h?). Please let me know if some of you can attend, on what date, and I would organise a room.
3. Gorka Merino to establish contact with QUEST_GSI (lead by Nigel Arnell and Terry Dawson) and QUEST_Food? (Evan Fraser) to make sure we use the same future scenarios and are consistent in providing "fisheries narratives" for these. Possibly this contact should include Marie Badjeck, so that the scenarios are also consistently carried through to Module 4. He should report back at the QUEST_Fish meeting in the autumn.
4. Gorka merino to visit CEMARE in coming months to get input from CEMARE regarding parameterisation of the scenarios for fisheries commodities.
5. It may be useful, for representatives of Module 3 and 4, to meet in July 2008 at the GLOBEC/FAO symposium in Rome to develop some of the scenario issues requiring coordination (Allison, Barange and Badjeck will attend).

Other issues discussed:

- Please use the ppt on the website to promote and disseminate QUEST_Fish at your own discretion. I will do so at meeting in South Africa and Italy in coming months, and at the ICES ASC in Canada. Jason will do so at a meeting in France and Nick in Canada as well. If you need specific details please contact me.
- Every year NERC asks me to fill an Outputs database with project deliverables. Any publications associated to QUEST_Fish should have this noted in the acknowledgements, so that it can be counted as an output of the project. Please keep this in mind when you submit papers. If you send me PDFs we will be able to place copies of them on the website too.
- Data management: BADC is the agency responsible for managing QUEST data on behalf of NERC. Martin Juckes, the official responsible for it has contacted me to ascertain our data requirements. Module 1 will be the provider of over 90% of the data (by volume), and so Jason Holt has volunteered to take this under his wing. I will ask Martin to get in touch with Jason to further this.