



Economic Evaluations in the NEOH Handbook

REFERENCE: Short Term Scientific Mission, COST TD1404 NEOH

Beneficiary

Full name of grantee: Soledad Cuevas Garcia-Dorado

Current position: PhD student

Affiliation: London School of Hygiene and Tropical Medicine / LCIRAH

Country: UK

Host

Name of Host: Massimo Canali Current position: Senior Scientist Affiliation: University of Bologna

Country: Italy

Period: from 14-February-2016 to 26-February-2015

Reference code: COST-STSM-ECOST-STSM-TD1404-30437

1. Purpose of the visit

The aim of this short term stay was to collaborate on the elaboration of a protocol for economic evaluation of interventions from a One Health perspective, as part of the NEOH Handbook for evaluation of One Health activities (corresponding to NEOH working group 1). This work has built on the research carried out by Dr. Massimo Canali during his visit to LCIRAH (June, 2015). This included a review of existing evidence and methods across sectors, as well as interviews with experts in economic evaluation. The output of Dr. Massimo Canali's visit to LCIRAH included the outline and summary draft of a chapter in economic evaluation for the Handbook. During the course of the main aim is to finalize a first version of this section, to be then shared with and reviewed with other researchers in NEOH Working Group 1. The work carried out by myself during this visit was supervised by Dr. Laura Cornelsen (LSHTM/LCIRAH), who hosted Dr. Massimo Canali during his visit to London.

2. Description of the work carried out

I had several meetings with both Dr. Massimo Canali and Dr. Maurizio Aragrande in order to discuss and conceptualize the chapter on economic evaluation of One Health interventions. We discussed the concept and boundaries of economic evaluation in the context of one health, as well as the implications of complexity and environmental sustainability criteria for economic evaluation. We also discussed the links between methods for the analysis of socioeconomic and environmental systems and economic evaluation frameworks in OH, and





the role of Multi-Criteria economic analysis for One Health. We reviewed relevant literature on these topics, agreed on a conceptual framework and detailed outline for the chapter, and split the different sections to work on them. We then worked on writing the draft. I was also able to have informal meetings with other researchers interested in economics of One Health (Stefano Rivas Morales) or related areas like food economics (Dr. Mario Mazzochi).

3. Description of the main results obtained

Our meetings helped clarify the content and focus of the chapter. We agreed on the need to include a range of tools for complexity analysis. We identified the main characteristics of complex systems that are relevant from the point of view of an economic evaluation in OH. We defined criteria to guide the choice of economic evaluation tools for OH. We produced a draft of the subchapter. This included:

Introduction (why do economic evaluation for OH, what is specific about OH in terms of EE) Tools for economic evaluation (we discuss the definition and main tools for EE, focusing on their applicability and limitations in the OH context). This section functions as a guide to help choose EE tools for OH. We include a table with examples.

Analysing complex socioeconomic environmental systems: This section reviews a range of methodologies for analysis which can inform evaluations, including demand analysis, systems analysis, multi-sector economic modelling).

MCDA: We include a specific section on the role of MCDA in economic evaluation of OH, commenting on specific examples and applications.

4. Future collaboration with host institution (if applicable)

The collaboration between researchers at LCIRAH and University of Bologna has proven fruitful in the past. The wide range of areas of expertise of researchers at both centres is highly valuable in the context of NEOH. We expect that the interaction between experts in economic evaluation at University of Bologna and London School of Hygiene / LCIRAH can result in future collaborations and be extremely productive.

5. Projected publications resulting or anticipated to result from the STSM

A subchapter of the NEOH handbook is the mos immediate output of this meeting. Furthermore, we expect to produce a peer reviewed publication.

6. Confirmation by the host of the successful execution of the mission

The STSM was carried out successfully and it has significantly progressed the writing of the NEOH handbook's parts dedicated to Economic Evaluation. Soledad Cuevas succeeded in formalising the results of the meetings held in the host department. The draft she has produced could be now finalised as a chapter of the handbook and could be a good basis for a peer reviewed publication. This STSM fruitfully completed the work of the previous STMS hosted by the LCIRAH in May-June 2015 and marks an important progress in the collaboration between the University of Bologna and the LCIRAH/LSHTM within the framework of the NEOH Action.





7. Financial summary

| Expenses | Total expenses in EUR | % covered by NEOH grant (EUR) |
|---------------------|-----------------------|-------------------------------|
| Travel | e.g. 390 EUR | e.g. 88% (290 EUR) |
| Accommodation | e.g. 583 EUR | e.g. 88% (160 EUR) |
| Consumables (meals) | e.g. 502.8 EUR | e.g. 88% (160 EUR) |
| Total | e.g. 1475.8 EUR | e.g. 88% (1300 EUR) |

8. Other comments (if any)

Signatures

Date, 7 March 2016

