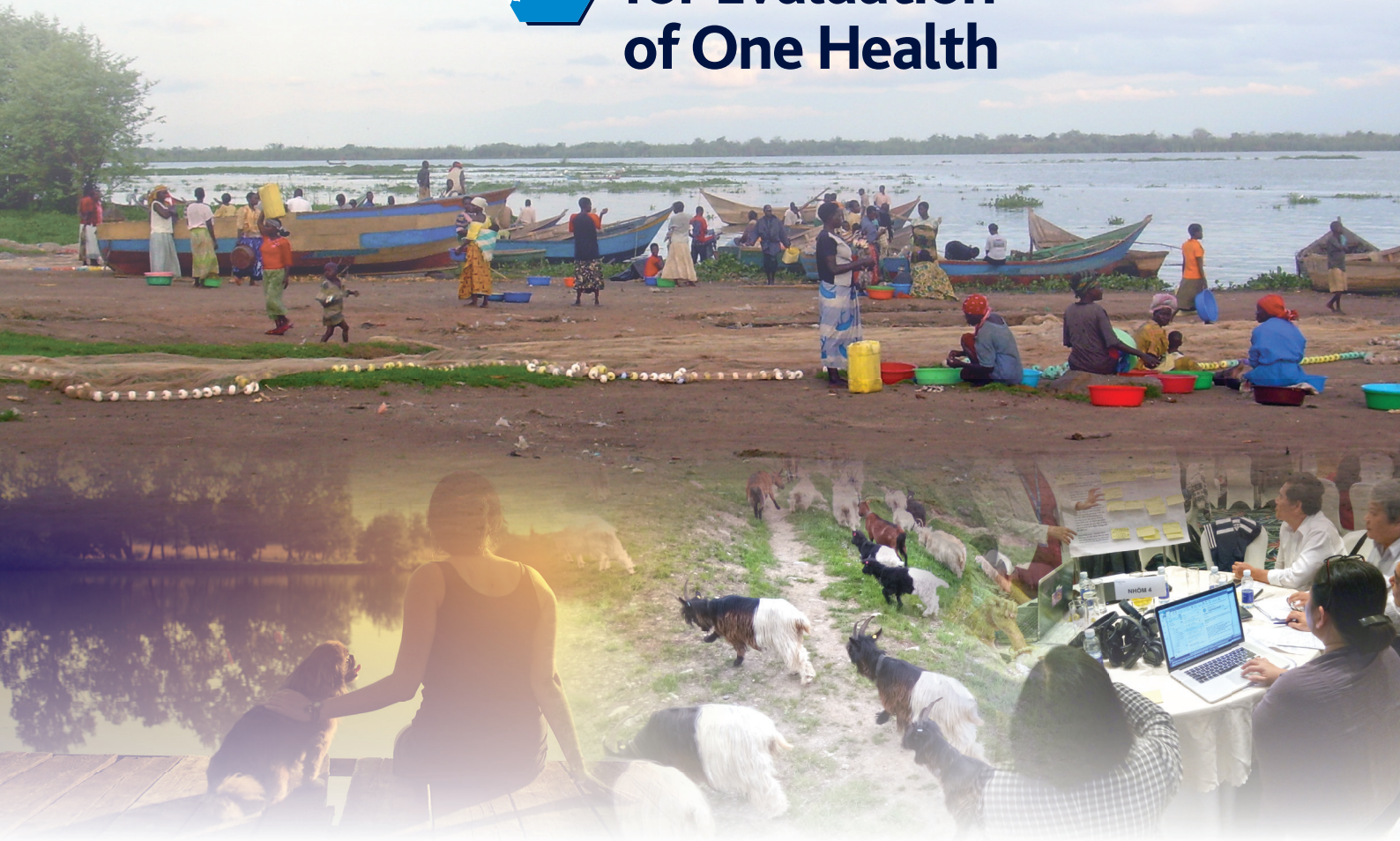




# Network for Evaluation of One Health



**The Network for Evaluation of One Health** is an **open network** that brings together researchers, practitioners, decision-makers and other stakeholders with an interest in One Health and evaluation

Our vision is to develop and use methods and frameworks for improved One Health decision making

- Production of a handbook for evaluation of One Health
- Validation of the handbook by applying it to a suite of international case studies
- Assessment of the value of existing One Health initiatives in a meta-study
- Stakeholder engagement to promote informed decision-making and resource allocation in One Health
- Training, learning and capacity building for evaluation of integrated approaches to health

# Evaluate to evolve

The Network for Evaluation of One Health (NEOH) is committed to ensuring a standardised approach to the evaluation of One Health initiatives, ultimately resulting in informed decision-making and efficient allocation of resources

A One Health approach to address global health challenges is one that accepts that complex issues require a participatory and interdisciplinary process. While One Health initiatives have been implemented across Europe, there has, to date, been no standardised methodology for the systematic evaluation of One Health activities and, more specifically, there were only a few studies that measured systematically the added value of One Health. It was from this realisation that the Network for Evaluation of One Health (NEOH) was established. Funded by the EU's COST Action programme, this four year project, which will be completed in November 2018, is focused on the evaluation and comparison of One Health Activities.

## A COLLABORATIVE NETWORK

The Network is organised into four working groups who frequently exchange information with a wider group of experts in the Network contributing to different tasks. There is a focus on ensuring a friendly and integrative attitude, with adaptive leadership. NEOH Chair Dr Barbara Häslér, from the UK's Royal Veterinary College, says this has contributed significantly to the innovation of methods and integration of existing knowledge: 'Members of the Network view this as a central pillar to succeeding within the interdisciplinary work, and has set the working standard for One Health as an approach in the future.'

WG1 is responsible for the development of the overall evaluation framework and the development of a handbook for the evaluation of One Health' says WG1 Vice-

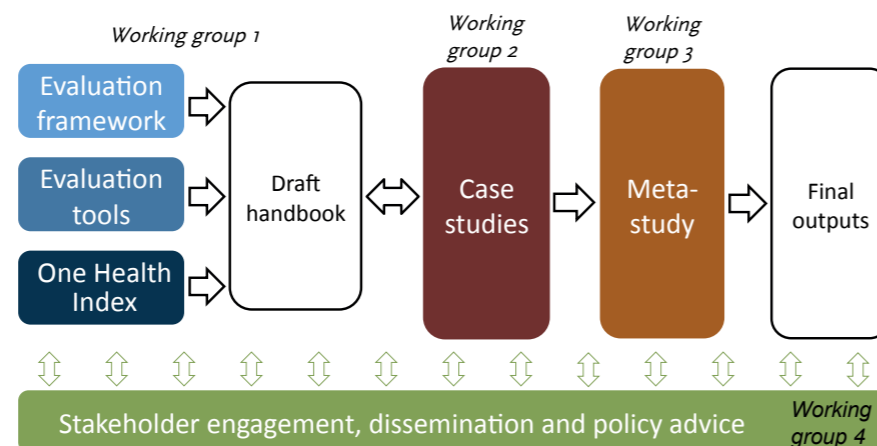
Leader Dr Simon Rüegg, Senior Scientist at the University of Zürich. WG2 applies the evaluation framework, protocol and index developed to different One Health initiatives. 'We have produced a suite of case studies that applied the methodology which is presented in the evaluation handbook,' explains WG2 Leader Dr Sara Savi, Senior Research Associate at the Scientific Veterinary Institute, Republic of Serbia.

Following on from this, WG3 conducts a meta-study of the available case studies to facilitate international comparison and the elaboration of policy recommendations. WG4 Leader Professor Vlatko Ilijeski from the Faculty for Veterinary Medicine in Skopje, Macedonia, explains that this group seeks dialogues with national governments, NGOs, research organisations and industry to ensure that the evidence produced will address the needs of decision makers and relevant stakeholders.

## COMMUNICATING ACROSS BORDERS

Given the large membership of the Network that is spread across a number of countries, strong communication is key to ensure that their work is as effective as possible. Networking tools to facilitate exchange and collaboration include training schools, workshops, short term scientific missions, and conference grants, among others.

These activities are open to anybody with an enquiring mind and an interest in One Health and/or evaluation – independent of their discipline, sector, or background. Events, key achievements, opportunities and resources are publicly available on the website and anyone is welcome to get engaged and make contributions. Interaction with other integrated health networks globally facilitates discussion, conceptual and practical advances, and shaping of a joint agenda.



## Overview of case studies in NEOH applying the handbook for evaluation of One Health

CASE STUDY TITLE	SHORT DESCRIPTION	KEY COUNTRIES / INSTITUTIONS INVOLVED
Drivers of human and canine obesity evaluated using a One Health approach	This evaluation focuses on characterising the problem of human and canine obesity in a One Health framework and links occurrence of obesity and associated health issues among humans and their pets to social, environmental and economic drivers	Spain: University of Murcia Denmark: University of Copenhagen Lithuania: InMedica Vilnius - Alfa Clinic Serbia: Scientific veterinary institute "Novi Sad"
Portuguese observatory of taeniasis and cysticercosis	The Portuguese "Observatory of taeniasis and cysticercosis", an example of inter-sectoral collaboration for surveillance at the national level, is being evaluated for its One Health characteristics and outcomes	Portugal: University of Évora; NOVA University of Lisbon; University of Trás-os-Montes and Alto Douro
Eradication of brucellosis in Malta and Serbia: A comparative evaluation	Eradication of brucellosis was achieved in both Serbia and Malta. This study compares the different ways and jurisdictions used and their outcomes	Malta: University of Malta Serbia: Scientific veterinary institute "Novi Sad"
A process evaluation of the University of Copenhagen Research Centre for Control of Antibiotic Resistance (UC-Care)	This study describes the processes and outcomes of the UC-Care programme, a cross-faculty university funded four year research project (2012-2016) on knowledge and tools to combat antimicrobial resistance at the University of Copenhagen, Denmark	Switzerland: Safoso Denmark: University of Copenhagen
A descriptive evaluation of the first report of MRSA recovered from wild boars in the north of Portugal	A research project aiming to generate knowledge and tools to combat antimicrobial resistance in Portugal by characterising methicillin resistant Staphylococcus aureus recovered from wild animals and assessing the labile epidemiology of virulence and drug resistance	Portugal: University of Trás-os-Montes and Alto Douro; Ricardo Jorge Health Institute Spain: University of La Rioja
Use of acaricides to control ticks & tick-borne diseases in Zambia: Implications for public & environmental health	This retrospective evaluation describes the OH characteristics and outcomes of a project between Zambian and Italian authorities on strategic dipping of cattle to control tick vectors of Theileriosis, a disease greatly affecting the traditional cattle sector in Southern Zambia	Italy: University of Turin (ISS, Rome); University of Bologna UK: University of Liverpool
Evaluation of the "International One Health" master programme in Western Balkan universities	This study captures long standing workings and effects of a master programme on One Health that has influenced higher education institutions, management, operations, and financing mechanisms in beneficiary countries	Slovenia: University of Ljubljana Bosnia and Herzegovina: University of Sarajevo; University of East Sarajevo, Italy: University of Milan; Spain: Universitat Autònoma de Barcelona Portugal: University of Porto Kosovo: University "Hasan Prishtina" of Prishtina
One Health-ness assessment of West Nile virus integrated surveillance in Northern Italy, 2016	This evaluation assesses in how far the integrated surveillance on West Nile Virus in three endemic regions in Northern Italy, conforms with a One Health approach	Italy: Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna (IZSLER); University of Turin; Servizio di Riferimento Regionale di Epidemiologia per la Sorveglianza la Prevenzione e il Controllo delle Malattie Infettive (SeREMI); University of Oriental Piedmont; University of Pavia; Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta (IZSTO); Switzerland: University of Zürich
Evaluation of an Animal Welfare Centre from the One Health Perspective	The Faculty of Veterinary Medicine in Skopje, Macedonia initiated a new Centre for Animal Welfare and Behaviour in 2010 to implement new animal welfare standards in Macedonia. This study evaluates the processes and outcomes of this centre from a One Health perspective	Macedonia: Faculty for Veterinary Medicine Skopje
Process evaluation of "Leishmania", a virtual network for data and knowledge exchange on leishmaniasis	A virtual network was established in 2014 to provide a mechanism for sharing knowledge and data on leishmaniasis. The study evaluates the processes and outcomes of 'Leishmania' with the aim to make recommendations on how to strengthen the network's capabilities.	Albania: Southeast European Centre for Surveillance and Control of Infectious Diseases, Institute of Public Health United Kingdom: University of Liverpool
Evaluation of the Southern African Centre for Infectious Disease Surveillance (SACIDS) infectious disease surveillance capacity	Eight years after the start of SACIDS this evaluation looks at the different One Health dimensions with a particular focus on capacity for surveillance of infectious diseases in Southern Africa	United Kingdom: Royal Veterinary College Tanzania: Sokoine University of Agriculture, Muhimbili University of Health and Allied Sciences Zambia: University of Zambia Switzerland: University of Zürich
Evaluation of the implementation of One Health in Kenya: A case study of the Zoonotic Disease Unit	This evaluation seeks to determine the effectiveness, impact on stakeholders and added value of using a One Health approach of the Zoonotic Disease Unit, a cross-sectoral One Health approach in Kenya	United Kingdom: University of Edinburgh; Royal Veterinary College; University of Liverpool Kenya: International Livestock Research Institute

## Project Insights

### FUNDING

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[http://www.cost.eu/COST\\_Actions/tdp/TD1404](http://www.cost.eu/COST_Actions/tdp/TD1404)



# Learning together

The NEOH is focusing on an approach that crosses borders between disciplines and sectors. With a network that spans multiple countries, Drs Barbara Häslér, Simon Rüegg and Sara Savic, and Professor Vlatko Ilieski discuss the NEOH's objectives and highlight some of its achievements to date



areas where practitioners can focus on solutions and also gives guidance for research and action on One Health.

## Can you explain the main driver behind establishing the Network?

**SR:** One Health promotes an integrated approach to health that aims to break artificial boundaries created by disciplines and sectors. The One Health paradigm has been gaining momentum as a mechanism for cross-sectoral and transdisciplinary engagement and cooperation in health matters. Pressures for novel approaches to promote and protect human, animal and environmental health are arising worldwide due to concerns related to the increase in infectious disease outbreaks, the (re-) emergence of human and animal pathogens and non-communicable diseases as well as ecosystems changes, such as loss of plant and animal biodiversity, landscape transformation, climate change and reduced ecosystem services.

## Was there a particular catalyst that led to it being set up or was it a gradual process?

**SS:** Several One Health initiatives have been implemented around the world, such as the establishment of cross-sectoral coordination, communication and data sharing mechanisms, but no standardised methodology exists for quantitative evaluation of One Health activities. Therefore policy makers have limited evidence for making decisions on new

policies and allocation of resources for a wider and systematic One Health approach. The One Health community continuously organises meetings and workshops, all of which contribute to the evolution of a common understanding and methodologies for One Health, the establishment of an agenda for One Health research and practice, as well as the communication of new findings and ideas. A meeting directly relevant to the establishment of the NEOH was the international workshop with One Health experts on 'Metrics for one health benefits: key inputs to create an economic evidence base', which took place in 2013 in London. This workshop was critical in defining the research questions and vision for NEOH, and gauge interest and commitment among potential collaborators.

## What plans does the NEOH have for the near future and for One Health specifically?

**VI:** One Health initiatives are more and more popular, but there are still many disciplinary, financial, and societal constraints which impede progress on the institutionalisation of One Health that will need to be overcome. We will aim to maintain momentum by establishing a Community of Practice that will allow us to continue attracting a wider group of scientists and practitioners. Objectives range from establishing collaboration between different disciplines and sectors, to progress on the theoretical foundations of One Health from a systems perspective.



Clockwise from top left: Drs Barbara Häslér, Simon Rüegg, Sara Savic and Professor Vlatko Ilieski

## With the book that is due for publication, what do you aim to convey to the One Health community or a wider audience?

**BH:** With this handbook we make a dedicated effort to capture the multiple dimensions of One Health. We identify social, economic, and environmental drivers leading to integrated approaches to health and illustrate how these evoke characteristic One Health operations, namely One Health thinking, planning, and working, which need an enabling environment that allows collaborative learning and sharing. Further, we look at how we can describe, measure and – most importantly – combine different One Health outcomes in our analyses. The case studies and meta-study provide insights into what does and does not work in One Health and how One Health can generate value. Our handbook identifies

