

ANNEX 5.1 Annual Report 2007-8

JOINT ENVIRONMENT & HUMAN HEALTH PROGRAMME ANNUAL REPORT 2007/08

This form supplements the NERC OPM questionnaire and should be completed for each Directed Programme. The boxes may be resized but the form **MUST NOT** exceed **FOUR sides of A4**, to which may be appended no more than FIVE sides of supporting information (single spaced, 12pt). Supporting information should include a summary of each research project's progress, a list of peer-reviewed publications from the projects and a summary of Core Team activities and publications (if applicable) in 2007/2008.

Name of Directed Programme	Joint Environment & Human Health
Programme Administrator / Manager	Dr Pamela Kempton
Science Coordinator (if applicable)	Professor Michael Moore
Core Team Leader (if applicable)	N/A
Date:	26 May 2008

1. Scientific Achievements for 2004/05

Please select from the OPM returns, at least two, and no more than four, of the most important scientific achievements of 2004/05. Explain how these achievements contribute to: (i) the overall scientific objectives of the programme and (ii) the NERC Strategy. Please append a *short summary table of progress on each project and a publication list collated from the individual OPM returns.*

1. Screening for MRSA in the agricultural environment (NE/E008054/1)
2. Demonstration of toxicity of silver nanoparticles in human food-chain model including invertebrates, fish and mammals (NE/E008232/1)
3. Identification of current knowledge gaps regarding transmission of viruses through the environment and food (NE/E009026/1)
4. Disease causing bacteria can survive inside nematode worms and are protected from sanitiser action (NE/E009085/1)

All of these achievements contribute precisely to the specific scientific objectives of the E&HH Programme, which focus on the pathways of pathogens and contaminant chemicals/particles through the environment to humans and potential for risk to health.

The wider aim of the E&HH Programme is the development of a multidisciplinary and interdisciplinary scientific community that will be capable of resolving environmental problems that involve human health issues. The primary objective of the E&HH Programme is to gain a better understanding of how we interact with our natural environment and what the consequences will be for sustainability of environmental goods and human health.

Please indicate the percentage of total programme activities in 2007/08 in each of the 4 areas of the NERC Strategy

Climate System		Biodiversity	
Sustainable Use of Natural Resources		Natural Hazards	
Environment, Pollution & Health	100%	Earth System Science	

Technologies		
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2. Science activities during 2007/08

Please list major science meetings, workshops, field campaigns, cruises etc

1. Science Day Conference (Swindon) February 2008. Oral presentations for the Workshop, Working Group, Network and Discipline Hopping Projects and Poster presentations for the Exploratory Studies (see Science Day Proceedings).
2. Complexity and Systems Approaches Workshop (Swindon) February 2008 (see Workshop Proceedings).
3. Many Workshops/Mini-Conferences related to the Workshop, Working Group, and Network Projects (see ROD for full details).
4. Field sampling campaigns have been implemented in the Mekong Delta and Malawi for the Exploratory Study projects led by Dr Few and Prof Atkinson respectively.

3. Knowledge Transfer and User Liaison activities

Please provide a brief summary of user liaison activity in 2007/08, and a list of new partnerships, co-funding and knowledge transfer/exploitation initiatives. This should include public and private sector collaborations.

1. The Workshop, Network and Working Group projects have all established effective functional networks for future collaboration and information exchange in all scientific topic areas of the E&HH Programme.
2. Many of the projects have now developed cross-linkages as a result of investigator involvement with several projects and the informal networking that occurred during the Science Day Conference in February.
3. Dr Helen Clough (NE/E008526/1) has offered to provide support for Bayesian statistical modelling for other Projects in the programme and this has been taken up by several other groups.
4. The Network project led by Dr Ka-man Lai (NE/E00881X/1) has been involved in advising on the design of infection-free hospitals.
5. Dr Nigel Cook (NE/E009026/1) has advised Government Departments on routes of virus infection.
6. It is anticipated that Workshop/Network and Working Group Projects will be advising Government Departments, Agencies and Industry via their final reports and related specific outputs.

4. International Dimensions

Please provide details of International activities in 2007/08. This should include activities under the Programmes International Fund.

1. Presentations on the E&HH Programme at International Conferences and Workshops in Truro (UK), Plymouth (UK), Rome (Italy) and the US National Water Resource Center (Tiffin, Ohio, USA).
2. Workshop/Network and Working Group projects have included many non-UK participants/collaborators and presentations have been made at various International Conferences (see ROD for details).

3. Implementation of EU-ERANET programme on Environment and Human Health supported by the UK, Netherlands and France.
4. Two of the Projects supported by the E&HH Programme are operating overseas: in the Mekong delta (NE/E009042/1) on contamination and seasonal flooding and in Malawi (NE/E008313/1) on the health consequences of micro-nutrient deficiency in agricultural soil.

5. Data Management

Please provide a brief statement of progress in data management in 2007/08

Not applicable at this stage of the E&HH programme. Some of the data generated in the Exploratory Studies may require data management in the coming year.

6. Science and Society

Please provide details of any relevant activities (promotion of Programme, media contact, public understanding, science communication etc) undertaken during 2007/08.

1. The Programme has been actively promoted at various conferences and meeting as mentioned in section 4, as well as many other less formal meetings and visits to potential future stakeholders (e.g., MetOffice, HPA, Department of Health).
2. A member of "New Scientist" editorial team attended the Science Day Conference and Systems Workshop at NERC Swindon.
3. ESRC has supported four Extension Projects and is in the process of awarding 3 Research Fellowships directly linked to the E&HH Programme.
4. Potential Journals for publication of the Proceedings of the 2009 Science Day Conference are being actively sought.

7. Science Coordination

Please provide information about science coordination activities not detailed above e.g. numbers of visits to PI's, conferences attended, liaison with other programme participants, co-funders, stakeholders and service providers etc

1. Around 50% of PIs have now been visited and almost all PIs have been met less formally at either the Science Day Conference/Workshop or various E&HH Workshops/Network & Working Group Meetings. Since many of the Exploratory Studies did not start until late 2007, visits to these groups have been delayed until they have made significant progress. Visits are being scheduled for summer/autumn 2008.
2. The Coordinator has attended many of the Workshop/Network and Working Group Meetings on viruses, atmospheric dust, airborne pathogens, environmental impacts on health benefits of organic food production, and soil health and environment, as well as a mini-conference in Bristol organised by Professor Vicki Stone's project group (NE/E008232/1).
3. The Science day Conference/Workshop in February 2008 served to effectively promote networking among the PIs and Co-Is. A number of PIs and Co-Is of Exploratory Study Projects have also been involved as participants in Workshop/Network and Working Group Projects, which has further facilitated the capacity building aspect of the E&HH programme.

4. Attendance of the Coordinator at various Project meetings and PI meetings has also enabled new alliances to be developed where potentially beneficial scientific linkages or knowledge gaps were identified in discussion.

8. Problems

Please identify any serious problems (e.g. scientific, technical, financial) which have prevented the achievement of planned targets for 2004/05 or will affect the programme in other ways. In appropriate cases, these may be brought to the attention of the Science and Innovation Strategy Board (SISB)

No significant problems have arisen. However, most of the Exploratory studies and some of the Working Groups had late starts due to the need to appoint staff and delays in receiving Institutional Ethics Committee Approval.

9. Plans for 2008/09

Please summarise major targets for 2008/09

1. Completion of all Workshop/Network, Working Group and Discipline Hopping Projects.
2. Many of the Exploratory Study Projects will also be completed in 2008/9.
3. Second Science Day Conference (oral presentations for Exploratory Studies) and linked Workshop on Societal Issues and Risk Perception.
4. Publication of the remaining outputs from the Workshop/Network and Working Group projects.

If you have any questions regarding the completion of this form, please contact the appropriate Programme Administrator