

# Health within EIA in the UK and India

(Abstract 588)

Urmila Jha-Thakur<sup>a</sup>, Thomas Fischer<sup>a</sup>, Vincent Onyango<sup>b</sup> and Pawan Labhassetwar<sup>c</sup>

<sup>a</sup> Department of Geography and Planning, University of Liverpool (UK)

<sup>b</sup> Town and Regional Planning, University of Dundee (UK)

<sup>c</sup> National Environmental Engineering Research Institute (India)

## Abstract (ID 588)

This paper explores the perception of health within EIA in a developed country (UK) and a developing country (India). The benefits of considering human health within EIA have long been established and yet the instrument has been criticised for failing to adequately assess the broad range of human health determinants resulting from developments. So far in the UK, attempts have been made to integrate health with strategic environmental assessment (SEA), however such integration at project level is still lacking. In terms of India, very little research has been conducted in exploring the inclusion of health issues within EIA in any developing countries and the Indian scenario can help to improve understanding here. In the paper, the results of two online surveys conducted in the respective countries are presented.

Key Words: Health, Environmental Impact Assessment, India, UK

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## Setting the Context

Environmental Impact Assessment (EIA) is practiced in more than 120 countries world-wide and has been instrumental in incorporating environmental considerations into the decision-making process. Within the EU, it has been 25 years since the EIA Directive was adopted. India too has had experience with EIA for the last 25 years. There should therefore be some scope for enhancing mutual learning by reflecting on practices in the UK (a developed country) and India (a developing country).

Furthermore, whilst the benefits of considering human health within EIA have long been established, the instrument has been criticised for failing to adequately assess the broad range of human health determinants resulting from developments (Harris et al, 2009). The limited range of studies conducted in this field to date suggest that current EIA practice fails to define health appropriately, do not consider the full range of health impacts and do not maximise any potential health benefits resulting from developments (Steinemann, 2000). To date, in the UK, some more serious attempts have been made to integrate health with strategic environmental assessment (SEA) (Fischer et al, 2010); however such integration at project level is still lacking (Harris et al, 2009). So far very little research has been conducted in exploring the inclusion of health issues within EIA in developing countries where the vulnerability of population to impacts from development projects is often perceived to be particularly high. With growing problems associated with suburban sprawl, deforestation and climate change on human populations, addressing health issues within EIA is seen to be of great importance (Bhatia & Wernham, 2008). Therefore, the aim of this paper is to explore how health is currently addressed within EIA practice in the UK and India.

## Evolution of EIA in India and the UK

The existence of EIA both, in India and the UK dates back to the 1970s. In the UK, initial interest was connected to the oil drilling activities in Scotland while in India EIA was introduced as an administrative measure in 1978-79 mainly for river valley projects and later extended to industrial projects (Arts et al, 2012; Jha-Thakur and Fischer, 2008). As a formal requirement, EIA was

somewhat reluctantly accepted in both countries. In case of the UK, the European EIA directive initiated the need to introduce EIA formally, while in India the Bhopal Gas tragedy (1984) precipitated the urgency for developing legislative instruments for enforcing environmental protection. Therefore, EIA was formally introduced in 1988 in the UK through the Town and Planning Regulations England and Wales while the Environmental Protection Act (EPA) which is the umbrella legislation for EIA in India was enacted in 1986. However, EIA became mandatory in India only in 1994 through the EIA Notification applicable for all new as well as expanding projects. Although EIA has been made mandatory in India at a much later stage it was formally introduced a year before it was made mandatory in the UK.

As far as the EIA process in the UK is concerned, the environmental statement (ES; i.e. the main written document) is usually prepared by or on behalf of the proponent and is submitted alongside the planning application to the relevant Local Planning Authority (LPA). LPAs can be consulted by the proponents for both, screening and scoping, while LPAs can consult statutory bodies, other experts and the public on the ES (RTPI, 2011). For India, the EIA reports are also prepared by the proponents or their consultants and then submitted to the Ministry of Environment and Forest where the respective Expert Committees review the applications and make a decision on them (Jha-Thakur et al, 2009). In the more than 25 years of its application, EIA has come a long way in India and in the UK. Nevertheless, EIA is still being criticised in these countries for some remaining shortcomings. In case of the UK, the scoping stage, public participation and follow-up are some of the areas where EIA has been criticised (Arts et al, 2012). In India, weak screening and scoping, poor quality baseline data, ineffective follow-up along with a struggling key legislation which is constantly being modified and adapted are identified as weaknesses (Paliwal, 2006; Jha-Thakur et al, 2009).

## **Health and EIA**

Many of the causes of disease and inequalities in health, and of the challenges that lie ahead, are outside the acting domain of the health sector. The importance of articulating a wider case for public health has been recognised in recent WHO and UN publications (World Health Organization & United Nations Human Settlements Programme, 2010). Health Impact Assessment (HIA) is one way by which public health engages with other sectors. However, several researchers perceive HIA as an extension of EIA and are of the opinion that EIA can 'learn' from its less established counterpart' (Harris et al 2009). On the other hand, Ahmad (2004) makes the case that taking a step further to utilise HIA as a standalone tool is 'ironic'. This is because the broad model of health assessment itself is based on the consideration of wider social, environmental and economic issues. Furthermore like Ahmad (2004), Bhatia and Wernham (2008) argue that despite HIA's holistic approach to human health assessment, the procedural requirements of EIA are better equipped to assess human health by providing for a powerful and 'underutilized mechanism to institutionalize a holistic and cross-sectoral approach to address health in public policy'(p. 91–100). However, one needs to also BE aware of the complications of integrating too many dimensions of impact assessment because 'while integration enhances effectiveness to some extent, too much integration, especially in terms of the procedural element, appears to diminish the overall effectiveness of each IA in influencing decisions' (Tajima and Fischer 2013:29).

As far as incorporating health considerations within EIA is concerned, this is seen to add value in both India and UK. While this research does not undermine the role that HIA can play in addressing health challenges, the potential role which EIA can play in the absence of a developed HIA is highlighted. HIA in India is still in its embryonic stage and only sporadic examples are available. This does not imply that health is absent from decisions taken about the environment but that it is rarely explicitly considered (Harris et al., 2009). In contrast to HIA which is still trying to find its place in India, EIA is well established. In case of the UK, HIA is not legally required and neither conducted routinely. Recent study by Tajima and Fischer (2013) indicated that out of a total number of 83 core strategies that had been adopted by English Local authorities by 2011, only six (7.2%) had conducted HIA. This highlights the great potential of EIA in addressing health issues within UK planning. This paper therefore aims to contribute to this relatively under researched area by first establishing the extent to which health is being considered within EIA in the two countries and secondly drawing a comparison to enhance mutual learning and developing recommendations for better integration of health within EIA.

## Methodology

This research is based on (a) a literature review and (b) two online surveys conducted with Indian and UK practitioners (including consultants, researchers, academics and administrators) in collaboration with National Environmental Engineering Institute of India (NEERI), as well as the Universities of Groningen and Utrecht. Surveys were aimed at identifying opinions on the overall effectiveness of EIA in India and the consideration of health within EIA. The Indian part of the survey was conducted between May 2011 and January 2012 and received 179 responses. In the UK, a similar survey was carried out in spring 2011 and yielded 181 responses. The survey consisted of four parts, dealing with: a) establishing the background of the respondents; b) establishing the opinions of the respondent with regards to the Indian/UK EIA systems; c) exploring the extent to which health has been accommodated within EIA; and d) suggestions on what an 'ideal' EIA system in the respective countries may look like. In this chapter, we are concerned mainly with the third section of the survey results i.e. exploring health considerations in EIA. Analysis of survey data was done, using the SPSS (statistical package for social scientists) software. With regards to those contributing to the survey, in the UK, consultants, researchers and scientists are somewhat overrepresented, while in India, the majority of respondents came from research organisations, followed by consultancies and private companies who are one way or another involved with EIA e.g. project proponents and managers. Government organisations dealing with and administering EIAs and community members involved in EIAs were under-represented.

## Findings & Discussion

**Perception of health within EIA practice:** Figure 1 shows that perceptions in India and the UK are not very different, participants from both countries said that health was perceived mainly in terms of environmental risks within EIA practice. This is in line with what the international literature has reported. Around 45% of respondents both from India and UK agreed that there is a lack of clear legislative guidance on how health issues are to be considered within EIA. Furthermore there was general consensus amongst participants from both countries with respect to the following:

- 1) Existing practical guidance on how to consider health issues within EIA is not satisfactory;
- 2) Definition of human health in EIA requirements is inadequate;
- 3) The social determinants of health are rarely considered in EIA;
- 4) There is usually no separate health impact procedure;
- 5) Health experts are rarely included within an EIA team;
- 6) Covering health issues in EIA would increase its duration and overall costs;
- 7) Addressing health issues will make public participation more complicated;
- 8) The degree to which health issues are being accommodated within an EIA have increased over the last five years.

There were some differing opinions of the respondents from the two countries. For example, 40% of UK participants neither agreed nor disagreed with the statement that EIA procedural rigidity acts as a barrier in including a broader understanding of health. However, most Indian participants (48%) thought that this is indeed a barrier within the Indian context. Somewhat surprisingly, in India the biophysical determinant of health is not always considered within EIA. Furthermore, Indian respondents are particularly concerned about the political consequences of covering health issues in EIA.

**Health issues considered within EIA:** With respect to the type of health issues that are usually considered within EIA, Indian responses were considerably higher than UK responses for the following aspects:

- 1) Employment opportunities/unemployment
- 2) Effect on local economy and incomes
- 3) Education opportunities and level of education.

Another substantial difference between Indian and UK responses was observed with respect to the aspect 'changing human behaviour (e.g. encouraging healthy lifestyle)'. 46% UK respondents said this was occasionally included within EIA, while 44% of the Indian respondents said that such factors were never incorporated within EIA.

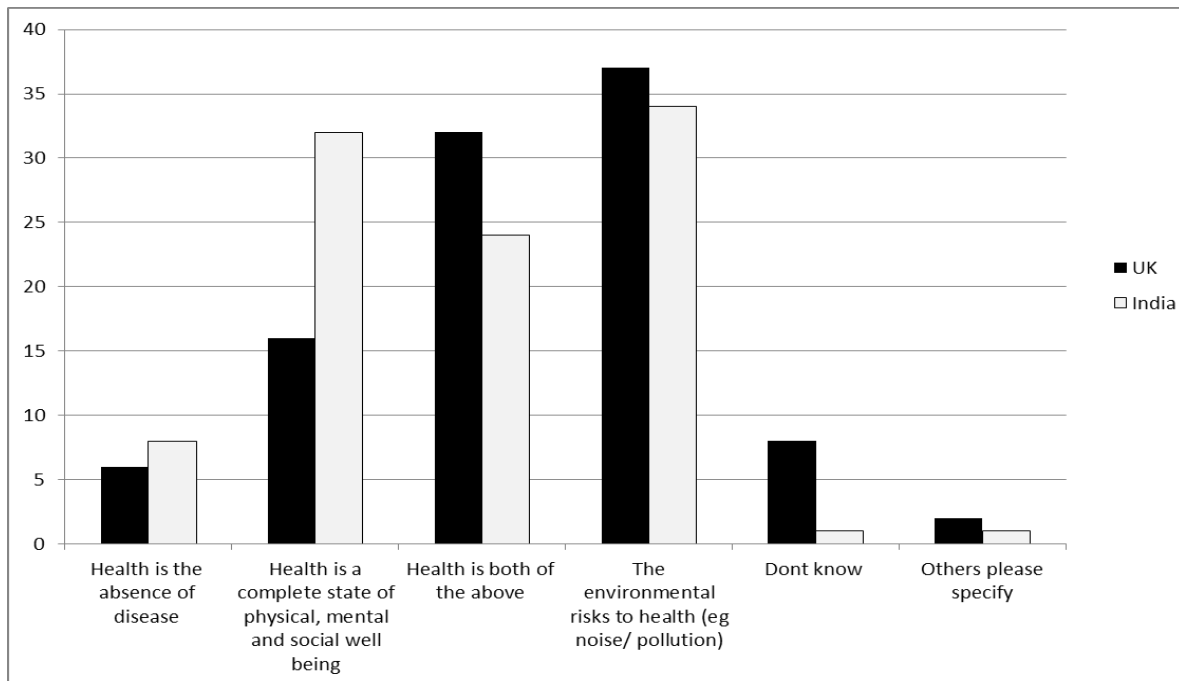


Figure 1 Interpretation of Health and EIA in India and UK  
(Y axis representing number of respondents)

**Sources of information on health:** The survey also looked at the sources of information on health which EIA practitioners can draw upon in the respective countries. The option for these sources provided for the surveys differed for the two country context. However, World Health Organisation (WHO) documents as a common source were included in both, Indian and UK surveys. In the UK, only 18% relied on this source while in India this figure was 46%. The most important information source for UK participants was Local Planning Policy e.g. Local Area Agreements (46%) and Local Development Plans for Primary Care Trust (34%). For India, the most popular source was Government Hospitals (63%) followed by Municipal Corporations (55%).

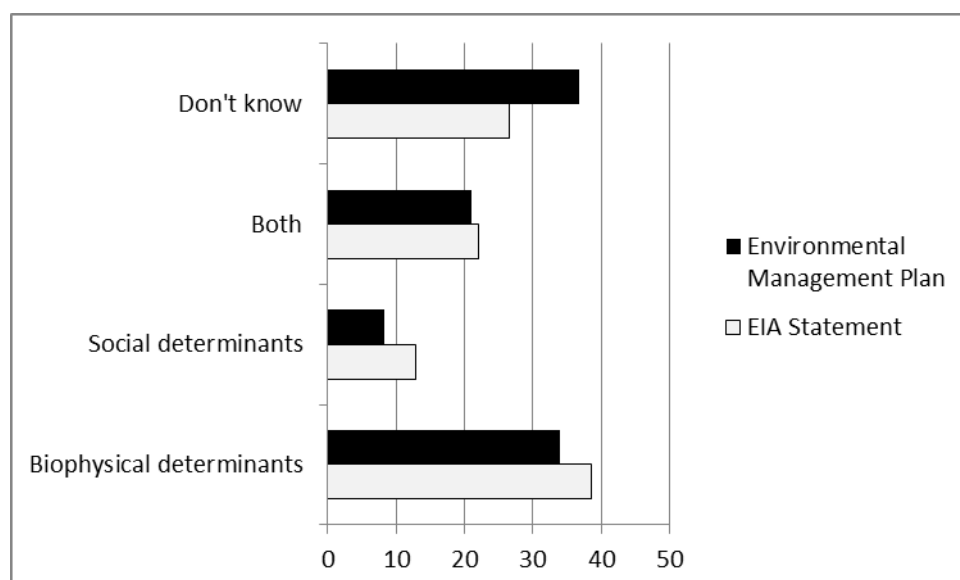


Fig 2a. Most common type of health impacts considered in the EIA outputs in the UK  
(X axis representing number of respondents)

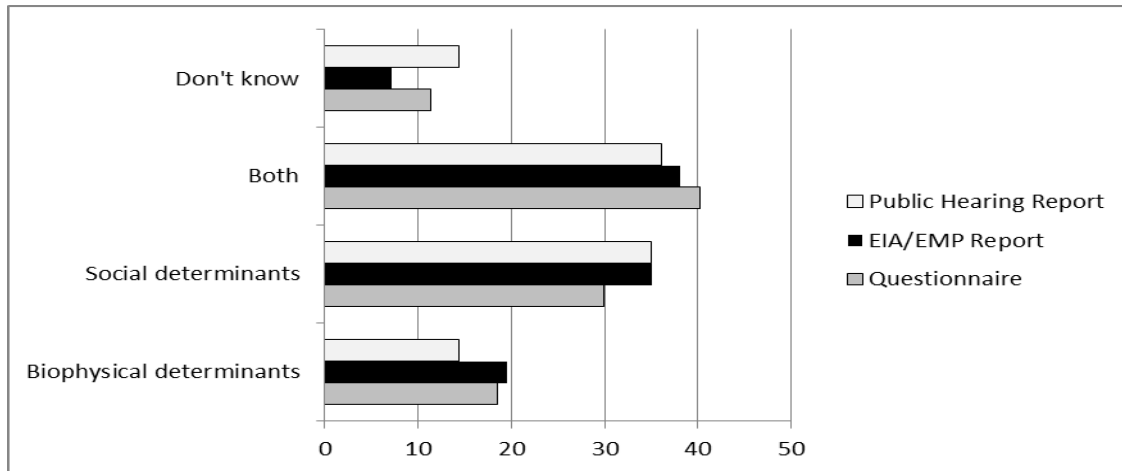


Fig 2b. Most common type of health impacts considered in the EIA outputs in India  
(X axis representing number of respondents)

**Health impacts considered in EIA outputs:** Figures 2a and 2b show the most common types of health impacts considered within EIAs of both countries. Biophysical determinants are clearly dominating in the UK, while it is the social determinants that dominate in India. The emphasis on the social determinants is most likely related to the social and political sensitivity related to many projects. Overall, it is evident that in India there is more concern about political consequences. Furthermore, factors related to employment and education usually receive some close attention in India. This may be owing to the developing economy and the state of the affected population.

## Conclusions

This paper explored the extent to which health issues are considered within EIA in India and the UK, based on a literature review and online surveys. The initial findings do not show any striking differences with respect to how health is treated within EIA in the two countries. The general problems are very similar both in UK and India, indicating a need to improve guidance on Health within EIA. Findings also reveal that in India factors related to the economy and education are being more emphasised than the bio-physical factors. This may be owing to the sensitivity of many projects and the communities involved. It is interesting to note that Indian participants were concerned a lot about political consequences of incorporating health within EIA.

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