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AJES
ASIAN JOURNAL OF ENVIRONMENTAL SCIENCE ■ VOLUME 7 | ISSUE 1 | JUNE, 2012 | 107-110

REVIEW ARTICLE

Environmental impact assessment of pesticide use, using environmental impact quotient

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Article Chronicle :
28.01.2012;
Accepted **:**
14.05.2012

SUMMARY: Environmental impact assessment (EIA) may be defined as a formal process used to predict the environmental consequences of any development project. Environmental assessment identifies potential problems and opportunities and is thus an essential part of assessment. By itself, however, it is insufficient for decision making. As mentioned earlier, the economic and financial analysis helps the planner to decide among possible options so as to eliminate or reduce negative environmental effects in a cost effective manner. Balancing costs and benefits, private and public considerations, are those where difficult decisions have to be taken. Environmental impact quotient organizes the pesticide information that is active ingredient, rate of application of pesticides into a usable form to help growers and other practitioners make more environmentally sound pesticide choices. The values obtained from these calculations can be used to compare different pesticides and pest management programmes to ultimately determine which programme or pesticide is likely to have the lower environmental impact.

HOW TO CITE THIS ARTICLE : Sathish Gowda, C.S., Sheela Rani, S. and Mohan Kumar, T.L. (2012). Environmental impact assessment of pesticide use, using environmental impact quotient. *Asian J. Environ. Sci.,* **7** (1): 107-110.

Key Words :
Environment,
Ecology, Pesticides,
Impact assessment,
Impact quotient

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Environmental impact assessment (EIA) may be defined as a formal process used to predict the environmental consequences of any development project. EIA thus ensures that the potential problems are foreseen and addressed at an early stage in the projects planning and design. Three criteria for identifying significant impacts on the environment were suggested in the world conservation strategy.

- Criterion would include an assessment of the number of people affected, how much of a particular resource would be degraded, eliminated or – depending on what action is taken – conserved (Lois, 2000).
- Urgency – It is important to establish just how quickly a natural system might deteriorate and how much time is available for its stabilization or enhancement (Myrick Freeman, 1999).
- The degree of irreversible damage to communities of plants and animals, to life – support systems, and to soil and water (Dixon *et al.*, 1986).

EXPERIMENTAL METHODOLOGY

Measurement of environmental impacts :

Environmental impact quotient :

This method organizes the pesticide information that is active ingredient, rate of application of pesticides into a usable form to help growers and other IPM practitioners make more environmentally sound pesticide choices. The values obtained from these calculations can be used to compare different pesticides and pest management programmes to ultimately determine which programme or pesticide is likely to have the lower environmental impact .

The EIQ equation :

The formula for determining the EIQ value of individual pesticides is listed below and is the