Pesticides: A growing health hazard in Sri Lanka

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The use of pesticides and other agrochemicals have become a virtually indispensable means of increasing crop productivity in most of our present day agricultural systems. Most pesticides are highly effective in their role of controlling pests even in trace amounts with ability to disrupt or irreversibly change essential metabolic functions of their target organisms as well as of other living organisms thus leading to unintended problems in human or animal populations as well as in the environments in which they live. Most of the present day pesticides still have high persistent times in the environment in spite of the growing tendency to manufacture easily degradable forms. Organo-chlorines and Organo-phosphates are two important groups of pesticides that have been detected in our waterways in significant concentrations through research carried out at Walawe and Nilwala rivers in the southern Sri Lanka. . Both groups of pesticides are highly toxic and are known to be carcinogenic even in very minute levels (in microgram range). River water, being the principal source of drinking in urban areas, could thus pose an imminent threat to the public, unless special precautions are adopted to prevent their wash off into the river systems.(de Silva et al, 1991, de Silva and Gunaratne,2001). A study on pesticide residues in some of our tea samples (de Silva and Thiemann, 1991) has also given positive results indicating the continuous monitoring of food and water essential to minimize health hazards effected through the presence of pesticide residues. A wide range of pesticides are applied profusely in the agricultural sector of Sri Lanka but unfortunately with little attention to rules and regulations that govern the use of pesticides thus threatening our population with imminent health hazards. Since the use of pesticides is rapidly increasing while precautionary measures are less adhered to, the people of Sri Lanka are being increasingly exposed to their adverse effects. Statistics reveal that over 1000 people are poisoned each year from poisonous chemicals in Sri Lanka. The majority of these poisonings are suicidal while some are through occupational exposure. Most occupational poisonings in Sri Lanka seem to affect cultivators and it is among the mass of poor farmers that pesticides take their toll.

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