Title: Regarding issue of pesticide contamination of soft drinks.

MR. SPEAKER: Now we will take up Item No.9. Dr. Anbumani Ramadoss to lay a statement. First, you have to apologize to the House.

THE MINISTER OF HEALTH AND FAMILY WELFARE (DR. ANBUMANI RAMADOSS): Sir, first of all, I apologize to the entire House for not being present in the House when my name was called in the morning. I was just entering the House at that time. I would assure you that it will not happen again.

Sir. with your permission. I beg to lay a statement on the issue of pesticide contamination of soft drinks...(Interruptions)

The Centre for Science and Environment, New Delhi has released a press report on 2nd August, 2006 on their web site, in print media as well as electronic media about the studies carried out by them on the presence of pesticide residues in carbonated beverages. The CSE in their report have stated that during 2006 they have analysed 57 samples of 11 soft drink brands, from 25 different manufacturing plants of Coca-Cola and Pepsi Co., spread over 12 States. These samples were lifted by CSE from September 2005 to March 2006. The CSE study finds pesticide residues in all samples. CSE has found pesticide residues of Organo chlorine pesticides (HCH and its derivatives and Heptachlor) and Organo phosphorous pesticides (Chlopyrifos and Malathion) in the soft drink samples tested and analysed by them.

The Ministry of Health and Family Welfare has taken note of the studies carried out by CSE as well as its discussion in the print and electronic media on 2nd August, 2006. The CSE has made available a copy of the aforesaid study

* Laid on the Table and also placed in Library, See No. LT 4600/2006 entitled "Soft Drinks - Hard Truth II", to the Ministry on 04-08-2006. The report of the CSE is being examined.

I would like to inform the House that the standards for soft drinks or "carbonated water" were formulated under the Prevention of Food Adulteration Rules, 1955 in the year 1955 for the first time and have been subsequently amended form time to time. These standards for soft drinks have provided that the water to be used in making carbonated water should conform to the standards prescribed for packaged drinking water. These standards also provide microbiological requirements, maximum metal contaminants and declaration of added sugars, various food additives including caffeine, artificial sweeteners and food acids.

The CSE had published another report in the year 2003 on pesticide residues in soft drinks. The matter relating to pesticide residue in soft drinks was examined by a Joint Parliamentary committee (JPC) headed by Shri Sharad Pawar. It was brought out by the JPC that soft drinks consisted of the following ingredients:-

- 1. Water comprising 86-92% of total volume,
- 2. Sugar comprising 5 10% of total volume,
- Concentrate
- 4. Ingredients other than Concentrate which include Carbon dioxide, acids such citric acid, phosphoric acid and malic acid.

The JPC in its report at para 2.179 has reported that due to the manufacturing process, pesticide residues are not substantially contributed from sugar. The observations of the JPC are as follows:-

"2.179 Carbonated water manufacturers have already mentioned before JPC that they have fool proof process to select and treat the sugar and this treatment is uniform world-wide to ensure good quality sugar syrup for the products. These companies are already purifying the sugar syrup with Hot Carbon Treatment Process, which is effective in reducing most of the pesticide residues to below detectable level or below 0.1 ppb levels. The Committee feel that sugar, therefore, cannot be the only source of pesticide residues."

Regarding the concentrate used by the manufacturer in these products the manufacturers stated that the quality of concentrate used in these products are the same as used in other countries around the world and in addition to the concentrate, the food additives used in these products also meet all statutory requirements.

The JPC in its recommendation number 2.181 has recommended as follows:-

"……… The committee therefore recommend that standards for carbonated beverages, which are best suited for the Indian conditions need to be fixed in the overall perspective of public health. These standards should also be stringent enough. The reason that the other countries have not fixed such limits, should not dissuade our law makers in attempting to do so, particularly when a vulnerable section of our population who are young and constitute a vast national asset are consuming the soft drinks. In committee's view therefore, it is prudent to seek complete freedom from pesticide residues in sweetened aerated waters. 'Unsafe even if trace' should be the eventual goal."

The Committee in its recommendation 2.176 has recommended as follows:-

"……..The Committee are, therefore, of the considered opinion that the water used in manufacturing the soft drinks should be in conformity with the new norms which have already been notified under notification No. GSR 554 (E) dated 18.7.2003 so that the consumers are not deprived of the best standards."

In compliance with the recommendations of the JPC, the Ministry of Health & Family Welfare has taken the following steps:-

- The standards for soft drinks (carbonated water) have been amended making it mandatory to use water conforming to standards prescribed for Packaged Drinking Water under Prevention of Food Adulteration Rules, 1955 in the manufacture of carbonated water. An amendment of the standards of carbonated water was issued vide notification GSR 451 (E) dated 15.7.2004 which came into force on 12.10.2004. It is reiterated that water constitutes 86-92% of the soft drink (carbonated water).
- 2. The Ministry of Health & Family Welfare has set up a National Level Expert Committee to advise Central Committee for Food Standards on the issue of pesticide residues. The composition of this Committee is:-
- (i) Dr. N.K. Ganguly, Director general, Indian Council of Medical Research (ICMR) Chairman
- (ii) Dr. S.K. Khanna, (Retd.), Industrial Toxicology Research Centre (ITRC), Lucknow
- (iii) Dr. N.P. Agnihotri, (Retd.), Indian Agricultural Research Institute (IARI), New Delhi
- (iv) Dr. G. Thyagrajan, Ex-Director, Indian Institute of Chemical Technology, Hyderabad

The terms of reference of this committee are as follows:-

- (i) To guide the Pesticide Residue Sub-Committee in fixation of MRLs of pesticides in carbonated beverages, fruits and vegetable juices and other finished products;
- (ii) To guide the Pesticide Residue Sub-Committee on technical aspects of fixing MRLs including methodolgy, toxicity, processing factor, method of analysis, health risks that may be considered for risk analysis, risk management and risk communication as per Codex Working Principles;
- (iii) To guide on monitoring of pesticides in carbonated beverages and other food commodities;
- (iv) To guide on any other matter on which Pesticide Residues Sub-Committee, CCFS, Department of Health may require technical clarification/guidance.
- 3. The Ministry of Health & Family Welfare has also requested Ministry of Agriculture to provide the requisite residue data in respect of all pesticides registered for use on sugarcane, to enable the Ministry of Health & Family Welfare to notify Maximum Residue Limits (MRLs) in respect of these pesticides. In order to reduce the time taken to fix MRLs my Ministry has streamlined the process of fixation of MRLs.
- 3. The Ministry of Health & Family Welfare commissioned a pilot study of sugar samples in September 2005, in order to

establish the methodology of sampling and testing for the same. The report of this study has been received. The pilot study of 200 sugar samples collected from retail and wholesale outlets as well as sugar factories from all regions of the country was entrusted to Bidhan Chandra Krishi Vishwa Vidyalaya, (BCKVV) Mohanpur, Kolkata which is part of the All India Coordinated Project on Pesticides. This pilot study broadly found absence of pesticide residues in the samples collected and tested. The data generated by BCKVV is being reviewed by a peer group of 2-3 Pesticides Residues Chemists from Government institutions/universities, which have been designated by the National Level Expert Committee. The peer review process is expected to be completed shortly. Based on the findings it was decided by the Expert Committee to undertake a comprehensive multi-centre study using LC-MS-MS which is the most sophisticated equipment available so as to detect even the slightest traces of pesticides and conducted to pre-empt the remotest possibility of even traces of pesticides coming through sugar. The study will be carried out by Bidhan Chandra Krishi Vishwa Vidyalaya, National Institute of Occupational Health, and National Institute of Nutrition. The National Institute of Occupational Health, Ahmedabad and National Institute of Nutrition, Hyderabad have since taken necessary steps to augment their facilities and have installed LC-MS-MS.

The Ministry of Health & Family Welfare views the issue of contamination of soft drinks (carbonated water) with utmost seriousness and is committed to protecting the health of the consumers and would take all necessary steps to ensure this [r9].