Glycophosate ban may exacerbate chronic kidney disease in Rajarata

Doses in diets, and has established that cadmium doses in some diets in Rajarata are well above the WHO safety levels. He has submitted his findings to the government with recommendations.

Presenting the hypothesis in an international scientific journal, Dr. Jayasumana (MBBS) claimed that glycophosate has the ability to bring to active mode of heavy metals that would have been otherwise inactive, hence less available for harmful reactions. He also noted that although glycophosphate alone does not cause an epidemic of chronic kidney disease, it seems to have acquired the ability to destroy the renal tissues of thousands of farmers when it forms complexes with a localized geo environmental factor (hardness) and nephrotoxic metals. (http://www.biomedcentral.com/1471-2369/15/124).

Never mind an epidemic, there is no evidence to suggest that the causal kidney failure is at all. Further data exhibits the properties both in soil and biological environments. However, as claimed by Dr. Jayasumana the cadmium induced nephropathy cannot be associated with only glycophosphate but other nephrotoxic agents such as arsenic and cadmium.

Thus these heavy metals (cadmium, arsenic and lead), in fertilizer are quite capable of causing harm to the body in multiple ways all by themselves. No third party assistance is required to do their worst. Cadmium is a well-established element that causes kidney failure, as opposed to arsenic. Isn’t it a coincidence that the proffer of arsenic as the agent for kidney failure too is Dr. Jayasumana who made the claim following studying only the levels of arsenic in urine of CKD patients and a control group, and not cadmium or other heavy metals which are also present. This is hardly the basis for credible scientific research makes one wonder the wisdom in this ban.

Given the rampant escalation of the number getting CKD presently about 400,000 (four hundred thousand) and deaths in the absence of a clearer understanding of the cause(s) of CKD, although any measure deemed to address the issue is welcome, the glycophosphate ban is somewhat incongruous. Not only does it fail to address the core issue of reducing the environmental and soil burdens of nephrotoxic metals which are almost entirely reinforced

that the agricultural workers in the CKDu endemic areas are exposed to arsenic, the exact source and mode of exposure is controversial. If only, he were to calculate the amount that enters the body through the diet, much to his shock, he will realize that the answer has always been at his fingertips.

Furthermore, his HYPOTHESIS has a major weakness, since it rests on incorrect foundations. In that Dr. Jayasumana claims that, “it [glycophosphate] seems to have acquired the ability to destroy the renal tissues...”. Chemicals and elements DO NOT acquire new will, but only existing living organisms such as plants or mammals that acquire resistance or sensitivity to an agent. For example, drug resistance has been found to be acquired after having been effectively developed resistance with time.

Beside his hypothesis being weak and flawed, what is incongruous in this approach is, why a season's change is not known to cause CKD be banned on the basis of a hypothesis, when the necessity is to prevent well established nephrotoxic agents such as arsenic and cadmium, and general toxic agents arsenic and lead which the proposed claimants of the hypothesis, and essential for CKD, entering the body. Since the presence of these metals in the environment, water, food and the body are almost entirely due to phosphate fertiliser, in an order of priority, it is the fertiliser quality that must be first controlled.

Arsenic and phosphate fertiliser, but more poignantly under those circumstances it has the potential to exacerbate and protract the condition.

http://www.biomedcentral.com/1471-2369/14/180 after a substantial study based on their findings indicated cadmium as the primary cause for kidney failure in Rajarata. This is in contrast to Dr. Jayasumana’s previous claim that arsenic is the element responsible for kidney failure in Rajarata. This is in contrast to Dr. Jayasumana’s previous claim that arsenic is the element responsible for kidney failure in Rajarata, and subsequently in combination with hard water. Dr. Jayasumana most robustly but not necessarily scientifically asserted the weaknesses in the GOSL/WHO report for failing to consider his theory that arsenic is the cause of CKD.

http://www.biomedcentral.com/1471-2369/15/124)

Science, competitiveness, assessment of scientific observations are healthy practices that enhances research, but observations made by Jayasumana and colleagues are something else. Notwithstanding merits or demerits of his claims, and an assertion on the GOSL/WHO report and the authors, must create in the minds of the readers a justifiable anxiety about the quality and the capability of those in charge of prevention of CKD, and in the minds of our scientists who are somewhat subdued, “what a mess we are in.

It must be acknowledged that, agricultural industry globally as well as nationally are intertwined in socio-political-economics and business. Presumably this is what Dr. Jayasumana is suggesting with regards to GOSL/WHO report. Also this introduces an inexplicable ‘blame game’ into the equation either to absolve oneself from blame, or to benefit from economic and business considerations. Therefore, whether it is phosphate fertiliser or other agrochemicals such as weedicides or pesticides, consumers need to be aware of what is most relevant in the socio-political-economic domain. Hence, the danger is that unless there is a similar ban or severe restrictions on fertiliser quality to result in reduced heavy metals from getting into the body, the contamination of the environment and the food chain may even get escalated as a result of phosphate fertiliser suppliers and users carrying on with their ways unabated.

One wonders when the glycophosphate ban would have happened if not for the fact that, the proposer of multiple and sequential hypotheses, the arsenic and hard water combination as the cause

* Arsenic, hard water and glycophosphate combination is the cause

and the director responsible for prevention of CKD is one and the same person.

Dr. Jayasumana is a Biomedical Scientist at the National Institute for Health Research, Imperial College, London)