

Date : 03.10.2020

Joint Secretary (Plant Protection),
Ministry of Agriculture and Farmers Welfare,
Department of Agriculture, Cooperation and Farmers Welfare,
Krishi Bhawan, New Delhi-110 001.

Sub.: Comment/Suggestions on the Draft Restriction on use of Glyphosate Order, 2020.

Ref. : Gazette Notification, No. 1998, dated 7th July 2020; Notification No. S.O. 2268(E)
Draft Restriction on use of Glyphosate Order, 2020 dated 6th July, 2020.

PAN India would like to bring to your notice that glyphosate in its approved use itself is a restricted weedicide in India, that it is approved for weed control only in tea plantations and non crop area accompanying the tea plantation. This fact has been re iterated in an order issued by the Agriculture Department of West Bengal in 2019 quoting the Secretary of Department of Agriculture, Cooperation and Farmers Welfare, Government of India, states that glyphosate formulations are 'registered to be used in Tea Plantation Crop and non plantation area accompanying the Tea crop and any use beyond this is illegal and in violation of the insecticides Act, 1968 and Rules, 1971'. Therefore, all other uses of glyphosate-based herbicides in India are illegal.

An Indian Council of Agricultural Research's report¹ reveals that two formulations of glyphosate, 41% SL and 71% SG are widely used in at least 22 Indian states for several food crops (cereals, pulses, vegetables, fruits, and spices) and non-food crops, which are not the uses approved by the Central Insecticides Board and Registration Committee.

Glyphosate by itself is still toxic, causing a wider range of effects on humans and the environment. Because of the inert ingredients, exposure to a glyphosate-based herbicide entails exposure to a wide range of other chemicals as well as the glyphosate, about which little information is available and the full health effects of which have not been established. Glyphosate formulations may contain a number of so-called 'inert' ingredients, most of which are not publicly known. It has been reported that many of the inert ingredients and contaminants in glyphosate results in increased toxicity to non-target organisms.

¹ Choudhury PP, Singh R, Ghosh D and Sharma AR. 2016. Herbicide Use in Indian Agriculture. ICAR - Directorate of Weed Research, Jabalpur, Madhya Pradesh, 110 p.

The Safety and Hazards data provided in the PubChem database based on Globally Harmonised System Hazard Statements state that glyphosate causes serious eye damage (danger serious eye damage/eye irritation), may cause respiratory irritation (warning: specific target organ toxicity, single exposure; respiratory tract irritation), may cause drowsiness or dizziness (warning: specific target organ toxicity, single exposure; narcotic effects), very toxic to aquatic life (warning: hazardous to the aquatic environment, acute hazard), and very toxic to aquatic life with long-lasting effects (warning: hazardous to the aquatic environment, long-term hazard)

According to the International Chemical Safety Card, glyphosate exposure can cause cough, redness in skin, redness and pain in eyes, burning sensation in throat, and chest.

A PAN International monograph on glyphosate shows numerous research studies pointing to chronic toxic effects of glyphosate other than cancer, such as reproductive and developmental toxicity, neurotoxicity and immunotoxicity. Signs and symptoms of exposure include irritation, swelling, tingling, itching or burning of the skin, photo-contact dermatitis, recurrent eczema, blisters, rashes; numbness in the face, swelling of the eye and lid, face, and joints; conjunctivitis, painful eyes, corneal injury, burning eyes, blurred vision, weeping eyes; oral and nasal discomfort, unpleasant taste, tingling and irritation of throat, sore throat; difficulty breathing, cough, coughing of blood, inflammation of lungs; nausea, vomiting, headache, fever, diarrhoea, weakness; rapid heartbeat, palpitations, raised blood pressure, dizziness, chest pains. Numerous occupational exposures and self poisoning with death have been reported for glyphosate.

The topic of association between glyphosate and cancer became subject-burning discussion globally after the International Agency for Research on Cancer classified it as probably carcinogenic to humans in 2015. Though the EU's comprehensive scientific assessment presents a different view and says 'glyphosate is unlikely to pose a carcinogenic hazard to humans', the European Commission brought in restrictions for its use in 2016. While there are diverse views on the carcinogenic potential of glyphosate from various global regulatory and health institutions, a 2019 report titled 'Toxicological Profile for Glyphosate' from the Agency for Toxic Substance and Disease Registry (ATSDR) of the United States Department of Health and Human Services is in view of supporting the findings of IARC that there are links between glyphosate and cancer.

The ASTDR, 2019 report also shows that gastrointestinal effect, developmental effects,

endocrine/hormonal effects, body eight effects, renal effects, hepatic effects, haematological effects, and reproductive effects are the various toxicity effects of glyphosate identified in animal studies.

According to the World Health Organisation classification of pesticides based on acute toxicity, glyphosate belongs to Class-III Slightly Hazardous category. However, according to Pesticide Action Network International's list of Highly Hazardous Pesticides, glyphosate is a highly hazardous pesticide, considering its health and environmental effects.

Glyphosate is a wide spread environmental pollutant in both aquatic and terrestrial ecosystems. It pollutes water and soil and results in degraded soil quality. Glyphosate is toxic to soil microorganisms. Decreased earthworm and microbial population, as well as reduced soil dehydrogenase activity, are reported in scientific literature. PAN international fact sheet also reported weed resistance to glyphosate was reported in 35 species of weeds from 27 countries.

Glyphosate has been banned or severely restricted in more than 35 countries²; some of them are Srilanka, Netherlands, France, Colombia, Canada, Israel, and Argentina.

Allowing continued use of glyphosate in India would contribute to wide spread use of illegal herbicide tolerant crops, which would endanger the agroecological nature of Indian farms. As illegal HT cotton has invaded many of the cottonseed markets and supply chains in India, farmers themselves may not be able to identify HT and non-HT varieties, and therefore, application of glyphosate on non-HT cotton leading to crop destruction could be a disaster. As glyphosate is not approved for cotton in India and considering its huge use and anticipating public health and environmental issues, some states such as Maharashtra, Telangana, Punjab, and Andhra Pradesh tried to temporarily restrict its usage but ended up with little effectiveness. The State of Kerala brought stringent restrictions and/or cancellation of licenses for glyphosate based herbicides in their jurisdiction considering indiscriminate use as well as health and environmental concerns.

The regulation allowing use of glyphosate through Pest Control Operators as put for the by the Draft Restriction on use of Glyphosate Order, 2020, would be disastrous as the presence of such pest control operators is almost non-existent in agriculture sector in

² <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/where-is-glyphosate-banned/>

India. Moreover, as any such regulations would actually contribute to black marketing and illegal trade of glyphosate-based herbicides in India, which will in turn endanger health and environmental well being for Indian citizens as well as India's rich biodiversity.

Hence, PAN India urge the Ministry of Agriculture and Farmers Welfare to completely ban glyphosate (import, production, sales and use) in India, considering its health and environmental effects and wide spread illegal use.

Further, we urge the Ministry of Agriculture and Farmers Welfare to initiate legal/prosecution actions against the responsible institution, agencies and industry for illegally recommending glyphosate for weed control in crops/farm violating the national approved use.

Additionally, PAN India recommends the Ministry of Agriculture and Farmers Welfare to put in efforts and facilitate encouraging the manufacturers of glyphosate based weedicides to come up with non toxic weed management products that help boost sustainable, non-chemical farming methods.

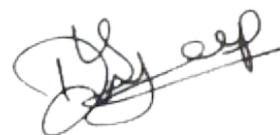
Thank you,



C. Jayakumar
Director



Dr. Narasimha Reddy
Honorary Director



Dileep Kumar A. D.
Assistant Director

About PAN India

PAN India is a public interest, non profit, research and advocacy organisation working to eliminate human and environmental harm caused by pesticides and uphold agroecology. PAN India is keen to help communities and governments to reduce dependence on toxic chemicals for pest control in agriculture, household as well as public health and to increase the use of sustainable alternatives. PAN India is committed to safe farming, safe living and safe working place. PAN India is working to make India a world leader in Agroecology by empowering farming communities to keep away from toxic pesticides and agrochemicals, and to take up non chemical methods of farming practices that champion traditional knowledge, biodiversity, and farmer participated research in attaining food sovereignty.