1. Regarding the approval of pesticides in Argentina: Does the country have any particular national legislation on pesticide evaluation and approval (as in the EU)? If yes, is this system of legislation and approval regulated by a national authority? If so, what is the name and contact information of that authority?

The **National Agrifood Health and Quality Service** (Servicio Nacional de Sanidad y Calidad Agroalimentaria –SENASA-)[1] constitutes the core of the national regulatory system for phytosanitary matters. This is the body responsible for ensuring that only phytosanitary products, whose risks have been properly assessed, are marketed for expressly permitted uses.

The agency was created at the end of the 19th century to guarantee the safety of the country's exports and, after successive institutional adjustments (such as the merger of the animal health agency with that of plant health in the 1990s), it is currently regulated by Law 27.233 and multiple resolutions that organize their work.

For a phytosanitary product to be marketed or applied in Argentina, either experimentally or for commercial purposes, **it must be registered in the National Register of Plant Therapeutics,** in accordance with the provisions of Decree Nº 3489/58 and Decree Nº 5769/59, in the terms of the Manual of Procedures, Criteria and Scope for the Registration of Phytosanitary Products in the Argentine Republic, approved by Resolution SAGPYA Nº 350/99. The aforementioned Resolution adopts for Argentina the **Fifth Edition of the MANUAL ON THE DEVELOPMENT AND USE OF FAO SPECIFICATIONS FOR PRODUCTS INTENDED FOR THE PROTECTION OF PLANTS.** This is a procedure for evaluating sufficient scientific data to demonstrate that the product is effective for its intended purpose and does not entail undue risks to health and the environment. The information related to the physical, chemical, toxicological, ecotoxicological and waste properties must come from tests or studies carried out on the phytosanitary products to be registered or their equivalents, according to **internationally recognized protocols**, among which are the **OECD Guidelines** on acute oral toxicity, acute dermal toxicity, inhalation classification, dermal irritation, eye irritation and skin sensitization, for product analysis.

That phytosanitary product presented by a registrant before SENASA, which meets all the requirements established by the aforementioned Resolution Nº 350/99, obtains a **Certificate of Use and Marketing** that enables the product to be used for all those uses for which it was registered, and the registrant to market it throughout the National Territory.

The legislation and approval system is regulated by SENASA.

The contact authority is the **Directorate of Agrochemical and Biological** under the National Directorate of Plant Protection: **dirabio@senasa.gob.ar**. The contact details of SENASA are: Av. Paseo Colón No. 367 (ACD1063), Autonomous City of Buenos Aires, Argentina; Tel:

(+54 1) 4121-5000 / 0800-999-2386.

2. Is Argentina currently in the process of prohibiting and eliminating the use of the pesticides paraquat, atrazine and glyphosate?

[1] https://www.argentina.gob.ar/senasa)

In Argentina, authorized phytosanitary products with their corresponding maximum residue limits (MRLs) are in accordance with **current international standards** (Codex Alimentarius) and are based on sound scientific evidence after **complete risk assessments**.

At the moment, Argentina is not considering banning the use of pesticides such as paraquat, atrazine and glyphosate, since the approvals of these substances are based on scientific evidence about their safety under responsible use.

In the case of **glyphosate**, whose renovation has been approved by the European Union until December 2022, it is a safe and effective product when used correctly by farmers. This is endorsed by Codex Alimentarius, the European Food Safety Agency (EFSA), the European Chemicals Agency (ECHA), the US Environmental Protection Agency (EPA), the National Council for Scientific and Technical Research (CONICET) and the joint FAO / WHO meeting, as well as other national agencies around the world.

As for **atrazine**, it should be clarified that Argentina does not authorize its use for the cultivation of soybeans.

As for **paraquat,** its use is authorized in soybean cultivation, in line with Codex.

3. Does Argentina have a national legislation for the protection of workers regarding the use of pesticides?

The country has **safety and hygiene regulations in the agricultural sector**. The regulations in force in 2019 are:

- Decree 617/1997: Hygiene and Safety Regulations for Agricultural Activity. (B.O. 11/07/1997) of Law 19.587 on Occupational Health and Safety;
- Law 25.739 approving the Safety and Health in Agriculture Convention, 2001 –num. 184–. (B.O. 06/24/2003) Ratified June 26, 2006;
- Law 26.727: Agricultural Labor Regime. Title VII: Safety and risks at work (B.O. 11/28/2011);
- Resolution 11/2011 of the National Agricultural Labor Commission (CNTA): General Working Conditions for temporary, cyclic and seasonal agricultural workers. (B.O. 04/11/2011);
- Resolution 46/2011 CNTA: General Working Conditions for temporary agricultural workers who work in seed activity. (B.O. 08/16/2011)

The **National Agricultural Labor Commission** (Comisión Nacional de Trabajo Agrario CNTA) is empowered to establish the hygiene and safety conditions that must be met by workplaces, machinery, tools and other work items. This Commission is obliged to observe the pauses and limitations to the duration of the work, and adopt the necessary measures that, according to the type of work, experience and technique, are necessary to protect the psycho-physical integrity and dignity of the workers, and must prevent accidents and damages to health that are a consequence of work, are related to work activity or occur during work, by eliminating, minimizing or controlling the risks inherent to the work environment in agriculture.

The regulations establish the obligation for employers to have occupational health and safety and hygiene services, in the cases and with the modalities determined by the Superintendence of Occupational Risks (Superintendencia de Riesgos del Trabajo – SRT-), and to provide the worker with personal protection elements when its use is necessary for operational reasons of the work in accordance with the provisions of CNTA. In addition to cases in which the worker must perform dangerous tasks to his health, the employer must instruct him on the appropriate forms of work, and in those tasks that involve the performance of processes or manipulation of toxic, irritating or aggressive substances in any of its ways, the cleaning of contaminated clothing will be the responsibility of the employer. As for the packages that contain or have contained chemical or biological substances, they should be stored in specially marked places. The treatment of hazardous waste must be carried out in accordance with current regulations and resolutions issued by the CNTA in consultation with the competent jurisdictional bodies.

4. What is the opinion of the Argentine government about the use of pesticides in soy production, and what is your point of view about the possible connection between soy production and deforestation?

(a) Regarding the use of pesticides in soybean production:

Argentine has been incorporating new technologies in order to develop a more sustainable agriculture. Phytosanitary products are one of the technologies that have been adopted to prevent and control pests or diseases more efficiently and with lower toxicity levels.

Responsible and safe management of phytosanitary products requires rules and good practices in their use so as not to affect human health or the environment, and their management must be sensitive to the concerns of society. The danger of these substances varies according to their degree of toxicity and formulation, and the risk to human health and the environment associated with their use depends on the doses used, the mixtures, the climatic conditions at the time of application, the type and condition of the applicator equipment, suitability of the operator of the application equipment and the form and degree of exposure. All these aspects are contemplated in the regulation and in the development of standards of good agricultural practices.

The use of phytosanitary products in the country shows three significant trends. First, the increase in the total volume used (expressed in total liters / kg) almost tripled since the early 1990s: the increase in the area sown (increased from 16.4 to 36.6 million hectares between 1990 and 2017) and the widespread adoption of no-till farming that replaced the mechanical control of weeds and some pests. Second, approximately **80% of the phytosanitary volume used today in agricultural production corresponds to the lowest toxicological classification (green band).** The risk of contamination of the set of phytosanitary products used has dropped sharply with respect to the 80s. Third, the increase in the **adoption of precision farming** has meant incorporating technology that by definition optimizes the use of inputs (whether they are phytosanitary, fertilizers, seeds, etc.), which results in the most careful and efficient use of each of them. Additionally, **the selective application of phytosanitary products, specifically used for weed control during fallowing, allows the amount of**

phytosanitary products used per hectare to be reduced between fifty (50) and seventy (70) percent (%), since application is limited to specific sites in the area to be treated.

The **promotion of good agricultural practices, including the correct use and management of phytosanitary products, is a long-standing national policy.** Among the national policies and actions to promote and control the use of phytosanitary products, it is worth mentioning:

- **Joint Resolution Nº 1/2018** of the Ministries of Environment and Sustainable Development and of Agroindustry, which establishes that, within the scope of their respective competences, the activities of application of phytosanitary products for agriculture in agricultural activity in general, and especially in **buffer zones**, they must be carried out in accordance with good agricultural practices and subject to adequate control and monitoring systems. It establishes a **working group** that includes the Ministry of Health and the Ministry of Science and Technology to improve the adoption of good practices and more effective monitoring and control. This working group delivered to the four Ministries a **document with 12 principles and 23 recommendations to improve public policies regarding phytosanitary applications**. The document has been submitted for public consultation and is a reference for national, provincial and municipal authorities with competence in the subject.
- The **Health Entities**, public-private figure created by **Law 27.233** as a mechanism which complements SENASA, through which, alliances of civil associations, academic or professional entities and public bodies are empowered to strengthen the implementation of the law, programs and research. The law imposes obligations on producers as the main responsible for the applications.
- The incorporation of the **obligation of good practices in the production of fresh fruits and vegetables** in the Argentine Food Code, a process that is expected to enter into force from 2020 on fruits and 2021 on vegetables.
- The Undersecretariat of Agriculture of the Ministry of Agroindustry of the Nation, together with numerous organizations and municipalities, conducts demonstration and **training courses**, aimed at guaranteeing a rational and responsible use of phytosanitary products and promoting good practices in the use and application of phytosanitary products, with emphasis on the techniques and equipment used.2
- The **Network of Good Agricultural Practices** (Red de Buenas Prácticas Agropecuarias –Red BPA-)[3], a public-private sphere for the exchange of information, inter-institutional dialogue and cooperation on good practices. The Network is made up of more than 90 organizations from the private and public sectors. It represents almost all sectors linked to agricultural production, and it has generated guidelines and technical recommendations for producers and authorities.
- The voluntary standards of the Argentine Institute for Standardization and Certification, **IRAM, Nº 14.110 on Good Agricultural Practices and Nº 14.130 on Good Practices for Agricultural Work**.
- **Law 27.279 of Minimum Environmental Protection Budgets for the Management of Empty Phytosanitary Containers**, enacted in October 2016, regulates the destination of these containers in the national territory.

[2] http://www.agroindustria.gob.ar/sitio/areas/fitosanitarios/buenas_practicas/
[3] http://www.redbpa.org.ar/

- In addition, according to national regulations, **Argentina participates in the preparation of the International Code of Conduct for Pesticide Management of the Food and Agriculture Organization of the United Nations (FAO).**

The rapid technological innovation in agriculture requires a constantly evolving information base, and the ability to turn knowledge into techniques that improve the environmental performance of the activity. The **National Institute of Agricultural Technology** (INTA) is at the center of public research, development and innovation efforts in this area. INTA addresses the issue of applications of phytosanitary products within the framework of a multiplicity of programs, projects and initiatives, such as the National Agribusiness and Value Added, Fruit, Plant Protection and Natural Resources, Environmental Management and Ecoregions programs.

(b) Regarding the point of view on the possible connection between soybean production and deforestation:

Argentina recognizes deforestation as an important challenge and is acting accordingly. The **deforestation rate reached its peak in 2008, when the law of conservation of native forests comes into force, after which it falls sharply.** The trend is positive but we are not satisfied yet, and ending deforestation is state policy. Currently, the change in land use represents 13% of Argentina's total greenhouse gas emissions, and the country has established significant reduction targets in this sector, including avoided deforestation and restoration of degraded forests. **Law 26.331 on conservation and sustainable use of native forests** establishes, among other regulations, their categorization into three types: conservation (19% of native forests), sustainable use (60%) and forests that can be converted (21 %).

In this context, **establishing a direct connection between a particular product and deforestation is not useful for public policies and lacks methodological rigor**. Forest pressures are multi-causal, the expansion of the agricultural frontier, minor and major livestock, urbanization and infrastructure, timber extraction and forest fires. Each of these factors has a different incidence at different times. Additionally, **more than 80% of the volume of soybean production comes from areas that were never forests or that underwent conversions many years ago**, in addition to the fact that soybeans are produced in rotation with other crops. Compliance with the law and the implementation of best agricultural practices are the main pillars of national policy in this area.

5. Does Argentina have a position on the research reflected in the article, which argues that Argentina uses "unlimited quantities" of pesticides and the respective consequences for the population exposed to them?

(a) Regarding the "unlimited quantities" of pesticides: As mentioned above, the increasing level of adoption of **technology linked to precision agriculture and environments implies the optimization of the use of resources** for economic reasons and good practices. The wastefulness has no place in that context and phytosanitary applications are consistent with the recommendations established in the labels or tags that must be attached to the packaging of these products. The same goes for the increasing diffusion of selective application, aimed at reducing the volume of phytosanitary products applied per hectare. In

summary, in the context of Argentine agriculture **there is no place for the use of "unlimited quantities"** of any input, including phytosanitary products.

(b) Regarding the "consequences for the population": **Argentina bases its policies on the best available scientific knowledge, information that does not endorse the assertions of the article, and has institutions to that effect**:

- Agricultural products and by-products that are imported or produced locally for internal consumption must comply with the **maximum residue limits** of agrochemicals established in Resolution SENASA Nº 934/2010, which in its Annex I establishes for a long list of active ingredients the residue in terms of mg / kg of product, and establishes a default value of 0.01 mg / kg corresponding to the detection limit of the analysis method for the active ingredients not listed.
- For chemical compounds that are already prohibited, but because of their persistence they can still be found in the products, the country adopts the values established by the Codex Alimentarius as maximum residue limits.
- SENASA has a **system of laboratories specialized in analytical controls** of animal and plant health, food safety and the quality of agricultural products, by-products and supplies. The system comprises 18 SENASA laboratories and a national network of more than **400 laboratories** throughout the country in which the necessary studies are carried out to detect contaminating or residual substances in products, by-products and derivatives of animal and / or plant origin, to ensure food safety.
- The country has a **National Health Surveillance System**[4], a network of timely notification and communication between the different actors involved in the surveillance, prevention and control of risks and damages that allows guiding the actions of prevention and control as well as serving the determination of priorities in health.
- The Public Health area also has **national registries of cancer and congenital diseases**: the Argentine Oncopediatric Registry (ROHA)[5], the Institutional Registry of Tumors of Argentina (RITA)[6] y the National Registry of Congenital Abnormalities (RENAC AC).[7] The Service periodically publishes an integrated epidemiological surveillance bulletin.
- To this must be added efforts made at the **provincial level**, among which the report Cancer: Incidence and Mortality in Córdoba. 2004-2013 of the Ministry of Health of the Province of Córdoba.[8]
- Additionally, the **National Council for Scientific and Technical Research** (CONICET) carries out scientific evaluations and research at the request of the authorities, for example on phytosanitary drift and exposure of the population, or on the state of knowledge about glyphosate risks. It has a Food Security Network, a mechanism for scientific consultation for

[4] http://www.msal.gob.ar/index.php/home/funciones/area-de-vigilancia
[5] http://www.msal.gob.ar/images/stories/bes/graficos/0000001365cnt-registro-oncopediatrico-argentino-digital.pdf
[6] https://www.argentina.gob.ar/salud/instituto-nacional-del-cancer/institucional/rita
http://www.msal.gob.ar/images/stories/bes/graficos/0000000955cnt-2017-04-21-presentacion-avances-y-resultador-periodo-2012-15.pdf
[7] http://www.anlis.gov.ar/cenagem/wp-content/uploads/2018/12/1-REPORTE-RENAC-2018-formato-web.pdf
[8] Available at: http://www.cba.gov.ar/wp-content/4p96humuzp/2018/02/PUBLICACION-REGISTRO-DE-TUMORES-2004-2013.pdf.

decision-making, in which framework consultations are carried out related to the impact of phytosanitary products[9]

[9] https://rsa.conicet.gov.ar/