

# International Conventions and Development of the Legislative Base of Chemical Safety for the Population in Georgia

*Alexander Mindorashvili*

Inspectorate for the State Supervision of Sanitary-Hygienic Norms and Rules  
Ministry of Labor, Health and Social Affairs, Tbilisi, Georgia

*Address for Correspondence:*  
23, A. Kazbegi, Tbilisi, Georgia,  
Tel: +995 32 393205,  
E-mail: [Ann-gfa@gol.ge](mailto:Ann-gfa@gol.ge)

## **Abstract**

Chemical safety of the population on an up to date stage is of particular significance. Fulfillment of International Conventions and development of corresponding legal base related to the indicated problems is one of the basis for creating the safe environment for the population of each country as well as the developing countries.

**Keywords:** *international conventions, health protection reform, national policy, legislative base, chemical safety for the population, pesticides*

## **Introduction**

**C**reation and development of infrastructure for chemical and ecological safety of population is a prioritized direction for the fields of health and environment protection [3,12,15,29]. The status of legal base development for the chemical safety of Georgian population was not studied on an up to date level on the background of international conventions. The inventory for identification of quantity of useless pesticides and dangerous industrial chemical substances as well as the possibilities for reducing their harm was not conducted from 1990 to 2000.

## **Material and Methods**

In 1993-2002 the first analysis of laws adopted by the Georgian parliament and by laws issued by the executive branch of government in the fields of health and environment protection was carried out. This was accomplished with the aim of studying the current status of legal base in the sphere of chemical and ecological safety for Georgian population. In 65 regions of the country the inventory conducted in 2000-2002 identified the number of useless pesticides and dangerous industrial chemical substances as well as the possibilities of reducing their harm.

## Results

Since 1992 Georgia as well as other countries of former Soviet Union experienced deep social-economic changes including the destruction of health protection system and other fields of economy during that period.

The emerged situation effected the quality indicators of environmental objects and health protection, such as: the average life rate of the population and natural multiplication, birth and death rates including the indicators of health conditions of mothers and children [11,26,27,28].

During the aforementioned period the opportunity of conducting the monitoring of environment quality conditions and the funds for financing the scientific-research work in separate directions for the establishment of safe environment for the health of human beings did not exist.

The background became the basis for the need in radical changes to be made with the support of international institutes. The reforms on regulating health and environment protection fields as well as the active formation of corresponding legislative base have initiated [10,23]. As a result, in 1994 and following years the Georgian Parliament passed numerous legislative acts on health and environment protection fields. It is noteworthy that the laws on "Health Protection" and "Environment Protection" became the basic documents for regulation of these fields and enforcement of the legislative role of state. As an outcome, the priorities have been defined and the preconditions for further gradual development of legislation have been formed.

If the legal acts on creation of the safe environment for the human health are, to a certain extent, considered reviewed or reflected from the views of recommendations, requirements, program documents and conventions of international organizations, it will be possible to outline the following groups of laws between them:

1. Group of laws forming the general principles for the security of safe environment for the health of human beings.
2. Group of laws reflecting the priorities for the security of the chemical safety of the population, state policy for the support towards the elaboration of standards, the criteria and norms to secure the necessary quality for each concrete factor of environment.
3. Group of laws forming the requirements for performing unified state policy in the field of food security.

4. Group of laws comprising the issues on establishment of safe environment for human beings in recreational zones.

Considering the significance of chemical safety of the population [3,6,12,19], Georgia joined the international register of the potentially toxic-chemical substances [6].

According to the final act of Basel Convention [1] the law on "Transit and Import of Reminders on the Territory of Georgia" was elaborated and adopted by the Parliament in 1995. This law afterwards was amended and the new edition was passed in 1997 [10]. It is noteworthy to state that two years later according to the May 4, 1999 order №232 of the President of Georgia on "Integration with the Basel Convention of 1989 and Trans-boundary Transportation of dangerous remainders and their emplacement", Georgia joined the this Convention.

Considering the fact that the development of mechanism for chemical safety is necessary for health of human beings and on the basis of UNITAR and IOMC proposals, the President of Georgia issued the order №82 about "The National Program on Infrastructure of the Management of Chemical Substances" on march 17, 1998. Consequently, the state committee for elaboration of national program on infrastructure of the management of chemical substances was formed. According to the September 29, 1998 order №372/0 of the Ministry of Health about "The Establishment of National Coordination Council for the Management of Chemical Substances" the national coordination council was set up. The assignment of the council was to prepare the national profile for the management of chemical substances.

On the basis of foregoing, UNITAR, UNEP, WHO and with the financial support of eleventh general director of EC environment protection and nuclear security the "First National Version of Infrastructure Assessment for the Management of Chemical Substances" was elaborated [13]. "The First Version of Final Resume for the Assessment of National Profile for Infrastructure Management of Chemical Substances" was prepared [14]. "The Guideline materials for Assessment of National Profile for Infrastructure Management of Chemical Substances" was elaborated and issued in 1998 [18].

Integration of Georgia in the international processes of global ecological safety and sustainable development, the practical implementation of systematic reforms in the fields of health and environment protection as well as the definition of priorities for the social orientation of health protection and security of safe environment for the health of human beings, became the basis for the preparation of the following significant documents: "National Policy of Health Protection in Georgia" [24], "Strategic Plan for the Development of Health Protection

in Georgia 2000-2009" [21], and "National Program of Environment Protection of Georgia" [9].

The aforementioned documents reflect the issues on the elaboration of national program for hygiene of environment, sanitary-hygienic norms and their harmonization with the EC requirements, making inventory, specification of the quantity of unused industrial and agricultural remainders of chemical substances and the establishment of relevant cadastre, investigation and assessment of the risk of their influence on the health of population and environment, etc.

The Ministry of Labor, Health and Social Securities elaborated "The National Plan for the Actions of Environment Hygiene" in cooperation with other ministries and institutions [25]. It is noteworthy that this plan is based on the global strategy of WHO (Geneva, 1993), the recommendations of the consulting discussion on elaboration of national plans about actions for environment hygiene (Helsinki, 1994; Sophia, 1995) and the review of 1990 European experience prepared by European bureau of WHO (Copenhagen, 1995) and others.

During 1996-1997 the activities of draft law preparation on "Dangerous Chemical Substances" and "Pesticides and Agro-chemicals" were performed. During the preparation of these draft laws, the recommendations and the basic provisions of the following guideline documents of UN [4,5,17,19,20].

After the tragic events of September 11, 2001 in US and in accordance with the resolution №1337 of UN Security Council (2001) the "Georgian State unified program against the international terrorism" was elaborated in accordance with the assignment of the Security Council of Georgia (14.12.20001) The minister of Labor, Health and Social Affairs issued the order on "The Participation of the Ministry of Labor, Health and Social Affairs in the implementation of Unified Program against the International Terrorism", which also defines the issues of chemical safety for population. The activities for the establishment of registry for the dangerous chemical substances are already undertaken.

As for the Persistent Organic Pollutants, on the basis of data from 1976 the substances: DDT, Aldrin, Dieldrin, Endrine, Xlordane, Mirex and etc were prohibited [2]. Though till 2001 at national level there was no normative document prohibiting or limiting their usage.

Taking into consideration the basic requirements and recommendations International Conventions [6,12,15,20], and other documents [11,23], the Minister of Labor, Health and Social Affairs adopted the prohibited and limited chemical substance list. The list was composed by 47 chemical substances, including 27

chemical substances indicated in Appendix III of Rotterdam convention. From those 47 chemical substances 38 are prohibited and 9 strictly limited, 7 chemical substances of industrial usage and 2 pesticides [16].

Important normative documents as: "Norms of qualitative condition of the environment: "Hygienic norms of pesticides contents in environmental objects", were also developed in the country, adopted by the Order of the Minister of Labor, Health and Social Affairs.

According to Decree of the President of Georgia form interdepartmental board was created and is responsible for management and coordination of dangerous chemical substances safe usage on the territory of Georgia [22].

Proceeding from the above mentioned it is noteworthy that legislative and executive organs of Georgia carry out certain work for creation and development of legislative basis and realization of measures for ensuring chemical safety for the population. There are certain possibilities for realization of International conventions requirements [1,5,12,15,20].

It is also noteworthy that the establishment of safe environment for the health of human beings is a quite complicated task and it is especially complex for the countries with transitional economies. The final performance of the activities, efficiency of performed tasks and regulation of priorities greatly depends on the quality of laws and by-laws in force as well as the abilities of government structures in practicing them.

In order to heighten effectiveness number of key principles should be adopted, including clear and comprehensive legislative acts, realistic goals, there correspondence with recommendations and requirements of international agreements, conventions, compatibility of the new legislative acts with legislation in force realized by institutional structure, clear discrimination of different structures competencies, economic efficiency and participation of society, etc.

It is noteworthy that up to 90-ies pesticides and other chemical substances were widely used in the country. At the same time import volume exceeded usage volume. As a result, big amount of out-dated and useless pesticides and other chemical substances for plants defense brought in 80-90-ies accumulated in the country [27]. But from 1992 to 2000 there inventory was not made [7,8].

Taking into consideration that they represent danger for human health and environmental objects state sanitary service made their inventory in 2000-2002. As a result it was found out that because of non-satisfactory sanitary-technical condition of storehouses, influence of

atmosphere precipitation the amount of out dated and useless pesticides and other chemical substances for plants defense was diminishing with each year. If in 1992 there were 2372 tones of out dated and useless pesticides and other chemical substances for plants defense on the territory of the country, according to the date of inventory by the end of 2002 there amount diminished for 2069 tones compared with 1992 and amounted to 302 tones in 12 districts. Non-satisfactory condition of their accounting and storage contributed to the fact that in the majority of cases package is in bad condition, preparations have no necessary marking, part of them turned into conglomerate and it's not possible to identify them. Lots of storehouses are destroyed, out dated and not fit for usage pesticides are taken out from them and sold [7,8,27].

Liquidation of pesticide remainders is complicated because in 1989 polygon for burial of toxic wastes was closed, and lack of financial means for expensive procedure of disinfection and liquidation, non-availability of appropriate technology worsens the situation. Chemical substances of industrial usage also still represent a problem. In 2001 98 chemically dangerous industrial objects were operated and according to preliminary data 2894 tones including dangerous chemical substances were on their territory [7,8,27].

As for pesticides affection on the health of population during their usage, as a consequence of destroying of collective farms and privatization of agricultural lands

active supervision on the health of above-mentioned contingent and identification of the early stages of intoxication has not been carried out since 1992. As a result from 1991 to 2001 only 4 case of professional intoxication caused by influence of different chemical substances were registered [28].

## **Conclusions**

According to the international conventions the creation and development of legal base for chemical and ecological safety of Georgian population commenced as of 1994.

Currently 302 tones of useless pesticides and other plant protection means are kept in 12 regions of the country, while 289 tones of dangerous chemical substances are present in 98 industrial objects.

Starting from 1994 the polygon for elimination of harm of the chemical substances was abolished; there were neither financial resources, nor the expensive technologies for eliminating the harm of dangerous industrial chemical substances and pesticides. This lead to the fact that the issue of their influence on the population of Georgian and problem of chemical safety still remains active.

## **References**

1. Базельская конвенция о контроле за трансграничной перевозкой опасных отходов и их удалении. Заключительный акт. 1989 год.
2. Вредные вещества в промышленности т.1-3 под общей редакцией Н. В. Лазарева, М. 1976.
3. Здоровье-21. Основы политики достижения здоровья для всех в Европейском регионе ВОЗ: введение. № 5. Копенгаген. 1998., 40 стр.
4. Кодекс этики в международной торговле химическими веществами Принципы и руководящие положения для промышленности и других сторон частного сектора в целях повышения химической безопасности". (Программа ООН по окружающей среде) 1994. 16 стр.
5. "Конвенция о трансграничном воздействии промышленных аварий" (ООН), Хельсинки- 1992 г. 42 стр.
6. Лондонские руководящие принципы обмена информацией о химических веществах в международной торговле с изменениями 1989 год (Программа ООН по окружающей среде). 23 стр.
7. Миндорашвили А. Чанкселиани А. Инцкирвели Л. Санитарное состояние почв в Грузии. Сборник трудов 1-ой национальной конференции по Национальному плану действий по гигиене окружающей среды. Тбилиси 2001. стр.130-145.
8. Миндорашвили А. Бицадзе Н. Некоторые аспекты санитарного состояния почв населенных мест Грузии. Сборник научных трудов Тбилисского Государственного Медицинского Университета. т. XXXVIII, Тбилиси, 2002. стр.322-324.

9. Национальная программа действий охраны окружающей среды Грузии. 2000. 63 стр.
10. Нормативные акты Парламента Грузии в сфере охраны окружающей среды Тбилиси., 2000. 247стр.
11. Охрана здоровья-статистический сборник., Тбилиси 2001.
12. Окончательный доклад третьей сессии Межправительственного форума по химической безопасности. Сальвадор-де-Байя. Бразилия.2000. стр. 1-14.
13. "Первая версия национального профиля оценки инфраструктуры управления химическими веществами", 1998., 53 стр.
14. Первая версия финального резюме национального профиля по оценке инфраструктуры управления химическими веществами", 1998., 18 стр.
15. PIC конвенция Роттердамская 1998, 33 стр.
16. Приказ Министра труда, здравоохранения и социальной защиты 26 марта 2001 года №133/н"Об утверждении списка запрещенных или строго ограниченных опасных химических веществ подлежащих производству, применению или экспорт-импорту"
17. Применение процедуры предварительного обоснованного согласия для запрещенных или строго ограниченных химических веществ в международной торговле - Руководство для правительств". (Программа ООН по окружающей среде), Рим- Женева, 1991 г. 49 стр.
18. Руководящие материалы национального профиля по оценке инфраструктуры управления химическими веществами., 1998., 47 стр.
19. Создание законодательства по химическим веществам: Обзор - Первая публикация из серии руководств по законодательству по химическим веществам" (Программа ООН по окружающей среде). 1995 г. 61 стр.
20. Стокгольмская конвенция о стойких органических загрязнителях. 2001., 53 стр.
21. Стратегический план развития здравоохранения Грузии - 2000-2009 гг. 99 стр.
22. Указ Президента Грузии от 21 июня 2002 года (№307) "О создании межведомственного совета по регулированию безопасного применения опасных химических веществ и утверждению положени.
23. Legal Acts of Georgia-Health Care.1998., №3., p. 3-53.
24. Georgian National Health Policy., Tbilisi., 1999., p.99.
25. National program on enviroment and healthh 2001
26. National Health Report Georgia 1999.
27. National Health Report Georgia 2000.
28. National Health Report Georgia 2001.
29. Pic Circular UNEP-FAO XVI - December 2002.

## **Международные конвенции и развитие законодательной базы по обеспечению химической безопасности населения Грузии**

*Александр Миндорашвили*

Инспекция Государственного санитарного надзора Министерства труда, здравоохранения и социальной защиты Грузии

### **Р Е З Ю М Е**

Цель исследования - изучение перспектив создания и развития законодательной базы по обеспечению химической безопасности населения Грузии в соответствии с решениями Международных конвенций и на основании проведенной в 2000-2002 гг. на территории страны инвентаризации, уточнение количества устаревших и непригодных к применению пестицидов, промышленных объектов и количества хранящихся в них опасных химических веществ. Установлено, что в Грузии в соответствии с решениями Международных конвенций создание и развитие законодательной базы по обеспечению химической безопасности населения началось с 1994 года, однако отсутствие финансовых средств и недоступность соответствующей технологии для обеспечения дорогостоящей процедуры обеззараживания и уничтожения непригодных к применению пестицидов и промышленных токсических отходов, проблема остается актуальной. Несмотря на то, что в 2002 году в сравнении с 1992 годом количество непригодных к применению пестицидов в связи с неудовлетворительным состоянием учета и хранения способствовало уменьшению их количество на 2069 т, в 12 районах в настоящее время хранится 302 т. Неудовлетворительно обстоит также дело и с вопросом о химических веществах промышленного назначения. В 2001 году функционировало 98 химически опасных промышленных объектов, на территории которых размещены 2894 т, в том числе опасных химических веществ.

**Ключевые слова:** *международные конвенции, реформа в здравоохранении, национальная политика здравоохранения Грузии, развитие законодательной базы, химическая безопасность населения, пестициды*