# **Dragan GJORGJEV**

# STRATEGY AND ACTION PLAN FOR HEALTH AND ENVIRONMENT OF THE REPUBLIC OF MACEDONIA 2020

#### Introduction

## Why strategy and why now?

Present situation and dealing with environmental health risk impact and critical points for whichthe Strategy should define directions and mechanisms for solutions

esides the lack of a number of data-evidence at national level, there is no doubt that the Republic of Macedonia is facing serious problems in dealing with the states and risks in the environment. A number of ecological media and processes have an alarmingly bad quality. The ambient air quality mostly in the urban and industrial regions, throughout the year is of an exceptionally bad quality and at a lot ofplaces (locations) it highly exceeds the permissible levels, which seriously affects the health of the population. According to the estimation of the World Health Organization, the environmental burden of diseases in the Republic of Macedonia come to 3.370 death cases due to the environmental risks in other words 166 out of 100.000 inhabitants (1). Noise is an additional

The author is Advisor to the Director of the Institute of Public Health and professor of public health, Medical Faculty in Skopje

problem inurban settlements. There is evidence that these two risks have harmful effects on health mainly on children (2). Besides the uncontrolled urbanization and motorization, as well as the demographic migration, the stress is put on the problem of discarding and cleaning out the hard and liquid waste, which directly influences the serious environmental degradation, but also indirectly endangers the health of the population. These states and the unavoidable expansion of consumption are putting at risk not only the safety and quality of drinking water, but the safety of food as well. A number of registered industrial hotspots in the state which have been present for decades (3) as well as the growing effects of the climate change (4) complete the picture of the specifically serious level of end angering all the media of the environment which asks foran urgent strategic intersectoral intervention at all levels in the country. Above all without doubt there is a need for improvement of the life styles and habits of the people in the entwined segments concerning this field which asks for systematic. good educational, promotional activities and an exchange of information but at the same time including the citizens in this process. The fragmentary single-sector approach dealing with these risks up to now has not brought any satisfactory improvement. On the other hand the health, ecological, but also the economic consequences of these states although obvious and proved to a certain degree are not present enough in the policy of managing the state of the environment

# What will change?

# What will the new strategy bring – mechanisms and directions forimprovement

The Republic of Macedonia has made an effort to improve the health and well-being of the population to reduce the health inequalities, to advance public health and ensurea health system where the recipients will have a central position. A system which will be universal, fair, long lasting and with high quality by implementing the European framework policy of the World Health Organization (WHO) – Health 2020. Macedonia is an active factor in the European process for health and environment of the WHO and in that respect applies the resolutions and other documents of this process.

The strategic directions for the development of the activities for protection and control of the influence of the environment on the health of the population in the Republic of Macedonia, included in this document, are based on global and European evidence, on national available evidence, and on the evaluation and priority of the national challenges according to

which they should be suitably taken care of up to 2020. They are a result of some activities in the framework of the national process for health and environment in the Republic of Macedonia in which all the relevant subjects at central and local level take part. Their contribution in all phases of the process will create optimal conditions for the purpose of implementing the strategic goals of this process up to 2020.

The aim of this process and the provided strategic documents are to define the policies and capacities of the environmental health process in the country to determine priority thematic areas, infrastructure and the mechanisms for managing these conditions, to determine the population groups and social aspects which will be in the focus, as well as to determine and ensure the process of implementation and communication of the proposed strategic goals.

# Summary of the basic elements/directions of the Strategy for health and environment of the Republic of Macedonia with Action plan to 2020

The strategy will have the following global priority regions:

- 1. Protection and improvement of the health and well-being of the population from the risks and pressure in the environment, applying policy of low carbonic, green economy and efficient use of natural recourses.
- Improvement of the mechanisms of managing and protecting the environment and health applying integral and stressed intersectoral approach.
- 3. Further harmonization of the regulations and standards in all affected regions with those of the European Union and World Health Organization.
- 4. In determining the priority areas a focus will be put on the improvement of life in the urban settlements, protection from climate changes and other environmental health risks in all the media of the environment. Of the vulnerable groups priority will be given to child health protection and reducing inequality.
- 5. Improving research in these fields, collecting valid evidence, building up a solid base of knowledge, which are used in preparing consistent sector and inter-sector policies in these fields.
- 6. Providing optimal financial technical and human resources for detecting and dealing with environmental health risks in the country.

### What will be achieved-expected results

Result: Three basic segments of the strategic package have been prepared:

# Part 1:General document: Strategic approach to health and environment in the Republic of Macedonia until 2020

Part 2:Action Plan For Health And Environment until 2020—Priority thematic areas presented using the WHO DPSEAA model, with a short review of the situation and detailed overview of the proposed actions, dynamics, sector and institutional infrastructure and approximate costs for implementation, which need additional calculation depending on the dynamic of the actions to be defined and approved by the Committee forHealth and Environment and the Government of the Republic of Macedonia.

Part 3: The concept of so-called **Book of Evidence and Indicators related to the Action Plan for Health and Environment in the Republic of Macedonia until 2020**, with an established matrix and an open internet portal for selection and classification of the activities and studies which would provide evidence regarding the conditions and/or the progress in all the segments such as policies, monitoring, confirming the risks, preventing the effects, and innovative actions towards improvement of the situation. This portal will add to the already introduced E-platform Health 2020, which presents an interactive web-based E-platform for continuous exchange of information in the course of analyses, planning, public discussion and determining the national priorities and activities of Health 2020. In it, using the available forms and questionnaires, all the citizens will be able to point out specific problems in other sectors related to health and well-being in the country, to present their opinions, suggestions and ideas andin that way to contribute towards the implementation of the Strategy.

# Methodology/ process

Including the key sectors, partners and citizens

The process of preparing strategic documents for addressing issues related to health and environment in the Republic of Macedonia started in 2013 upon the initiative and request of the Ministry of Health and the technical assistance of the World Health Organization. Upon the preparation of the initial document assessing the situation and areas for action, the process continued with involvement of intersectoral working groups composed of representatives of the public administration, professional and academic ex-

perts and institutions from all the relevant sectors of this multisector and multimedia issue, as well as the civil society.

Priority areas of action were defined in three workshops, within the process of public discussion with available arguments. For their further elaboration 4 working groups were established (1.-governance and policies, 2. air, asbestos, radon and noise, 3. waste, climate changes, water and sanitation, food and 4. soil, chemicals and industrial hot spots) with total number of 33-35 participants as representatives of a number of sectors and institutions (Ministry of Health, Ministry of the Environment and Physical Planning, Food and Veterinary Agency, the Crisis Management Centre, Directorate for protection an drescue and civil society representatives). The World Health Organization supported all these activities, as well as the subsequent two expert missions on air pollution and industrial pollution.

Sectors which would additionally need to be considered (in the public discussion) are the ministries of finance, economy, agriculture, culture, education and science, local self-government, the public, the citizens (E-platform2020) industry, youth organizations, private sector, etc.

**Applied methodology**: plenary presentations, work in groups (SMART method, desk review, prioritization).

#### Results

The basic Strategic document has been prepared together with an overview of the situation taking into account the matrix, driving forces, pressures, states and exposure to effects, as well as actions for reducing and mitigation of the risks.

The key documents on which the Strategy is based - a number of international strategic documents of the WHO and the EU per se, as well as selected national strategies, are at the foundation of this document (5,6,7,8,9,10).

# Established main aims and elements of the Strategy

Strengthening the capacity for preparing and carrying out the policies in the field of health and environment putting emphasis on intersectoral approach

#### 1.1. At administrative / political level

• Inter sector committee and bodies (at the level of the whole Government and/or at the level of groups of the competent ministries for

particular theme fields.

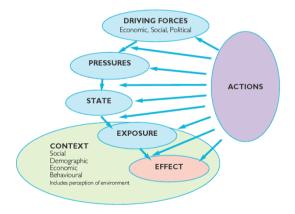
- Councils for public health (national and municipal).
- Inspector Council for coordination of activities of inspections from different departments which operate as audit and implementation of regulations in the field of health and environment.

#### 1.2 Budget

- A. Special allocated fund for health and environment (allocated to the Committee or inter-department bodies).
- B. Special budget items for health and environment in the relevant departments.

Introduction of effective model for research and identification of influences on the environment and prevention and/or reduction of their harmful effects on the health and well-being of the population in general or specific vulnerable groups in particular.

#### The Driving Forces model (DPSEEA)



Priority thematic areas were determined for activities and further research (on macro level – focus towards determined inclusive and healthy neighbourhoods and vulnerable groups of population and on micro level – environment media and environmental risks as indoor and outdoor air quality, noise, asbestos and radon, climate changes, waste, food safety and nutrition, chemicals and industrial hot spots, water and sanitation.

In accordance with this model and the selected priorities, lists of indicators were developed for integral monitoring (grouping) of risks in particular regions of living, mobility and consumerism (traffic, neighbourhood and housing, climate changes....).

Special focus on the vulnerable groups (children, social marginalized groups) and inequalities.

- An integrated information system for health and environment was developed together with a matrix of a book of evidence and lists of indicators for monitoring the driving forces, states, exposure and activities within the priority regions, as follows:
- **Demographic, sociological, economic, behavioural and other data** which are part of the integral conceptual frame, including the assessment of the driving forces, which are necessary for the development of effective policies in a number of departments.
- **Information on environment** relevant for demonstration of the effect of the ecological factors which lead to negative health effects.
- **Epidemiological data** which shows the link between certain diseases and the exposure to certain factors in the environment.
- **Toxicological data** which shows that certain factors can cause biological and physiological changes.
- **Data for adopted policies**, actions, technologies, which are in function of dealing with and minimizing the risks.

Preparing and carrying out cost efficient intersectoral actions directed towards all levels of pressures on environment and health of the population

An action plan structure has been developed in all the thematic area senlisting activities, competent sectors and institutions and approximate costs which in the course of established time dynamics until 2020 will be defined more precisely, together with the possible sources of financing, such as: regular budget lines in the health sector and in the other sectors as well, new budget allocations and advocacy for other sources of financing at central and local level, such as international and domestic crediting and donations; resources from larger polluters that do not comply with the legal requirements and standards for protection of the environment.

Actions are directed towards: building new policies implementing new standards and regulations in accordance with international (EU) legislation, standardized inter sector activities of supervision of the states, infrastructural investments which will lessen the driving forces and pressures on environment, strengthening the monitoring in a form of integral inter sector monitoring and information systems, bio monitoring and specific epidemiological and toxic research, strengthening humane and technical capacities, strengthening promotional activities, raising awareness campaigns and increasing the participation of the public sector. In all the activities a special stress should be put on the vulnerable groups and the reduction of inequalities.

- A draft-Book of evidence has been prepared in each priority field and a process of completion has been opened. The matrix enables collecting evidence according to a number of criteria such as new policies and regulations at domestic and international level, evidence which is a result of the monitoring and research, health indicators and innovations which help the improvement of the conditions in the environment. Internet-page where studies are selected and classified, will be opened for supplying public with information as well as for an exchange of experience between the national and international expertise.
- A list if indicators has been developed for monitoring the conditions in all the defined priority fields and risks with their categorization in accordance with the DPSEEA model, which enables preparing for and directing the actions toward the specific segments of the general driving forces such as demography and the social economic factor, energy, transport, climate changes and a like up to the specific pressures in each of the selected fields including the observation of the health indicators and the welfare of the citizens. Such list, which is in accordance with the international database, will allow comparable analyses of the states and activities with other countries above all in the WHO European region.

# **Next steps**

- Presentation of the documents to the Committee of Health and Environment;
- A public discussion about the documents (internet-page of the Ministry of Health and Ministry of Environment and Physical Planning);

- Workshops for finalizing the Document and preparing the e-toolfor collecting evidence and monitoring the implementation;
- Endorsement by the Government of the Republic of Macedonia;
- Parallel process of research, collecting evidence, analysis of the present ones and the activities for providing remaining indicators, completing the book of evidence and Implementation of the activities in accordance with an established priority and dynamic at a central and local level with a parallel activity of the relevant sectors and factors, and supported by appropriate financial means and established infrastructure as stated by the Strategy recommendations.

### Possible obstacles in the process of implementation

- Lack of political will and conviction/ devotion to strictly inter sector action at central and local level;
- A lack of planned human, technical and financial capacity.

# Support of the World Health Organization (WHO) for the national process of health and environment

WHO supports the continuity of the national processfor health and environment, with an aim of a strategically oriented action up to 2020 and its operative organization, by establishing and implementing a strong framework for following and assessing as a part of the established priorities of the two year contract for collaboration 2014-2015. For this purpose, threeteams of experts were sent by WHO in 2014 with the aim of assessing the actual state of the environment and health in the country in general, as well as the air pollution and the pollution caused by major industrial plants. In 2015 WHO hassupported the participatory process for defining priorities and goals of the strategy and the action plan and promoting public debates, using new tools for communication with an aim to enable a wide spread participation of all concerned parties, and an inter sector approach. The support of WHO is focused on the vulnerable groups of the population, the social health determinants and reduction of health inequalities.

### **Executive summary**

The Republic of Macedonia lacks a unique policy and a strategically oriented document, which will introduce an integral approach to bringing up the problem, detecting the risks as well as improving the complex relation between the states of environment and the health of the population.

The previous system of partially solving the problems in some media of environment and their relation to the health of the population brought a moderate progress in the improvement of the environment protection, in the need for a valid detection of the health risks based on evidence as well as the need for applying effective inter sector actions in dealing with the risks at central and local level.

According to the present national and international strategic documents and activities for healthy living and welfare, and a rational attitude to environment and natural resources, the Strategy and the Action Plan determine the model of the driving force as a key model for detecting and dealing with the risks in the environment in the Republic of Macedonia, they determine the priority regions for action in all eco media in the state, stressing the necessary application of the inter sector approach and the focus on the settlements, the climate changes, the vulnerable groups of the population, as well as the wide participatory process in preparing and adopting the document.

#### References

- 1. WHO (2009) Country profiles. Environmental burden of diseases.
- 2. http://www.who.int/entity/quantifying\_ehimpacts/national/countryprofile/tfvrmacedonia.pdf?ua=1
- 3. Kochubovski M., Kendrovski V. Monitoringof the ambient air quality (PM<sub>10</sub>) in Skopje and evaluation of the health effects in 2010. JEPE. 2012;13:789–796
- 4. Development of Remediation Plans with Financial Requirements for Elimination of Industrial Hotspots ,An EU-funded project managed by the European Agency for Reconstruction Europeaid/123674/D/SER/ MKComponent: Qualitative Health Risk Impact Assessment, 2007-2008
- Кендровски Владимир, Спасеновска Маргарита. Заштита на здравјето од климатските промени – иницијатива на седум земји. Резултати на проектот и компендиум на документите од проектот во Република Македонија, 2008-2011 г., ISBN 978-608-4518-33-4
- WHO, Regional Office for Europe (2012) Health 2020-A European policy frameworkand strategy for the 21st century.http://www.euro.who.int/en/ health-topics/health-policy/health-2020-the-european-policy-for-health-andwell-being/publications/2013/health-2020-a-european-policy-frameworkand-strategy-for-the-21st-century
- 7. Health 2020 European policy framework and strategy for the 21-st Century, WHO publication, 2013
- 8. Health and Enviornment in the WHO European Region, Creating resilient communities and supportive environments, WHO publication, 2013
- 9. DECISION No 1386/2013/EU OF THE EUROPEAN PARLIAMENTAND OF THE COUNCIL of 20 November 2013 onma General Union Environment Action Programme to 2020"Living well, within the limits of our planet".
- 10. Стратегија Здравје 2020 во Република Македонија, Министерство за здравство, 2015 г. (во изработка)
- 11. Национална Стратегија за одржлив развој во Република Македонија (2009-2030 г.), МЖСПП, 2010 г.