THE MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

ACTION PROGRAM ON SCIENCE AND TECHNOLOGY

THE MINISTER OF NATURAL RESOURCES AND ENVIRONMENT

Pursuant to the Government's Decree No. 91/2002/ND-CP of November 11, 2002 defining the functions, tasks, powers and organizational structure of the Ministry of Natural Resources and Environment;

Proceeding from the conclusions of the 6th plenum of the Party Central Committee (the IXth Congress) on continued implementation of the Resolution of the 2nd plenum of the Party Central Committee (the VIIIth Congress) on orientations for development of education, training, science and technology from now till 2005 and 2010;

Pursuant to the Prime Minister's Decision No. 188/2002/QD-TTg of December 31, 2002 approving the Government's Action Program for materialization of the conclusions of the 6th plenum of the Party Central Committee (the IXth Congress) on science and technology;

At the proposal of the director of the Science and Technology Department,

DECADES:

Article 1.- To approve the Natural Resources and Environment Ministry's Action Program for materialization of the conclusions of the 6th plenum of the Party Central Committee (the IXth Congress) and the Government's Action Program on science and technology with the following contents:

1. Major orientations for scientific and technological activities

   a/ To establish scientific grounds for use as basis for the formulation of the system of legal documents and policies on management of natural resources and environment along the direction of sustainable development, for the formulation of strategies and plannings on rational and efficient exploitation and use of each type of natural resource, and on combination of the environmental protection with the socio-economic development.

   b/ To assess the effectiveness of the system of policies and laws on the State management over natural resources and environment, thereby to propose the supplementation and perfection of the system of policies and laws on natural resources and environment, so as to make it closer to the reality of life and highly feasible.

   c/ To renew technologies and apply scientific advances, thus contributing to stepping up the basic surveys; to raise the quality of investigation, observation and forecasting of natural resources and environment in service of the socio-economic development, security and national defense.

   d/ To accelerate the modernization of the natural resources and environment branch so as to meet the requirements of the cause of national industrialization and modernization, to strive to lift the scientific and technological level of the natural resources and environment branch to the advanced level of the Southeast Asian region by the year 2010.

2. Objectives of scientific and technological activities in each field:

   a/ Land:

   To study the evolution of land use right as a
commodity in the socialist-oriented market economy. To organize the survey and assessment of the current state and potentials of land for use as grounds for the formulation of institutions, policies as well as planings and plans on land use in conformity with the process of land use restructuring in the period of accelerated national industrialization and modernization. To research into and improve technologies and build up the multi-purpose land information systems (LIS) in service of socio-economic development.

b/ Water resources:

To survey and assess water resources, the current state of exploitation, use and protection of water resources in the Vietnamese territory and territorial waters, in each river basin or key economic zone, serving as basis for the determination of policies and the formulation of a national strategy on water resources, the elaboration of overall planings and plans on protection, exploitation, use and development of water resources. To research into and apply new technologies and advanced models in the general management of water resources in river basins. To research into the relations between various forms of water resources, such as rain water, surface water, underground water and sea water in some river basins and key regions to serve as basis for management, protection, exploitation, rational use and development of water resource and protection of the water environment.

c/ Geology and minerals:

To assess the present situation and make statistics of mineral resources throughout the country for use as basis for the determination of policies, strategies and planning on exploitation and rational use of mineral resources. To enhance the researching capacity and step up the application of scientific and technical advances and high technologies in order to raise the efficiency and reliability of the basic surveys on geology, minerals and geological catastrophes and environment. To step by step renew and invest in advanced technologies and organize the application thereof in order to evaluate deep mineral deposits.

d/ Environment:

To formulate and improve the system of legal documents and policies on, and measures for, environmental protection in order to limit the pollution growth rate, remedy the environmental degradation currently occurring in some areas and improve one step the environmental quality, rationally exploit natural resources, and ensure the ecological balance at a stable level. To continue researching into and supplying scientific grounds for formulating environmental standards and criteria for assessing the environmental impacts in compatibility with the national economic conditions.

e/ Hydrology and meteorology:

To concentrate on developing the hydrological and meteorological science and technology capability along the direction of modernization of technologies and methods in the observation, data collection and readjustment, information and communications and hydrological and meteorological forecast systems, in order to raise the operational capacity, turn out hydrological and meteorological products of high quality and reliability, well serve the prevention of natural disasters and the mitigation of consequences thereof, protect the environment, and meet the socio-economic demands.

f/ Metrology and topography:
To research into and apply advanced technologies to metrology and topography, raise the capability to modernize the metrological and topographical works in service of the cause of industrialization and modernization. To perfect the geographical information system (GIS) in service of socio-economic development.

3. Principal tasks of scientific and technological activities

a/ To research into the scientific bases for the management of natural resources in the market economy and in the process of accelerated national industrialization and modernization.

b/ To step up the scientific and technological research, raise the quality of basic surveys in such fields as land, water resources, geology-minerals, environment, hydrology and meteorology, metrology and topography; to raise the quality of forecasts of geological catastrophes, environment, climate, weather, assessment of existing natural resources in service of socio-economic development, exploitation, protection and rational use of each type of natural resources in each region.

c/ To make general review and appraisal of implementation of, and preparation for amendments and supplements of, the Law on Environmental Protection, the Law on Minerals, the Law on Water Resources, and elaboration of the Law on Biological Diversity. To screen, amend, supplement, elaborate and improve the system of legal documents, technical rules and processes, systems of branch standards and sets of norms and unit prices, aiming to enhance the management tools of the Ministry of Natural Resources and Environment, in service of the assessment of the quality and efficiency of the domains of natural resource and environment basic survey.

d/ To evaluate the present situation of the basic survey domains and forecasts of the Ministry of Natural Resources and Environment in general and potentials and demands for scientific and technological development in particular, thereby to formulate the development strategy and planning of the natural resources and environment branch till 2010 with orientations till 2020.

e/ To strengthen the organizational system, to perfect the functions and tasks of the State management agencies under the Ministry, the research institutes, training establishments, other business units, enterprises attached to the Ministry; to step by step separate the State management from non-business management.

f/ To enhance the State management role of the Ministry in combination with the elaboration of regulations on democracy in management agencies, basic survey units, organizations engaged in scientific and technological activities, in order to promote the creativity and tap all potentials in basic surveys, forecasts and scientific researches into natural resources and environment.

g/ To study, elaborate and promulgate the system of standards for assessing the natural resources and environment in our country.

h/ To formulate a mechanism for cooperation and coordination among the ministries and branches in the domain of State management over natural resources and environment. To elaborate programs, projects and schemes on natural resources and environment research and surveys and propose the State to incorporate them in the
programs, plannings and plans on sustainable development of regions and territorial areas.

4. Major solutions:

a/ Perfecting the State management apparatus, research agencies and non-business units of the Ministry:

- To assess the efficiency of operations of the State management units in charge of natural resources and environment over the recent time, propose solutions to modify and adjust the functions and tasks of such units, so as to meet the branch development requirements as well as the management requirements in the new period.

- To review the functions and tasks of the non-business units conducting basic surveys and the research institutes under the Ministry, propose measures to end overlaps in the basic survey and scientific research work of the units.

- To study and establish scientific and practical foundations for working out plans on renewal and reorganization of the units conducting basic surveys on natural resources and environment, the training establishments, scientific and technological research organizations to make them suit to the characteristics of the Ministry of Natural Resources and Environment.

- To study and perfect the organizational system of the local apparatuses in charge of management of natural resources and environment.

b/ Developing the human resource:

- To work out plannings in association with plans on training of the contingent of public servants as well as cadres and scientific and technological cadres in different forms and with different capital sources in order to build up the successive contingent of cadres and remedy the current shortage of cadres in the units under the Ministry.

To attach special importance to the training of high-level scientific and technological cadres in line with the development orientation of the branch, and promote the capability of young cadres in combination with the employment of experienced and high-level cadres at home and abroad.

- On the basis of the State’s regulations on personnel work, to coordinate with the functional agencies in elaborating the regulations and policies on use of public-servants in general and scientific and technological research cadres in particular in conformity with the characteristics of the natural resources and environment branch.

c/ Strengthening the researching capability and equipment for scientific and technological basic surveys

- To develop the scientific and technological capacity of the natural resources and environment branch on the basis of absorbing advanced scientific and technological achievements of developed countries, which are suitable to our country’s conditions and at the same time to organize the research into particular scientific and technological subjects of the Ministry.

- To concentrate efforts on organizing the implementation of scientific and technological research subjects within the framework of the State’s key programs in order to rationally tap and use the existing scientific and technological research capacity and equipment of the Ministry. To introduce the research results of the programs, projects and subjects into the practical production, thus contributing to the formulation of mechanisms and policies on rational and efficient use of natural resources and on environmental protection.
- To formulate a mechanism for cooperation among basic survey-conducting units and scientific and technological research institutions of the Ministry in order to tap and efficiently use the scientific capability of researchers as well as the existing system of researching equipment to help raise the quality of basic surveys and forecasts, thus meeting in time socio-economic development requirements.

- To attach importance to the application of achievements of advanced technologies to the basic research and survey domains in a way suitable to our country's conditions, aiming to create a firm basis for raising the quality of surveys and forecasts, rationally using natural resources and protecting the environment.

- To work out programs and plans on investment in the consolidation of material foundations, machinery, equipment and conditions for scientific and technological research for the basic survey-conducting units, organizations engaged in scientific and technological activities, research institutes and analysis centers up to the advanced level in the Southeast Asian region.

- To make preparation for, then proceed to, the building of key laboratories of the Ministry in service of the performance of basic surveys and tasks under the scientific and technological programs as well as the techno-economic programs, in order to raise the survey quality.

 **d/ Raising the capacity to apply the information technology:**

- To step by step invest in and renew the informatics equipment, raise the capability in the domain of State management over natural resources and environment, and satisfy the requirements of the State's administrative reform program (building of an e-government). To computerize the public services related to the system of legal documents, dossiers and licenses to be provided in a convenient and quick manner to domestic and foreign organizations and individuals for operation in the natural resources and environment fields.

- To build a system of scientific and technological information and documents, electronic libraries specialized in natural resources and environment at the Ministry's Office and attached units.

- To build a specialized of telecommunication information and information networks on the basis of new achievements of telecommunications and to information technology, in order to increase the transmission speed and to process information in a quick, prompt and convenient manner at home and abroad, thus meeting the higher and higher requirements of professional activities in service of the Ministry's State management work.

- To build a database of the natural resources and environment branch on the basis of integrating databases of the basic survey domains under the Ministry's management. To build the information systems, local-area networks and intranets from the Ministry to its attached units, the provincial/municipal Services of Natural Resources and Environment, and connect them with other networks.

- To build a software system for the uniform management of personnel, planning, finance-accounting, science and technology in the units attached to the Ministry.

 **a/ Stepping up the international cooperation in the field of natural resources and environment:**

- To appraise the current situation of international cooperation in different domains, propose solutions
to make the fullest use of bilateral and multilateral aids and assistances for the successful realization of the Ministry's policies, strategies, programs and plans, thus contributing to the implementation of Vietnam's international commitments in the field of natural resources and environment as well as the national socio-economic development and hunger elimination and poverty alleviation objectives till the year 2010.

- To work out plannings and long-term and short-term plans on international cooperation in the fields of natural resource and environment basic surveys as well as the development of the Ministry's scientific and technological capability.

- To study and orient the performance of activities of creating and receiving in an efficient manner all bilateral and multilateral aid sources on the basis of international cooperation plans which are annually worked out.

- To propose measures to rationally and efficiently use the official development assistance (ODA) sources for Vietnam in the field of natural resources and environment.

f/ Diversifying financial sources for scientific and technological activities:

- To coordinate with the concerned ministries and branches in formulating mechanisms and policies to diversity investment capital sources for scientific and technological activities of the State in general and of the natural resources and environment branch in particular.

- To encourage the units attached to the Ministry to renew technologies, attract and efficiently use foreign investment capital sources for basic surveys and scientific and environmental development.

- To encourage organizations and individuals to cooperate with the units attached to the Ministry in conducting natural resource and environment basic surveys according to law provisions.

- To participate in the formation of a science and technology market:

- To closely coordinate with the concerned ministries and branches in formulating and perfecting mechanisms and policies to promote the development of a science and technology market suitable to the socialist-oriented market economy.

- To study mechanisms and policies to step by step commercialize products of basic surveys as well as scientific and technological research into natural resources and environment.

- To formulate a mechanism for selecting ministerial-level scientific and technological research subjects according to the provisions of the Science and Technology Law and the Ministry's management regulations.

- To establish step by step organizations to manage and support the development of the science and technology market for natural resources and environment in such domains as consultancy, brokerage, service and technology transfer; to attach importance to the development of trademarks for a number of basic survey products.

5. Key tasks:

a/ To continue building and strengthening the system of organizations performing the State management over natural resources and environment to be strong enough and clean, especially at the district and grassroots levels. To raise the quality, effectiveness and efficiency of the State management over natural resources and
environment.

b/ To concentrate on the elaboration, amendment and supplementation of legal documents in order to ensure their systematicality and synchronism, and make them govern all issues arising from the State management over natural resources and environment.

c/ To step up the scientific and technological research, raise the quality of basic surveys in the fields of land, water resources, geology - minerals, environment, meteorology - hydrology, metrology and topography, in parallel with the renewal of organization and operation mechanism of these fields. To introduce information technology into the management of natural resources and environment, concentrating on the formulation of a database and a system of geographical information and land information on natural resources and environment. To work out and submit to the Prime Minister the Strategy on development of information technology in the natural resources and environment branch.

d/ To attach importance to the training, fostering and attraction of managerial cadres and scientific and technological cadres, especially those having high qualifications in different fields.

e/ To expand, and raise the efficiency of, international cooperation in order to enhance resources, get access to capital sources, advanced technologies, experiences of management and training of personnel for the natural resources and environment branch.

6. Key scientific and technological subjects and projects till the year 2010:

a/ Assessment of the present situation and potentials of land in order to lay scientific grounds for working out the planning and plans on restructuring the land use in service of national industrialization and modernization.

b/ The evolution of land use right as a commodity in the socialist-oriented market economy.

c/ Study and assessment of the conformity of law provisions on land (the 2003 Land Law and guiding documents) with the actual land management and use.

d/ Building of a legal framework for the formulation of the new Land Code.

e/ Research into and building of the modern cadastral system of Vietnam.

f/ Statistics and inventory of natural resources and minerals; assessment of the present situation of exploitation and use thereof, and identification of measures for management and investment in mineral development.

g/ Sustainable management of river basins.

h/ Building of models of environmental treatment in industrial parks and some craft villages.

i/ Incorporation of environmental protection objectives in the planning on overall socio-economic development of regions and territorial areas.

j/ Elaboration of the planning on development of environmental protection sector for use as basis for integrating environmental protection targets with the hunger elimination and poverty alleviation and comprehensive growth targets.

k/ Elaboration of the scientific and technological development planning of the Ministry of Natural
Resources and Environment till 2010 with orientations towards 2020.

1/ Building of the database of the natural resources and environment branch.

2/ Building of the data and information system in service of the State management over metrology and topography.

3/ Planning on training and development of the contingent of scientific and technological researchers of the Ministry of Natural Resources and Environment to meet the requirements of the modernization process and raise the scientific and technological capability of the Ministry of Natural Resources and Environment.

Article 2.- Organization of implementation of the Program

1. The Science and Technology Department shall assume the prime responsibility for, and coordinate with the Ministry’s Office, the Departments, Bureaus, Institutes, Centers and other units attached to the Ministry in, organizing the thorough study of this Program of Action.

2. Basing themselves on this Program of Action, the units attached to the Ministry shall work out their own specific plans and organize the implementation thereof.

3. The Science and Technology Department shall have to regularly urge, inspect and monitor the implementation of the Program by the units, promptly review, assess, draw experiences and propose measures to overcome difficulties and solve problems in the course of implementation.

Article 3.- Implementation effect

This Decision takes effect 15 days after its publication in the Official Gazette.

The directors of the Ministry’s Office and the Science and Technology Department as well as the heads of the units attached to the Ministry shall have to implement this Decision.

Minister of
Natural Resources and Environment
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