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SOCIO-POLITICAL TOOLS IN THE IMPLEMENTATION OF ENVIRONMENTAL POLLUTION PREVENTION AT MILITARY BASES

by

Petr Kozel
Ministry of Defence of the Czech Republic
Dobrovskeho 6, 771 11 Olomouc
Czech Republic

INTRODUCTION

Our technical society is often forgetting about a human role. However, the human role is still very important to function of a technical and technological systems. Not only the technologies but also socio-political tools are also necessary to the implementation of environmental pollution prevention at military bases.

PRINCIPAL SOCIO-POLITICAL TOOLS

There are the following principal socio-political tools in the implementation of environmental pollution prevention at military bases:

- environmental policy
- internal military legislation
- personnel, economic and financial conditions
- control
- science and research
- education
- emotional connection with environment

Especially increasing the role of environmental education results in increasing of efficiency the environmental pollution prevention.

EDUCATION

Education to environmental responsibility as a constituent part of a complex, purposeful and permanent formation of a personality is of outstanding importance today. But there are some problems in educational instruction necessitated by a narrow scope of outlook i.e. that outlook which lacks political and economic aspects, having potential serious consequences for students/listeners.

Organic integration of two systems below is supposed to be an effective prevention against this:

1. socio-politico-economic education and instruction, and
2. special natural science and environmental responsibility.

The first system includes accomplishments of fundamentals of social studies, philosophy, and formation of political attitudes, while the second one includes a wide knowledge of particular components of nature, their mutual relations and connections, including those to mankind and his activities.

Quality of co-operation and integration of both systems with regard to individual constituent parts of the educational process is not always the same. But both are absolutely indispensable, helping to fix the principal idea of inseparability of mutual politico-economic-ecological relations, with accent on a class basis of the relationship, man-nature, that is, ecological responsibility. This must be permanently intensified to implant in students/listeners mind the condition *sine qua non* - that is, necessity of economic development hand in hand with protection and improvement of environment of nature and life, necessity of sustainable development.

Environmental responsibility in education is conceived as a part of complex training.

Given that educational and instructional processes cannot be separated an attention will be given in the following to contents and methods of environmental protections, considering complex education and applications in practice.

SOME SPECIAL TEACHING PROBLEMS

There are students studying combination of economy and environmental protection on Military University in Vyčkov. Coming students often have narrow views about environment protection. Their opinions are assumed to result from:

1. Previous restricted ecological and environmental education in instruction and social practice, monothematic discussions, not taking into account very often political and technico-economics aspects.
2. Defensive positions in retechnicoeconomic approaches, which do not consider or proclaim ecological aspects of the development of state economy and society.
3. Lack of objective environmental estimation of some regions in Czech Republic.

In fact, graduates are very well trained in ecology and environmental protection. But they are not in everyday practice. The same applies to their participation in ecological courses and public activities. They are also not well prepared for possible disillusion and encounters with misunderstanding. Thus, educational activity in applied disciplines must be completed by practical views on environment and development. A deeper approach to given problems is wanted here to eliminate any passive or even apathetic behaviour or disillusion when facing problems in practice. A firm and decisive behaviour of graduates who finished their studies on environmental protection is an indispensable condition not only for their own profession but even for public and pedagogical activities. They must be honest and precise with any information they provide society, either from their research or in their public or professional teaching.

Themes of theses are very important, too. To illustrate this, theses closely devoted to research of activities affecting an environment which do not emphasise range of dependencies, interactions between social activities and environment, and which do not consider causes of defects and do not take steps to remove them, cannot in any case help to shape a professional profile of a graduate. Without a complex approach and understanding of wider circumstances, thesis become useful only for understanding and methods, for a partial result or for education to self-activity. But such a way of thinking can never establish a realistic approach to problems considered from a socio-political or economico-ecological viewpoint. On the contrary, a negative behaviour may occur here to an initiator of such activities or even to society if a student is well aware of negative effects of socio-economic activities on a particular environmental component or biological detail.

Thus, besides themes incorporated in the curriculum and syllabus, it is necessary to intensify the process of complex education to environmental responsibility, emphasising politico-economic aspects by means of new, spontaneous and scientific form. Contents and methods used in teaching are supposed to contribute to this objective.

SOLUTION TO PROBLEMS IN QUESTIONS LECTURES

Students are acquainted here with contents of instruction in accordance with the syllabus and curriculum, as well as with wider aspects between ecosystems and technico-economic or socio-political systems. For this purpose a scheme of relations among individual landscape subsystems was set up, as well as a scheme of means for protection and creation of an environment in a broad and strict meaning. In the first case it is a model which emphasises inseparability of natural ecological, technico-economic and socio-political affinity. In the second case there are means covering the field of political, theoretical and practical operations (means in a broad meaning) which are superior to proper ecotechnical devices for protection and creation of an environment (means in a strict sense). These are realised in political spheres, further by methods of prognosis, conception and legislation, including state economic policy. Theory and conception of protection in non productive sphere is established through gnoseological, analytico-synthetic, prognostico-conceptual and didactico-educational methods. Material basis of protection in economic sphere rests on productive-economic and materio-technical methods. The above three spheres result in a sphere of realisation (see above).

In principle, these schemes are confronted in each lecture. In addition historical developmental trends of environmental systems are emphasised here as a result of co-operation of all spheres mentioned above. Their present state is analysed in courses, being a good basis for making proposals for individual environmental wholes. Thus, an extra lecture is devoted to a theoretical statement of common criteria to project development of socio-economic activities on a given locality.

TRAINING

Beside standard activities, we aim to equip students with abilities of how to solve realistically practical problems of environmental practice. Students are taught to read maps and projecting documentation; moreover, they try to construct general schemes of relations for individual model ecosystems and to project depends on range and contents of instruction; including schemes of relations and diagrams of progress as well as own global proposals of individual activities and general developmental conception of landscape wholes. For this form, training in terrain and excursions to military training areas and basis are used to teach students to recognise a terrain and to collect data both in the field and from the literature. All activities presented here including seminars (see later) are carried out with the aim to establish a variant project for sustainable development of a given locality. Students are instructed not to behave conventionally but to solve problems with respect to their theoretical knowledge and skills from all disciplines. Problems in training are very often formulated so as to correspond to some extent to themes of theses.

SEMINARS

To qualify mutual relations of ecology and economy, of environment and military activities, we modelled four situations, simulating various social approaches.

The First Situation.

The first situation (exploiting situation) is preferring momentary economic (military) affects, not taking into account an eventual damage of sources and environment, which usually occurs after a time. Students are informed about harmfulness of partial environmental concessions (e.g. governmental exception to law of air or water protection) which are very dangerous to landscape and environment. The same applies to small for-environmental actions with lower effects compared to previous against environmental decisions. This is the most difficult situation for students and teachers because a problem must be solved here, interfering with political, economic, technical and social sphere. This is the problem of some standing in social practice, resulting from a lack of discipline, banal or short sighted prognoses, which do not estimate an environment from wider aspects, i.e. as a dialectical unity of geoecological, technico-economic and socio-

political subsystem. These faults may result from irresponsible, misuse of natural resources and environment, either through ignorance or because of the pursuit of personal rather than societal goals. The faults may be conscious, resulting from personal or collective interests which are held above interests of whole society, or unconscious, resulting from ignorance of general environmental affinity because they will solve in practice professional problems as well as those concerning propaganda, education and conviction of not only workers of production but also workers and personnel of state management.

The Second Situation

The second situation issues from the idea that environmental actions represent only investment absent of economic profits and that economy cannot be introduced in environment. This is a consequence of stereotyped opinions about economic effectivity of investment, that means, that contribution of a better environment can be described verbally, but cannot be expressed financially. However, environmental investment is considered as necessary, being in the first place verbally but very often in the last one practically. Student's task in simulated situations is to discover opinions of an investor, designer or supplier, to convince representatives of state bodies about truth, and to press upon them to change or complement projected documentation, technology, etc. The situation may be arranged as several variants, using various (real or simulated) character qualities and a different knowledge of students about particular human activities. But a final solution must not ever be harmful to universal and dynamic social development. It must include a method of objective economic estimation of environmental investment, or its outlining at least.

The Third Situation

The third situation (conservating situation) issues from correct principles, and requires creating and protecting ecologically balanced environment/landscape and its components as a factor of harmonic advancements of economy, infrastructure, human modes of life and health. Unfortunately, the principles are not applied in concrete in concrete technico-economic and socio-political conditions. Thus, in the simulated situations students of such inclinations are persuaded morally with the help of others of the conservating situation, convenient only for National Parks, National or State Reservations, etc. The arranged situations explain the necessity of realistic applications of science and research in practice and harmful approaches leading finally to extensive utilisation of partial productive potentials of an environment/landscape.

The Fourth Situation

The fourth situation is based on the principle that environmental investment is economically effective, i.e. economy/military training activities is in harmony. Students are taught, at least theoretically, to quantify phenomena considered mostly as qualitative (health and psychic state, aesthetics, etc). In the imitated situations, opposite to this principle, they work out arguments for economic effectivity of environmental protection, with reference to theory and methodology.

The simulated situations are aimed to equip students in all four cases with needed habits and abilities to react in practice to various situations and the claim and promote adequate devices and guidelines, proposals and ideas standing on right theoretical principles and practical knowledge. Universal advancement of society must be respected here. As there are groups of 5 - 10 students, findings from social psychology about interpersonal relations in small groups may be used here. In case of hesitation or unwillingness to co-operate, a dialogue or brainstorming is used, as well as situation and imitation methods, approaching closely to practice. Tape recorder or video is recommended here for analysis and critique.

CONCLUSION

All above cited methods are aimed to prepare military specialist with a wide socio-political understanding in addition to the studies speciality, i.e. those specialist whose attitudes and activities will help to spread environmental findings among army members as well as broad public, improving and protecting an environment.