

GEOGRAPHICAL MONITORING AND MANAGEMENT

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Abstract:

“Geographical management must be regarded as a need of our Time.

The involvement of Geography scientists in this issue is deemed necessary as they will be rather often the only one who would be able, based on thorough university knowledge, to provide the best, plausible solutions in a specific case.”

Keywords: success, good organization, permanent control, quality.

INTRODUCTION

Need for change understanding

“Keep the eyes on something” is an answer to a determination.

The opening of “eyes” on what exists, on what is surrounding us occurred in the dawn of human childhood. In practical terms, and taking it scientifically, it means that it became a need, in the last instance, a need of human existence.

MATERIAL AND METHODS

Unfortunately, Geographic scientists did not know how to turn in their favour that respective requirement and the practices used. Actions such as: management, assessment, rectification, correction, optimisation ... of what is currently happening in the geographical life of Terra without going beyond the empirical findings of changes but rather trying to get to their essence. The perception and the understating of **environmental trend** become the pivots in the development of strategies and the efforts to be able to absorb the good and to avoid the damage which can be caused by natural and human events.

The dynamics of Geography is, in fact, Geography itself, as that “world” exhibits permanently new faces, images of changes, it exhibits new situations and states.

The interrogations about the dynamics and the sense of transformations arise from the need to make a **prediction**. Out of these interrogations we should mention:

- a. – What are the implications concerning the current geographical situations to environmental issues, to resources, to development ...?

It means explaining current states in the light of historical and current realities. It is also about explaining past events and the evolution of contemporary (*postdictum*) realities in the future.

- b. – Which are the rates of geographical changes in present? This means understating the current states and the dynamic state of geographical systems.
- c. What can happen geographically within one area or another if they are unequally developed and bring about territorial conflicts? Prediction becomes the first requirement in such a situation.

Such questionings do not prove the need to understand the change from the past to present and future, they prove that a relative control of movement and of sense of change requires a proper monitoring and management.

1. Geographical monitoring

The difficulty in understating geographical, monitoring and management changes have many causes. We would like to specify some of them:

- system complexity, possible complex answers;
- uniqueness of geographical systems which means manifestation and effects periodicity, system sensitivity to changes, convergence and divergence as change effects.
- Space and time scales inducing difficulties in the monitoring process as short-term, middle term and long term operations require various means and techniques and the answers shall have various precision notes.
- The instruments and the methods employed for the assessment of changes bear the mark of the application field (geo-morphologic, hydrologic, meteorological, demographic, tourist, economic ...)
- An integrated monitoring imposes acutely in the current stage of geographical investigation.

Monitoring methods – are either common or specific. Therefore, repetitive topographical elevations are frequently used and applied in various geographical areas with significant results.

Referential markers are widely used to monitor the rates of change (for instance, soil erosion, cross profile of river beds ...)

Monitoring equipments (strain gauge, piezometer, tide gauge, weather station ...) with the surveillance of various processes in geographical dynamics.

Marking-based monitoring and special equipments installed in experimental fields.

Respective **satellite images (photographs)** used to cover broader areas and complex issues (movement of sand dunes in the desert, game spread, iceberg movement ...). According to these images we may see the world in parts or as a whole.

In order to exhaust this technical issue with predictive valences, for the good development of geographical phenomena and processes, the presentation of idea has, in addition, the role to stimulate a detailed elaboration and syntheses to outline a various conception about supporting geographical predictions by means of specific and integrated monitoring. Normative Geography compels also to demarches in the practice of knowledge and geographical design.

2. Geographical management

The need for a good management of goods and places made the man, from the very first moment of his organization and groups inside his community to act also as a **manager**. From its strict economic meaning and business administration up to that of a **management science** involving ideas, theses, objectives, methods and practices put into society service, the area covered by the notion of management has gradually changed. The concept of management is considered to belong to engineers FR. Taylor (1856 – 1915) and (H. Fayol (1841-1925) as it was dedicated to the economic organizational space, of control and direction, of labour and company to attract maximum results.

According to P. Giştescu (2000), management would have 2 meanings: “Within the strict meaning of the word, it is reduced to current, operative management, the accomplishment of manager’s intentions against his subordinated people.

Within the broad meaning of the word, management is the administration by means of a complex human activity as it comprises management, administration, company running.”

Details about management contents and significance are mainly found in the works published by economists defining also the relation of management, administration, company running, resources economy, husbandry, management principles, the application area ...

For explanations and details, they usually resort to the theory of systems.

The advantages of systematic approach to these issues would be as follows:

- it allows a full view and consideration
- it helps to discern the functions and the relations in the territorial realities at various scale levels
- it provides with the possibility to dimension natural as well as social and economic processes according to the targeted goals

- it allows to notice geographical states (of balance, of imbalance, homeostatic, homeothermic) and the tendencies which are likely to occur;
- it ensures for managers the formation of a fully thinking and the drawing up of the plans and of projects by unitary and specific criteria in which connections and synergism are required.
- Especially, in the works of H. Fayol (1841 – 1925) it is shown that management has five functions which shall be permanently valid:
 - **Prediction**
 - Institutional and operative **organization**
 - **Order** activating the goal;
 - Process **coordination** through connections, adaptations, joint efforts;
 - **Control** which means the surveillance ensuring that the action should develop according to the established rules and the order given.

Management attributes dimensions and regulates the whole system of planning launching, direction and assessment at various organizational levels (knowledge, processing, decision ...)

Geographical management comprises the so-called problems, responsibilities, organisms and factors so that a broad generalization about it becomes difficult. Generally, environmental management comprises four major stages:

- problem **identification**
- **formulation** tactics, practice and the planning project;
- **implementation** project
- methods of **assessment** project.

Politics, problems and projects can be applied at various space and time scales and can involve numerous organisms, agencies and various interests.

Managerial responsibilities depend on the considered time and space scales. Generally, the geographical managerial level shall also depend on the nature of the identified problems.

There's also the possibility to make a hierarchy of a complex of agencies, organisms and groups. We shall point out here that management is not an isolated action; it is interdependent and represents a central function of society.

Management approach could be: structural, organic, logical, historical, chronological, global, naturalist on the one hand and integral, morphological, typological, functional, interdisciplinary and systematic on the other hand.

The participation of Geography scientists regardless of their specialisation in the actual territorial management is, first of all, for scientific information, obtained and supplied at various users. Quite often, Geography scientists

may set up the bases of data gathering on the field (databases), data which are not only numerical, but rather often cartographical and written (clearly oriented reports or studies).

Participation is only indirect but also direct, through **launched ideas** (strategies objectives, programmes, politics ...), **trained people** (with academic training), **relations built** and **promoted** in practical systems ...

In fact, geographical managerial field, regardless of who acts is polyfunctional and comprises:

- evolution and state **administration**;
- resource **economy** to the extent to which it could provide the future generations with the change of living (a sustainable chance of living).
- Asset **husbandry** in such a way as to avoid dissipation
- Development **forecast** from individual level (economic) to local, regional and global level.

By those specified above, we tried to outline a step from manufacturing (company) management to all-inclusive (integrated) management regardless of the level of approach (individual, group, local, regional, global).

Certainly, future will come with new ideas, visions, the details necessary for a complex geographical management.

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