

ALBANIAN DEVELOPMENTS IN COMMON FIELDS

Prof. Dr. Ergjin Samimi

Director of the Geographic Studies Center

Rr." Murat Toptani" Nr.11. Tirana (AL)

Tel. & Fax 00 355 42 27985

As. Prof. Dr. Agim Shehu

Scientific and Technique Information and Documentation Center

Rr."Leke Dukagjini" Nr.5 Tirana (AL)

Commission IV, Working Group 3

KEY WORD: Albanian Cartography today, tomorrow

ABSTRACT

In the history of Albanian Cartography, the 1994-th year is qualified as an epochal year. So the innition of the program realizing for airphotographic surveying of the Western Lowland as well as cadastral and urban map compiling with current technics and technology on the one hand and the application of the computer technology relatively sophisticated, at the Geographic Studies Center for the thematic maps and atlases compiling, constitute two essential stones of this epoch. The Albanian cartography will be developed in the future with current technics and technology, with ambitious tendencies to contribute in all activities of the society.

INTRODUCTION

In our former articles (Samimi,1993 a. Shehu, 1994) we have spoken briefly on the history of cartographic works revolution in Albania, from Antiquities until 1992.

In 1992 with deep social-political changes in Albania, in favor of democratic forces, the cartography was facing with very important theoretic and practical duties solution. To realize this, a decisive role have played: the material-economical help and the assistance of Home of Europe' States (England, Germany, Austria, Italy) and U.S.A.; the serious engagement of the Democratic Government, the initiatives and interests of our specialists, etc.

We think in the history of Albanian history of Cartography, the 1994- th year is qualified as an epochal year. So the innition of the program realizing for airphotographic survey of the Western Lowland as well as cadastral and urban map compiling with current technics and

technology on the one hand and the applicative of the computer technology relatively sophisticated, at the Geographic Studies Center for the thematic maps and atlases compiling, content of two essential stones of this epoch. The Albanian cartography will be developed in the future with current technics and technology, with ambitious tendencies to contribute in all activities of the society.

The ever since results testify the new technology for cartographic aims has influences positively and strong in all the activities levels of the society, specially in economy, science, education, culture, etc. It has opened wide roads for realizing in time many problems which require emergent solution in the immediate future, when the presence of maps and atlases of different thematic is indispensable and unreplaceable.

Such problems are: (Samimi, 1995 b)

- The compiling of monoplanes and exactness of regional plans for the universal managing and monitoring of the country.

- The complex and optimal assessment of the biological and geographical potentials of every region of the country.

- Founding the best solution for the utilization of every region forecasting the protection and reviewing of the environment, etc.

All state and private institutions, scientific and education ones, where the study or compiling of maps is connected with their daily activity are provided with computerized technics and technology. It is forecasted in the perspective, those institutions to be furnished with sophisticated equipments.

THE CADASTRAL MAPS

In the end of '40-s the Agrarian Branch (today Land Research Institute), developed the triangulation and takeometric survey in scale 1:2500, in some zone of Western Lowland.

The triangulation was projected on the Bessel ellipsoid and in the projection Gauss-Kryger, with main meridian $Lo=20^{\circ}00'$. Were compiled 535 planshets with sizes 90x60cm.

On '60-s and further on the surveying was extended on the hilly zones, in scale 1:5000. As an ellipsoid was accepted Krasovski, the projection remained that's of maps in scale 1:2500, the central meridian was replaced at $Lo=21^{\circ}00'$. Were compiled 2050 trapezium, which content the geographic and kilometric network.

The privatization of the properties on 1992 and further on, brought the division of former parcels in small units, which cannot be reflected in scale 1:5000. To that, now in Albania is functioning the Program of Immovable Property Registration System (IPRS), in order to realize a modern system of registration and to hand the needful information about them in every moment.

IPRS is assisted from technical and economical assistance by USAID and EU PHARE and has defined two main duties:

1. For the emergent needs of properties registration, to be realized in country scale new maps in scale 1:2500, by enlargement the maps 1:5000 by photomechanical methods and their

application in terrain.

2. To be compiled new cadastral maps on base of airphotographic surveying.

For both of them the work has started and goes on with intensity. On 1994 the airphotographic surveying covered an area of 4000 km² of Western Lowland. The processing of materials and maps compiling is being realized in the analytic stereoplotter D-40. Until the end of 1996 it is forecasted to be elaborated 2000 km², while the rest on 1997. On the 1997 will be realized the airphotographic surveying on 3000 km² area and so on for the whole country, whose processing is forecasting to be realized by sophisticated instruments of Stereodigit type.

To emergent needs, the maps prepared by the stereoplotter D-40 constitute only the situation of the surveying sectors, later they will constitute also the relief. The compiling is realized in scale 1:1000 (for the main human habitations) and 1:2500 for the rural zones.

THEMATIC MAPS

Until 1994 all kinds of maps were prepared by classic technics and technology, right now this method is used seldom. Today the main weight has the computerized cartography in many Institutions the computerized equipment are of AutoCAD and H-P 520 type, with format A4, when all Albania should be reviewed in scale 1:1250 000. Still one trying to ensure more advanced technics and larger format.

The computerized technics that exists at the Geographic Studies Center (GSC) in Tirana, installed on 1994 is of WST and PC ARC/INFO type with work format A0 and it is the only one in Albania. The fact underlines the very beginnings of the computerized Geographic Information System (Samimi, 1994,b). This technique was based on the extraordinary efforts of Prof. D.Bickmore, Prof. V.Freitag, Mr. W. Franklin, Mr. E. Füsselberger, etc to whom we are deeply grateful.

The equipment installed at the G.S.C are an integrated system, very sophisticated IBM, HW and ESRI-SW.

Nowadays is trying for the consolidation of the

GIS unit with the new equipment, capable to work with satellite images and to integrated in our schools.

pp. 397-403.

Among the main important workings that have realized until now the G.S.C, we mention:

- * digitizing of the topographic maps' contain on scale 1:100 000 in all Albanian territory.
- * compiling and publishing of some thematic maps by the "Geographic Atlas of Agriculture" on scale 1:100 000.
- * study of the new administrative organization of Albania in Republic, district and commune level. In these aspect the study create the data base of the sources to support the various analyze for any kind element of the environment of the society.

To the immediate future the G.S.C intends:

- * To set up small GIS multipurpose units in other institutions or districts, also in getting hold of a field lab for geographical researches in addition to have a GIS NETWORK in national and international level.
- * To give its scientific contribution in transmitting the current knowledge.
- * G.S.C ought to become a coordinative, consultative and projector Institution taking the role of the technical assistance for the implementation of the new technology.
- * All activity aims in getting Europeans levels of management and in its protection and preservation.

All these are common problems for Albania and the computerized Albanian Geography promises to solve these problems by the qualification and High Technology.

References

1. Samimi, E. 1993 a. Atlas Cartography in Albania ICA, Proceedings 2, Cologne, pp 829 - 837
2. Samimi, E. 1995 b. Geographical Information Systems in Albania In: "Geogr.Studies", 7 Tirana, pp 86-88
3. Shehu, A. 1994 The development of Cartography in Albania during the 20-th century. In: Intern. Archives of Photogr. and Rem. Sensing, Athens, vol.30, part 4,