

NATIONAL AND REGIONAL ATLASES: A CASE STUDY ON NECESSARY ELEMENTS NEEDED TO PREPARE AN ATLAS OF NEPAL FOR SECONDARY LEVEL STUDENTS.

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INTRODUCTION

The literary meaning of "Atlas" is a volume of maps. Historically the term refers to the Greek god of the old family, who held up, pillars of universe (Encyclopaedia and Dictionary, 1978). Although the collection of maps had begun to appear some years before the name "Atlas" was applied to them. Before the year 1570, the collection was called the Lafreri Atlas. Antonio Lafreri, an engraver and map-seller in Rome, engraved, about the year 1570, an elaborate title page for his collection and, among the figure represented was that of "Atlas", this being the first occasion known on which this symbol was used. Rumold Mercator caused the term "Atlas" to be universally adopted for map collection (Lock, 1976). Since the sixteenth century, unaccountable atlases have been published so far.

The conception of an atlas thereafter was a collection of maps brought together with some unifying characteristics. Such an adorned collection is still referred to as being in the "classical" tradition of atlas design.

Atlases usually contain gazetteers of named places and features. They are made for the purpose of supplying detailed information about physical and socio-economic conditions of a country or a region and serve both scientific and practical purpose.

The making of national and regional atlases is a cartographic task of high priority in all developed and developing countries. Atlases are generally considered a higher form of cartography, as in their production there is both an extra planning and an extra structural dimension. It is not just one map that has to be ready at a specific time, but perhaps a hundred, and these maps have to relate to one another (Kraah & Ormeling, 1996)

Atlases are very important in education. If the students learn and understand the form and features of the landscape of the country and human imprint on the physical environment, they can understand the country's situation and location in the world. They can even analyse, think and correlate or rationalise the events relating to the social lives of the people.

Objectives of atlases depend upon the purpose of the map and map - users. However, the most important objective is to convey the geographical facts and to transfer the knowledge and ideas to the students through different kinds of maps. In other words

“Objectives of atlases” may include the introduction of children to their environment or to access global information in a reference atlas” (Kraak & Ormeling, 1996)

NEED FOR AN ATLAS OF NEPAL FOR SECONDARY LEVEL STUDENTS

Atlases are very important in secondary education, which is the foundation of future education. Maps included in an atlas are the best medium through which students can learn and understand their country in a better way. Thus they can actively participate in the various development activities in the country.

There are volumes of atlases published by the reputed organisations of the world, but enough information on different aspects of Nepal is difficult to find. These atlases provide information about the countries of the world in general and about a particular country (i.e. atlas producing country) in detail. This inadequate information on Nepal has remained a major problem in teaching and learning geography in secondary schools.

In fact, geography in Nepal has existed as an academic discipline for over five decades. One of the problems in geographical studies has been the lack of educational facilities available at school and colleges. Geographical education in developing country like Nepal has to serve two main purposes.

First, it has to make students aware of the country’s physical, socio-economic and development situation, and second, it has to make students familiar with the position of Nepal in the world. This is possible only through the use of appropriate tools such as maps and atlases. It is said that 99% of geography can be learnt through maps and atlases.

So far the development of atlases in Nepal is very limited. There is no atlas which is produced out of systematic research and planning except “Nepal: Atlas of Economic Development” (a thematic atlas). This atlas also has many drawbacks in cartographic presentation.

Although the use of atlases by students in Nepal at secondary level has been limited. In addition, a concise and easy atlas of Nepal is not available. Those available are either specific (e.g. Nepal: Atlas of Economic Development, 1981) or too thorough (e.g. Nepal in Map, 1988) to be required by the students of the grade under review. So there does not exist an atlas of Nepal, which could fulfil the total needs of the students. This calls for a judicious work to make an atlas to be used by secondary level students.

As Ristor (1951) has expressed his view in his review of atlases, that no scientific and authentic atlas could be prepared without planning and preliminary research. Thus to direct the future course in constructing an atlas of Nepal, the preliminary study was carried out aiming at the secondary students and schools of the Kathmandu Valley.

STUDY AREA

Kathmandu valley was taken as the study area. The valley being the core area of the nation as well as the centre for all development activities, the major educational institutions are also located here. They enjoy relatively better facilities than the rest of the schools of the Kingdom. This being the case, the findings could only be generalised for the whole country with some reservations.

The Kathmandu Valley lies in the lesser Himalayas of Central Nepal and is located between 28°32'13" North to 28°49'0" North latitude and 85°11'31" to 85°31'38" East longitude. The valley comprises three administrative districts namely, Kathmandu, Bhaktapur and Lalitpur. Concentration of the important towns and cities is one of the most remarkable features of the valley.

Kathmandu valley is a "Bowl-shaped" tectonic basin surrounded on all sides by the mountains ranges such as Shivapuri, Nagarkot, Pulchoki, Nagarjun and Chandragiri, which have the highest of more than 2000 metres. The highest peak (2732m) lies on the north of the valley. The central part has an altitude of around 1300meters and rises towards the peripheral region.

In general, the valley's climate is temperate and the mean annual temperature is about 19°C. The valley receives an annual rainfall of 1400 mm and July is the wettest month with an average rainfall of 125mm.

Located within the Kathmandu valley, Kathmandu metropolitan city is the political, cultural and financial as well as educational focal centre of Nepal. Kathmandu has also religious value and historical importance, which attracts thousands of tourists and native people each year.

Information on Nepal

Location:

Latitude: 26°22'North to 30°27'North

Longitude: 80° 04' East to 88° 12' East

Border: China in the North, India in the South, East and West.

Size:

Area- 147,181 sq. km

Length- 885 km (East to West)

Width- non-uniform, mean width of 193 km, North to South

Population:

1981- 15,022,839

1991- 18,462,081

Growth Rate

2.08

The estimation made by Central Bureau of Statistics (CBS), Nepal had a population of 21.13 million in 1996 with a growth rate of 2.1 percent per annum.

Urban Population

1981- 6.4%

1991- 9.6%

Urban Areas

1981- 23

1991- 36

1997- 58

Metropolitan and Capital city:

Kathmandu

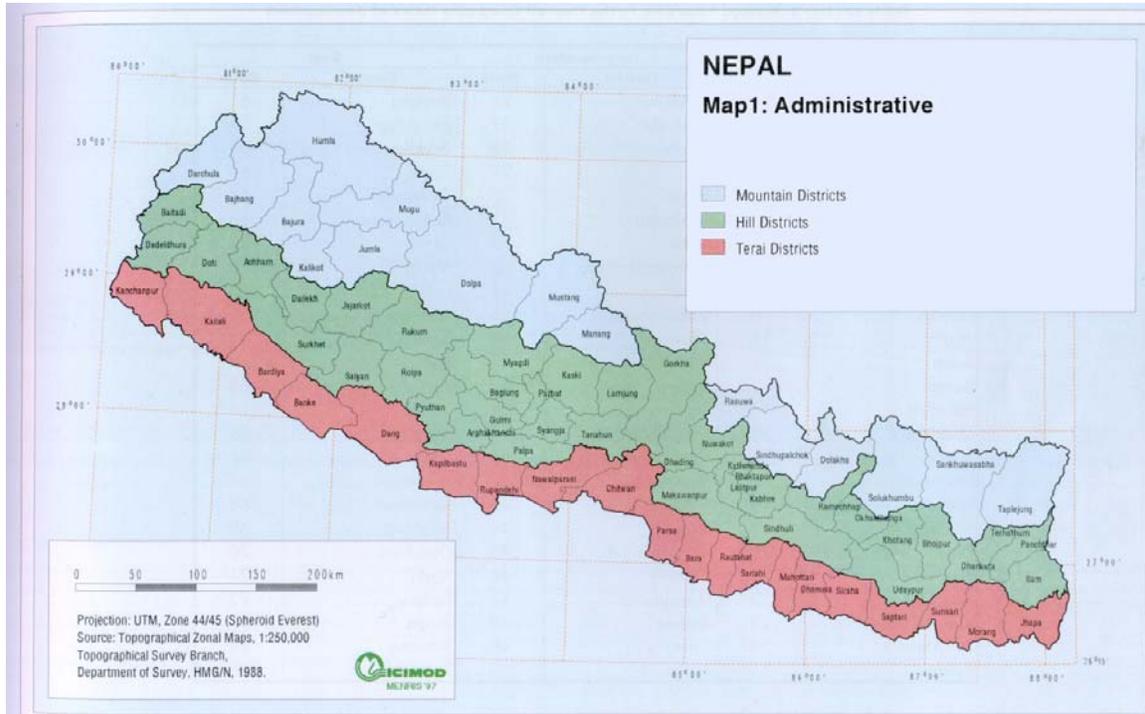
Sub-metropolitan city:

Lalitpur, Biratnagar and Pokhara

Ecologically Nepal is divided into three zones:

The Mountains, the Hills and the Terai.

Besides the ecological zones, the country is divided into five development regions and seventy-five districts as administrative divisions. (Map 1)



METHODOLOGY

The study was based on primary as well as secondary data. A list of 100 schools out of 139 total schools (statistical records, 1990) where Geography was taught as the major and the compulsory subject were prepared. 10% schools were selected for the study (i.e. 5 from Kathmandu, 3 from Lalitpur and 2 from Bhaktapur).

The list of students studying in grades 9 and 10 were prepared from the register of the schools. With the help of systematic random sampling 10% students were selected to administer the questionnaire. Information was solicited through two different questionnaires (a) for the geography teacher (b) for the students.

All the subject teachers were interviewed personally. In order to get better idea, proper guideline and suggestions, sixteen prominent and professional geographers of Nepal were consulted.

All the syllabus, curriculum and question pattern of secondary education were reviewed before designing the questionnaire.

FINDINGS

An atlas with various maps of diverse magnitude helps a student to understand the practical value of the subject. Maps have been used for centuries to visualize spatial data (Geographical information). Inclusion of informative maps in an atlas is the key to the geographical facts of the country. To enhance the atlas further a sample atlas of Nepal was suggested. Apart from the informative and detailed maps, instructions regarding map reading, understanding scales and symbolism would definitely help both teachers and students in teaching and learning process in general. All the teachers/students and geographers expressed that the atlas should be constructed according to the syllabus and priced within the means of most individuals. To fulfil the actual purpose of the students and teachers in learning/teaching geography of Nepal, it would be better to have an atlas prepared in one's own native country.

CONCLUSION

The present system of geography education however leaves much to be desired. The real situation is very ironical. It demands a very pragmatic approach to solve the problems. The system of teaching geography, syllabus, question pattern and examination should be improved. All these, of course, will require a long-term effort and calls for substantial changes which are hard to come by in a tradition bound education system. However, the time has come to present changed political system to restructure the education system which could provide true, scientific, life oriented education to the students.

In this context to provide education which could make students enable to question, think, analyse and correlate or rationalize the events relating to the social lives of people, social studies is being introduced as a compulsory subject at secondary level by the government from July, 1999. Although more than 50% weight is given to geography portion, in the absence of appropriate educational tools such as map and atlases teachers feel difficulty in teaching geography to students.

Curriculum Development Center (CDC) had conducted a seminar workshop on social studies in collaboration with Secondary Education Development Project (SEDIP) and Department For International Development (DFID) during March, 1999. One of the findings of seminar was to develop the quality textbooks, teaching guide and educational supporting tools to make them available throughout Nepal (CDC, 1999). In this context to fulfil the lacuna between teaching and learning process, atlas, as one of the educational tools, plays a vital role in delivering qualitative education.

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Note:

Based on above study, to draw the attention of the policy maker, planners, educators and geographers author could convince Prof.Pushker Bajracharya Ph, D., former Executive Director of CEDA in allocating a small amount of budget .So an atlas of Nepal on Sample basis was prepared. It was published by CEDA in 1997

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