



HISTORY OF METROLOGY AND ITS ORIGIN

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ANNOTATION:

This article describes the history of the cylindric output of metrology, the metrology of Central Asia, the contribution of our ancestors, and the history of the European measurement system

KEYWORDS: socio-economic, cultural history, Moses al-Khwarizmi, anthropometric

Introduction

The Greek word for "metrology" means to read metros-width and logos, to read about latiness, and in a more accurate sense to be a fan of measurements. The task of modern historical metrology is to highlight the history of units of measurement used at different times of human history and their compliance with modern units of measurement, bringing the unique heritage of our ancestors to future generations. Historical metrology is necessary in studying socio-economic, economic, legal, cultural history. The development of measurements is primarily related to the manufacturing situations of society.

MAIN SECTION

Some sources note that since the late 19th century, the term metrology has been used in books and tracts. However, our ancestors laid the foundation for measuring science for a long time. A number of information about units of measurement and measurement is presented in the works of the great scholar Abu Abdullah Muhammad ibn Moses al-Khwarizmi, while the great scholar Ahmad Fargo was the first in the world (861 B.C.E.) to discover and implement a tool measuring water level.

Joseph José Khojib's Turkish-language "Knowledge of God" not only uses units of measurement and measurement but also calls for perfect knowledge of measurement and good deeds. The Uzbek people, who had a rich cultural heritage and contributed invaluable to the treasure trove of world science, have long played a major role in the field of measurement and its development. There were professionals involved in measuring science.

There are more than 20,000 historically written sources that have not been studied in our country's libraries, archives and museums, and of course you will encounter units of measurement that have been used in the distant past if you scroll through them. Information on the history of ancient units of measurement included in the manual serves as an important resource in studying the history of the peoples of Central Asia and our country.

Units of old measurement

Our ancestors have long laid a full stone on its foundation. Initially, they found the methods necessary to measure the time, length, surface, volume and weight needed in their daily activities and used them



in practice. The oldest units of measurement are anthropometric, i.e. measuring units that originate based on compatibility or inclination to certain human organs. Indeed, when measuring time, they used such terms as early, late, day, night, day and night, while measuring length, they used step by step, ear, finger, elbow, as well as barley or wheat grain or horse road. They measured surfaces and volumes by comparing them to other known surfaces or sizes. To measure weight, one thing was compared to the weight of the other, mainly grains of grain (barley, wheat, peas and hakoza) and fruits (calves, nuts, and haqozo). Such simple methods of measuring were enough for the daily activities of our ancestors at that time.

The Uzbek people, who had a rich cultural heritage and contributed greatly to the treasure trove of world science, have long placed great emphasis on the field of measurement and its development. Therefore, our people have created hundreds of links related to this area: If you feed the garden, it will be a garden, there will be botmon-botmon fat, "With salt, with salt measurements," "Seven measurements, one cut," "Everywhere has a small bottle," "Everyone measures with their old age," "Everywhere you want to do it, everywhere is stone-balance," and hakoza.

A number of data on units of measurement and measurement are presented in the section of the algebraic book About Measurements by the great Khmer Rouge scholar Abu Abdullah Muhammad ibn Moses al-Khwarizmi on geometry. In this case, the scientist attached great importance to finding length, surfaces, and volumes by way of calculation and measurement. It provides good information about measuring instruments such as tanob, gas, fingerprints, and measuring wood, and provides guidance for their application in practice. In his essay "The Book on The Hours of the Sun," Horazmi also contributed appropriately to the field of measurement. The great scholar Ahmad Fargo was the first in the world (861 B.C.E.) to discover and implement a tool measuring water levels. He also wrote the book The Book on the Making of the Sun's Clock and contributed to the development of measurement.

The emphasis on measurement work in our country, namely, measurement, can be found in the works of Amir Temur, Alisher Navoi, Zachriddin Muhammad Babur, and dozens of other scholars and philosophers written in Turkish in 1310 by Rabshakh, the son of Noshruddin Burxonuddin. Measurement and measurement units used to measure water levels are also created by our people, and units of measurement, such as "Ear" and "Milling," can be examples of this.

Their values are very close to each other as the names of time, length, surface, volume, weight and other units of measurement, discovered by the peoples of the world for several thousand years, vary. At the initial stage of human development, people needed to measure it or these sizes. In the Middle East, a measure of longiation has long been carried out using a member of the human body, as well as the width of the grain and the width of the horse road, while secondly, wheat and barley grains are used as weight measurements. From central Asia, because the passage of the great silk road, located between the west and the east, units of measurement and measurement discovered by our ancestors were scattered on all sides of the world and were sometimes translated into our own language, or not, by the peoples of that direction.

That is why one of the many researchers in the units of measurement and measurement used in Muslim countries, including Central Asia, is German scientist V. Heins. He has done a great job by bringing in



units of measurement and measurement used in Muslim countries in the region from Maroqash to India in his manual.

CONCLUSION

Our ancestors strictly controlled the proper use of measurements without justifying the maximum units of measurement. Historical sources have written that those who betrayed the buyer's fee on balance or gas have been severely punished.

... It is no secret that Ibn Sino, Abu Rayhan Sha'drach, Me'shach and A-bed'ne-go used local units of measurement to insert their names into eternity. The towers of Samaria, Bukhara, and Sha'drach, Me'shach and A-bed'ne-go were built on those units of measurement.

COVER SUBJECT:

1. Buyuk siymolar, allomar. 2- kitob. T- 1996 .
2. T. Choriyeu. A.Do'stov. History and chronology of calendars. Q-2002.
3. Karimov I.A. There is no unscrupulous cleagean. T., 1998.
4. Karimova I.A. Jahon's financial and economic crisis, ways and means to overcome it in Uzbekistan. T., 2009.
5. T.Choriyeu. A. Dostov. Chronology.T- "New Century Generation" -2003.