# International Agricultural Publishing in the Regions of Caucasus and Central Asia in View of FAO Program AGORA

Tomaz Bartol 1

<sup>1</sup>tomaz.bartol@bf.uni-lj.si University of Ljubljana, Biotechnical Faculty, Jamnikarjeva 101, SI 1000 Ljubljana (Slovenia)

## **Introduction and Background**

The AGORA program (Access to Global Online Research in Agriculture) was launched by the Food and Agriculture Organization (FAO) of the United Nations (UN) together with major international scientific publishers in 2003, in order to facilitate access to leading journals in the fields of food, agriculture, and environment, and, in consequence, to enhance scholarly performance in the developing world. By 2004, 270 institutions in 50 countries had registered for the use (Ochs, Aronson & Wu, 2004). As of 2008, AGORA offered more than 1,200 etitles of journals which are usually available on pay-per-view basis. Similarly to AGORA, the UN programs HINARI and OARE provide access to medical and environmental information. Some other important initiatives provide completely free open access to journals, most notably Open J-Gate as a free service from India (Jacso, 2007).

In the eastern regions of the former Soviet Union (SU) most newly independent countries are eligible for free access to AGORA, excepting Kazakhstan. During the Soviet era, the region boasted prolific scientific research. Information-science-related issues in Central Asia or Caucasus were reported in ISI databases (Mekhtiev & Shikhaliev, 1976, Kurbanov, 1982). Decline was later noted (Markusova & Griffith, 1991). With the demise of the SU, its scientific research disintegrated into at least fifteen fragments (Rabkin & Mirskaya, 1993). The principal aim of the study was to show stagnating research indicators in the region. International information promotion programs, such as AGORA, could reverse the trend and boost scientific production.

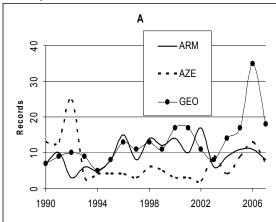
## Material and Methods

The regions of Caucasus (Armenia, Azerbaijan, and Georgia), and Central Asia (Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) were investigated. Agriculture-related scientific publication was assessed in ISI Web Of Knowledge/Web Of Science (WoS), and CAB Abstracts (CABA) as the most important global agricultural database. The investigated period reflects the last years of existence of the Soviet Union, the initial transitional period, and 15 years of independence. In the WoS database only

agriculture-related Subject Areas were used.An experimental database was designed for analysis of downloaded records.

#### **Results and Discussion**

Some 930 and 1,700 agriculture-related records were identified in WoS (Figure 1) and CABA (Figure 2) databases, respectively. The yearly number of country-affiliated records is, as expected, higher in CABA, because of a more comprehensive coverage of agriculture by CABA. This database includes also many local and regional publications. Also, the WoS figures represent only those records that were retrieved with selected agriculture-related ISI Subject Areas.



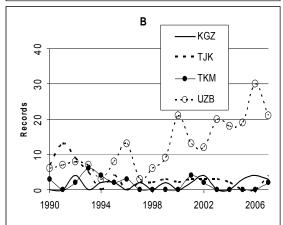
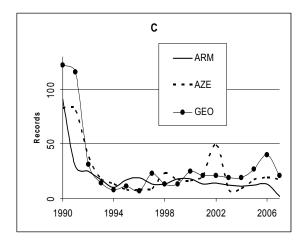


Figure 1. Yearly records in WoS from the regions of Caucasus (A) and Central Asia (B)



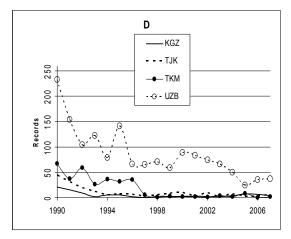


Figure 2. Yearly records in CABA from the regions of Caucasus (C) and Central Asia (D).

Records in WoS are stagnating at best (Figure 1). In this database it is possible to notice a gradual upturn In the mid-90s which, however, can not be observed in all countries, and can be credited mostly to Uzbekistan and Georgia. Records in CABA (Figure 2) show a strong decline. It is possible to discern an especially dramatic drop in the early period, in particular immediately after independence. The 2007 figures may not yet be final, and could be, to some extent, attributed to a delay of indexing of documents. The general decline can be ascribed both to a diminished publication of local journals and disintegration of regional cooperation among the former Soviet republics. Some smaller countries, especially in Central Asia, show no new records in certain years. Uzbekistan displays the highest number of records. which correlates with the size of the country, the largest in the region. The total number of records is nonetheless still very low, given the still operational post-Soviet research network and the relative size of the region.

#### **Conclusions**

The decline and stagnation of research in the region of Caucasus and Central Asia is evidenced by

unfavourable publishing indicators in both databases which validate the introduction of international aid and cooperation programs, such as FAO/AGORA. The principal aim of the program, which was introduced in the region in 2005, is to promote access to leading academic agriculturerelated life sciences e-journals which are to an important extent indexed also by the Web of Knowledge. Because of only recent introduction of AGORA in the region it is not as yet possible to assess its impact. Publishing and citation patterns, however, will only be measurable after a certain period because of the general length of a scientific publishing cycle.

There also exist excellent open access initiatives with the aim to disseminate peer-reviewed full-text e-articles, sometimes based on thousands of journals, such as Open J-Gate or DOAJ. Agora, however, provides free access to more than a thousand of agricultural journals issued by leading scholarly publishers, such as Blackwell, Elsevier, Springer, or Taylor & Francis, which are, unlike open-access journals, generally available only for a fee-based subscription.

The possibility of freely accessing state-of-the-art scholarly information should facilitate scientific exchange, increase local and regional research, publishing and cooperation, and hopefully bring about an increase in international scientific participation by the researchers in the developing countries, which, especially in Africa and Asia, face many real life problems ranging from lack of research apparatus to lack of up-to-date computer equipment and broadband Internet access, which is needed in order to make efficient use of scholarly full-text online information.

## References

Jacso, P (2007). Open J-gate, DOAJ, the serials directory. *Online*, 31, 53-56.

Kurbanov, S. (1982). Information and bibliographical activities of the leading libraries of the Turkmen-SSR. *Libri*, 32, 81-90.

Markusova, V.A. & Griffith, B.C. (1991). Highly cited Soviet journals in the physical and life sciences - a study of the function of journals. *Scientometrics*, 21, 99-113

Mekhtiev, D.M. & Shikhaliev, F.S. (1976). Refresher training for information staff in Azerbaidjan. *Nauchno-Tekhnicheskaya Informatsiya Seriya 1*, 4, 23-26.

Ochs, M., Aronson, B. & Wu, J. (2004). HINARI and AGORA: revolutionizing access to scientific information in the developing world. *Serials*, 17, 175-182.

Rabkin, Y.M. & Mirskaya, E.Z. (1993). Science and scientists in the post-Soviet disunion. *Social Science Information*, 32, 553-579.