

# **Sustainable Development Field Mapping: A Case of ISSD 2012**

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## **Abstract**

The purpose of this study was to analyse the nature of research preoccupying participants in the Third International Symposium on Sustainable Development (ISSD 2012) in Sarajevo, Bosnia and Herzegovina, from 31May - 1June 2012. It involved the analysis of abstracts and papers submitted for presentation and publication at ISSD 2012. Each submission was coded and entered into the Excel spreadsheet for quantitative and qualitative analyses. The results reveal dominant research groups, as well as the type of work that has the highest relevance to research and practice. These findings may serve as signposts for future research directions in the field.

**Keywords:** sustainable development, knowledge mapping, ISSD2012, literature review, protocol analysis

## **1. INTRODUCTION**

Knowledge networks and/or communities of practice are considered crucial for economic development and the achievement of local and global development goals. They are increasingly emerging as a new form of work which includes different actors and have the potential for knowledge creation and development performance.

According to Wenger, a pioneer and leading thinker in the field of organizational community, Communities of Practice (CoPs) are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis (Cox, 2005). More specifically, communities of practice are formed by individuals with different personal characteristics and capabilities, but with shared interest, who interact regularly through narration, collaboration and enculturation, applying common practices, using the same tools and expressing themselves in a common language in order to share ideas, strategies and experiences, learn from each other, determine solutions and build innovations to provide value to themselves and their organizations. Furthermore, additional advantage and aim of CoPs is to develop of a social capital and bring the socialisation and practice together.

The term „Communities of Practice“ is relatively new, but Communities of Practice are not. They started existing ever since people in organizations realized that sharing their knowledge with others is beneficial for solving problems and support to decision making (Nickols, 2003). The first Community of Practice was formed on a voluntary basis by the technicians in Xerox

Corporation with the aim of figuring out a way to diagnose and repair Xerox customers' copy machines. The results were invaluable for the company's business value and customers' satisfaction (Nickols, 2003). This is where the idea of this kind of communities came from, later followed by four works essential for the official formation of the idea and definition of a Communities of Practice:

First, Lave and Wenger (1991) proposed a new approach to understanding of learning as an interaction among practitioners, instead of traditional process in which a producer provides knowledge to a consumer (Kahan, 2004). They suggested observation and peripheral participation as the best practices of learning. At the same time, Brown and Duguid (1991) agreed with Lave and Wenger's statements at basic level, but they focused more on knowledge acquisition through narrative and improvisation by experts in community instead of reproduction of an existing practice. Then, Wenger (1998) finally defined a Community of Practice as a group that coheres through „mutual engagement“ on an appropriated enterprise, and creating a common repertoire (Cox, 2005). He also recognized the community members' identity as the key factor for the existence and success of the associations that stand for the Communities of Practice (Nickols, 2003). Wenger, McDermott and Synder (2002) redefined the Wenger's initial concept of Communities of Practice from 1998, focusing on the value of the Community of Practice as a management tool used for socialization, innovation and increasing a problem solving potential in large corporations, and defining the Communities of Practice as groups of people who are interested in the same thing, but with many diversities, that interact to share knowledge and insights, instead of to get the job done (Cox, 2005). This approach is widely accepted today.

Although the concept of Communities of Practice has been applied to business, organizational design, government, education, professional associations, development projects and civic life, most of the studies concentrate on their appliance specifically in organizations (Lave and Wenger, 1998). Mainly, CoPs originate and act primarily on self-organizing basis, without organization's management support. But very soon after they start adding value to organization's business by developing professional skills, helping organization recruit and retain talent, transferring best practices, solving problems very quickly and starting new lines of business, the management decides to make them more beneficial for the organization and supports them in every possible way, making them become sponsored CoPs in that way (Wenger and Snyder, 2000).

However, not every organizational group is a Community of Practice. While formal work groups, project teams and informal networks are formed necessarily by the management in order to deliver given task in specified period of time, the purpose of Communities of Practice is to develop members' capabilities and build knowledge and they last as long as there is interest in maintaining the group. They belong only to members who select themselves and passion, commitment and identification with the group's expertise are what hold them together (Odom and Starns, 2003).

The CoP's short-term value is seen outside of it, in actions of solving problems at the places the CoP's members act. In long-term, the value is twofold: over time the CoP's capacity and quality increases creating whole repository of knowledge and problems solved, furthermore, it

makes very positive effect to the development of social capital and socialisation, which is assumed to enable tacit knowledge, values and beliefs to be transferred between individuals through shared experience, space and time (Handzic, 2007).

The purpose of this paper is to examine the Third International Symposium on Sustainable Development (ISSD 2012) in Sarajevo as a case an evolving knowledge network/community of practice in the Balkan region.

## 2. Research Methodology

The character of ISSD 2012 was examined by the analysis of 343 papers/posters submitted by 683 authors. The first phase of the research required going through abstracts of all papers submitted and the extraction of participants, participants' countries, paper topics and keywords into Excel spreadsheets for analysis. After the duplicate records - in terms of participants and countries, were removed, the data were grouped into several categories in order to create corresponding charts and make conclusions. The keyword analysis tool was used for detection the most frequent keyword in abstracts.

## 3. Main Findings

The participants analysis found a total of 683 authors from four different continents. Since the symposium was held in the European country - Bosnia and Herzegovina, it was expected that the majority of the participants would come from Europe. However, the symposium accomplished a big success having participants from USA, Africa and Australia too, in the rates shown in Figure 1.

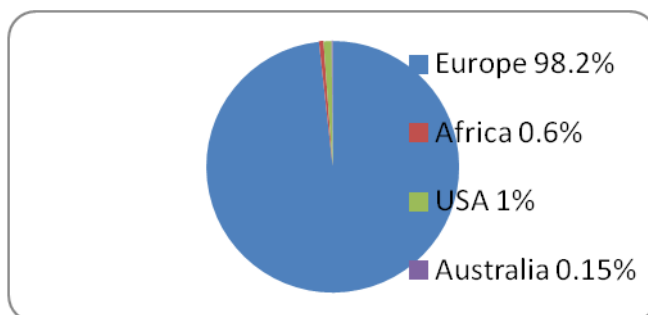


Figure 1. Demographic Analysis Results per Continents

Further analysis of the European attendance showed the main interest in the sustainable development research coming from eight European countries (with Turkey leading the group). The results presented in Figure 2 reveal a surprisingly intense response from foreign countries, that has even surpassed the host country.

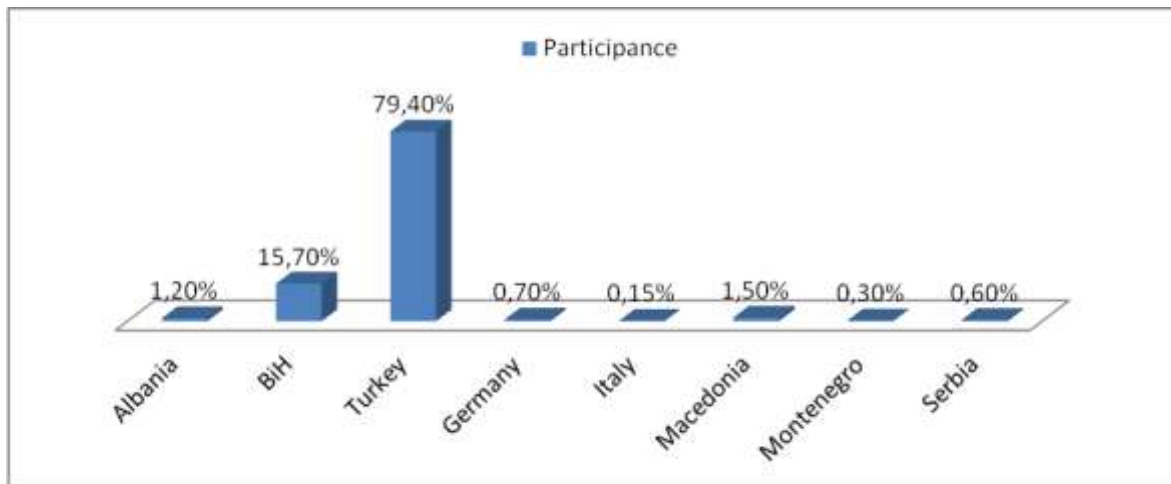


Figure 2. Demographic Analysis Results per European Countries

With respect to collaboration analysis, the results in Figure 3 indicate that participants preferred working in groups, mostly in groups of two (45%) and three (23%) people. Interestingly, one paper was co-authored by seven and one by nine people. This indicates that researchers recognize that team work and knowledge sharing is the fastest path to the quality and desired achievements. Given that one of the most important purposes of knowledge networks and communities of practice is collaboration and knowledge sharing, this is an encouraging finding.

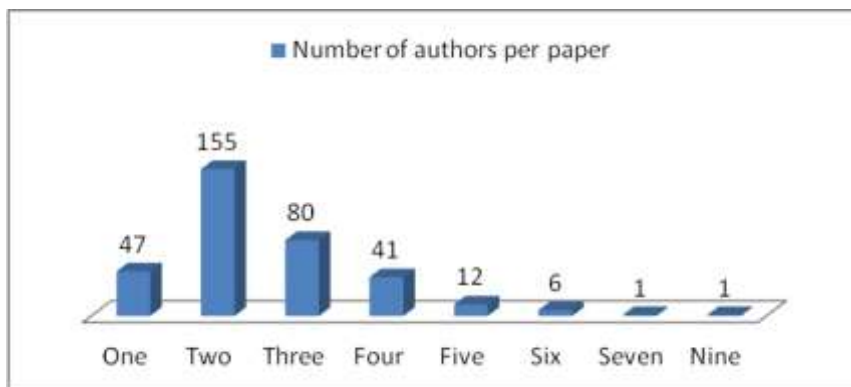


Figure 3. Collaboration Analysis Results

The results of track analysis, exploring themes and topics of most interest to the participants indicate similar spread of contributions across six different tracks. This is indicative of rich and diverse research culture. Detailed results are shown in Figure 4.

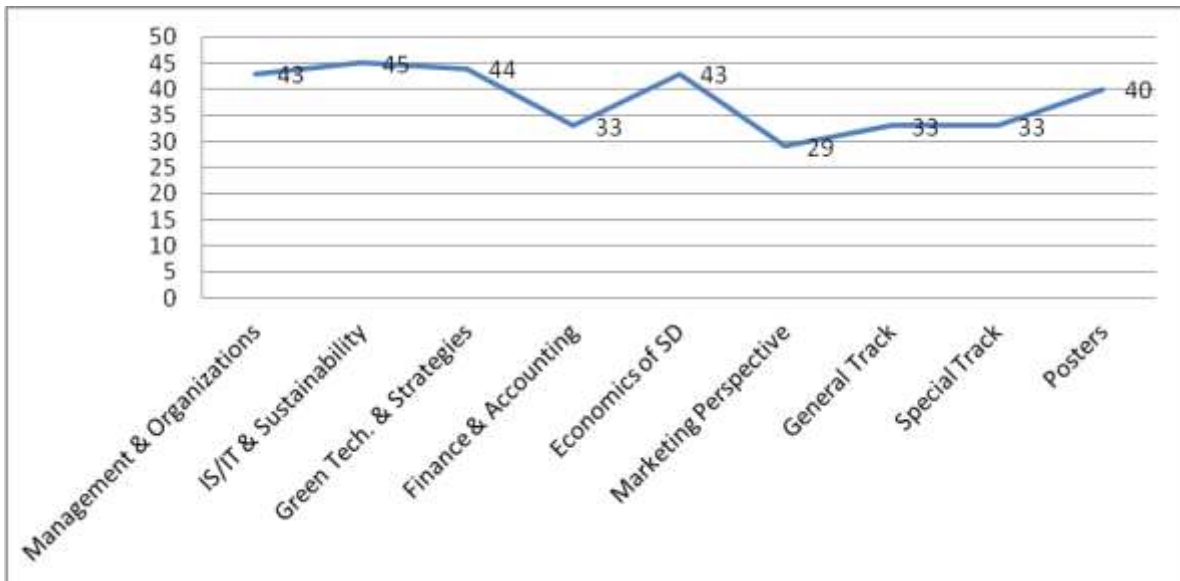


Figure 4. Track Analysis Results

The final keyword analysis, focused on the keywords provided within each of the abstracts submitted. The results presented in Figure 5 show only those words that were mentioned more than 10 times in keywording of each paper. Apart from 'sustainable development' and 'sustainability', most frequently mentioned keywords include 'management', 'economics', 'tourism' and 'Turkey'. The remaining keywords are spread evenly and reflect different conference tracks.

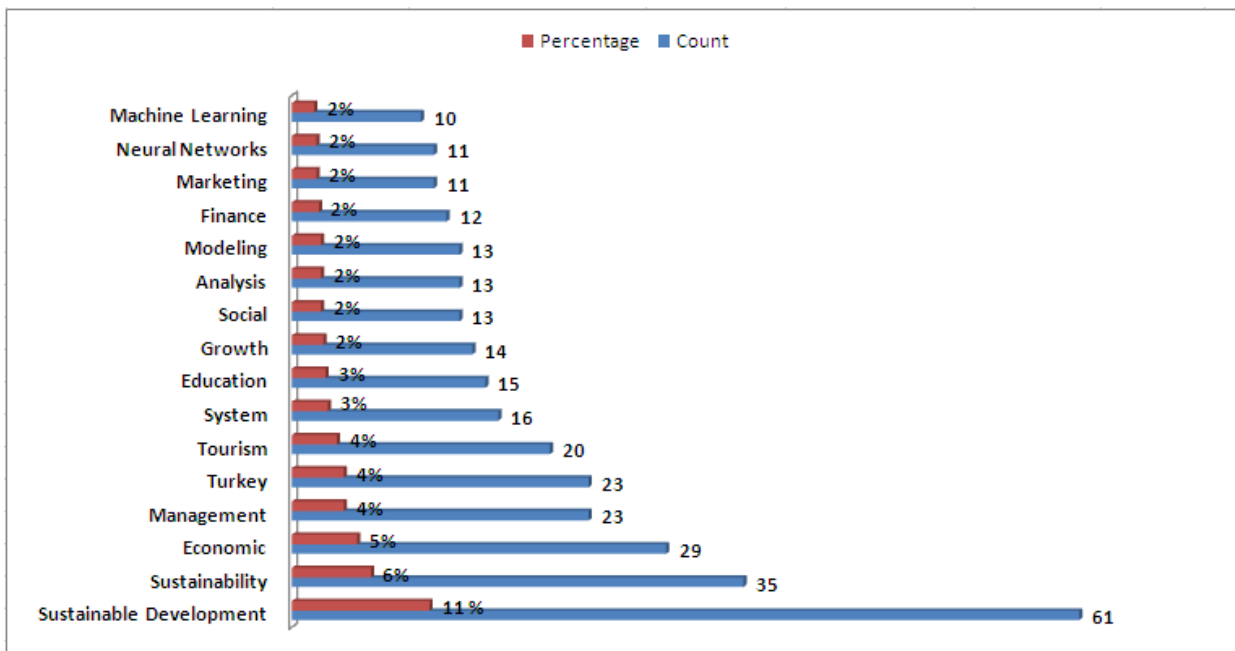


Figure 5. Keywords Analysis

#### 4.CONCLUSIONS

The main objective of this study was to analyse the nature of research presented at ISSD2012. With respect to participants, the study showed clear dominance of foreign (particularly Turkish) researchers over those coming from Bosnia, thus emphasising the international character of the event. Most papers were co-authored by two or more individuals coming from one or more different institutions, suggesting strong collaborative nature of research. All conference tracks attracted sufficient interest, indicating high thematic and topical diversity. While the finding of collaborative and diverse work is encouraging, the uneven geographic representation is of some concern. It suggests the need for paying more attention on promoting the event at local and regional levels, particularly among neighbouring countries.

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