Leadership for Sustainability of Socio-Ecological Systems

"Unity in Diversity" – "Humanity in Technology"

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The 60th Meeting of the ISSS in 2016 will address an urgent global need for leadership in academic and applied sectors of society to develop a worldwide *systemic sustainability agenda*, focused on the wellbeing and future health of *socio-ecological systems* (SES). We ask participants to focus urgent attention on the systemic balance between science, policy, ethics and human action needed to achieve greater synergy between natural and human systems, including technology. This requires new ways to understand and manage the complex socio-ecological interface, 'coupling' natural and human system models scientifically, culturally, and in practical applications; and integrating knowledge to realize a new paradigm for system wholeness. In particular we wish to build interdisciplinary and transdisciplinary partnerships to explore the relationship between 'crisis science', 'anticipatory science', and 'sustainability science', including ways to enhance resilience, ecological health, regeneration, adaptability, and creative potential in socio-ecological systems. We also call upon attendees to address critical development needs for achieving these goals through education, institutional cooperation, community to intergovernmental stewardship, management practice, entrepreneurial opportunities, and both individual and professional development.

The related concept of "Unity in Diversity" aims to enhance both diverse and shared qualities necessary to achieve sustainability, and to go beyond it to more creative planetary symbiosis. It captures our aspirations for a better future than is likely to result from disconnected or fragmented ideas and actions. Unity in Diversity recognizes the critical importance, necessity, and beauty of differences and discrete or individual processes, while also finding balance and harmony among those elements in nature and humanity. It means true holism, bringing together diverse philosophies in a new way that resolves conflicts in knowledge and society.

Similarly, the concept of "Humanity in Technology" recognizes an extremely bright technological future that is certainly coming, but that should be infused with and designed with humanity; i.e., truly appropriate technology for human development. It refers to a natural balance that has always been necessary between the goals and the means for living in all creatures. Technology is the capacity for doing, which throughout the ages has existed in relation to values, supporting them or savagely curtailing them. "Humanity in Technology" means harmonizing form and function to ensure human values we can agree on. Ancient wisdom, sometimes forgotten in modern times, tells us that 'means' cannot really be different in quality from their 'ends'; that they actually cultivate and characterize what we ultimately achieve and how that serves humanity.

Generally guided by these principles of wholeness and appropriate development, we are making a major effort to connect with other societies, government and non-government institutions, political sectors, community and individual actors, and academic disciplines involved in global stewardship. Sharp divisions have fragmented and compartmentalized our collective approaches, and we must now apply clear principles of both science and humanity so that we as a human colony no longer operate in opposition to the natural systems that sustain us. Feedbacks from the imbalances we have created are now threatening to degrade the quality and abundance of human and other life, and thus compelling us to find solutions.

2016 will be the Society's 60th birthday – "Shasti Poorthi" as it is celebrated in Vedic-Hindu tradition. It is a special time of entering maturity, marking one's transition from a material Being to a Spiritual Being with higher aspirations for humanity and one's own self-knowledge. It is therefore both fitting and symbolic that the 60th annual meeting of the ISSS will celebrate this renewal and rebirth in partnership with institutions in India. Recognizing our global heritage and joint responsibility we are planning a collaborative venue with Indian Institutions of Higher learning to build multi-cultural understanding, consensus, and exchange on key issues in system science and sustainability. Connecting scholars and professionals in India and the USA in real time creates a valuable opportunity to combine the unique talents of two cultures and their present and historical worldviews. But it also represents a sizeable technological challenge. Facilitating this connection will require advanced communication technology that is capable of exchanging much more than words and facts. We hope to create a semantic presence in which we may share deep scientific, political, cultural, and ethical contexts. We thus call on corporate involvement for a collaborative demonstration of the future of communication technology.

We will also mark our 60^{th} anniversary and 'coming of age' by entering a new phase of global responsibility. In 2016 we will inaugurate the first ISSS "Policy Congress" that will extend the reach of the system sciences to greater society by identifying systemic issues and creating policy recommendations for key decision-makers and institutions. Our conference should thus identify key issues and provide clear statements of fact, need, purpose, and action. We also wish to encourage new international education development, especially at graduate and professional levels, aimed at investigating and applying more whole system understanding from a multi-cultural perspective. We call for participation of ethicists and spiritualists representing a wide variety of organizations, to work in partnership with scientists and decision makers as we together envision the future of our unique planetary and human system.