Does the Generosity_Creativity_Solidarity Triad Matter on the Dual Domain: Knowledge Based Bio-Economy and Digital Business Ecosystems?

NICOLAE BULZ, ALEXANDRU BOGDAN, SORIN CHELMU, AMALIA STRATEANU
Center for Agroforestry Biodiversity Study and Research
Romanian Academy, National Institute for Economical Research
Casa Academiei, Corp A, et. 7, Calea 13 Septembrie nr.13, sector 5, 050711, Bucharest
ROMANIA
cscbas@yahoo.com, nbulz@yahoo.com, alecutbogdan@yahoo.com  http://biodiversitate.ince.ro/

Abstract: - The title and the content for this study is connected to the homonymous project (G_C_S KBBE & DBES) being a long term result, and having a scientific background within the Generosity – Creativity – Solidarity Consortium - as a 2008-2010 active interdisciplinary presence. This affirmation is justified, at least, through the presence of the GCS Consortium as a co-organizer of the two editions of the Interdisciplinary, International and Academic Summer School (i.e. July 2009 and July 2010, Romania), and the three (co-)authorship studies (published at the ISI level 2009/2010) on the main and correlated topics of just this project. Now, the entire team of the project (at this stage - 13 university and academic partners from UK, Ireland, The Netherlands, Poland, Hungary and Romania) will focalize the research according to the openness of the international scientific community toward the multi-thematic domain of the Knowledge-Based Bio-Economy (KBBE) and on the broader issues of the UN Millennium Goal and of the Lisbon Strategy for Growth and Jobs: Europe 2020.

Key-Words: - Agrosilvical biodiversity, Knowledge Transfer, Managerial risks and incertitude, West-East relations

1 Introduction
The main explanation of the concepts of the G_C_S KBBE & DBES proposed project is embedded into the title - as a multilevel inquiry: Does the Generosity_Creativity_Solidarity Triad Matter on the Dual Domain: Knowledge Based Bio-Economy and Digital Business Ecosystems?
This multilevel inquiry is revealing the three (also, multilevel / subsequently) main ideas that led this project G_C_S KBBE & DBES, and its issues:

Objective 1: The necessary Generosity_Creativity_Solidarity Triad to be innovatively involved within developing conceptual and praxis contexts related to Eastern and Western Worldwide and European efforts toward a higher and more equilibrated quality of life, and ascension on the levels of Knowledge-Based Bio-Economy (KBBE / as an important contemporary scientific and praxis approach related to the complexity of the problems and solutioning them regarding Food, Agriculture and Fisheries, and Biotechnology) and the broader issues of the UN Millennium Goal and of the Lisbon Strategy for Growth and Jobs: Europe 2020.

Objective 2: The conceptual and praxis innovative merging related to the Dual Domain: Knowledge Based Bio-Economy and Digital Business Ecosystems.

Objective 3: The construction - for each subdomain (Knowledge Based Bio-Economy / Digital Business Ecosystems) - of the conceptual and praxis “half”-interface to the other one, in order to fulfill the direction(s) proposed by the G_C_S KBBE & DBES project - as work programme topics (WPT):

(WPT I) Foresight: Identifying, and analyzing some major decisional, informational and actional related gaps in Eastern European countries, particularly in Romania, Hungary and Poland during the third decade of transition - 2011-2020, after the Cold War falling, within the Knowledge Society and Economy attempt - addressing the G_C_S KBBE & DBES issues.

(WPT II) Prospective Insight: Estimating the real positive decrease of the (WPT I identified and analyzed) gaps, supported by the effects of the:

A: expected (direct) Knowledge Transfer from West to East – according to the generating, organizing and acting of some interdisciplinary specialized micro-structures (research and on-line action) - addressing the G_C_S KBBE & DBES issues,

B: expected (reverse) Knowledge Transfer from East to West, regarding the comprehension on the available Eastern valuable resources and their state of low utilizability – according to the generating, organizing and acting of some (generally - the same as for the A, above) interdisciplinary specialized micro-
structures (research and on-line action) - addressing the G_C_S KBBE & DBES issues.

(WPT III) Organizing:
The above prospected specialized micro-structures would be real state projected and constructed after the finalizing of this project focalizations, within all the partners into the Generosity _ Creativity _ Solidarity Consortium, on:

AA: a primal (direct and reverse) Knowledge Transfer support,

BB: a stabilized differentiation of the initial perceived knot of complex Eastern World and Eastern European problems – starting within some samples,

CC: a quasi-stationary identification of the desirable nexus of representations and solutions - starting within these BB samples,

DD: attaining a direction toward an adaptation area. All addressing the G_C_S KBBE & DBES issues.

(WPT IV) Acting and Attaining:
To manage the inner strategy of the Consortium onto two horizons (of the period of the present project; and onto the next period); i.e. to attain, step by step:
A revision of the heterogeneous corpus “Knowledge Society and Economy, Information Society, the New Economy” within and across Worldwide and European Union enlargement and action scale, proposing / resulting new approaches onto the Eastern and Western Worldwide and European efforts toward a higher and more equilibrated quality of life, and ascension on the levels of Knowledge-Based Bio-Economy (as an important contemporary scientific and praxis nexus related to the complexity of the problems and solutioning them regarding Food, Agriculture and Fisheries, and Biotechnology) - addressing the G_C_S KBBE & DBES issues and the broader issues of the fight against poverty and sustainable growth - as:

AAA: ACTING issues (problems, managerial efforts, and solutions):
per se “Knowledge Based Bio-Economy / fork to farm - farm to fork: food (including seafood), health and well being / environmental sustainability in the Worldwide and European food and drink chain”.

BBB: ATTAINING issues (managerial efforts, and re-adaptation):
e.g. A Generosity _ Creativity _ Solidarity Triad (conceptual and praxis) involvement into the Dual Domain: Knowledge Based Bio-Economy and Digital Business Ecosystems.

From the large variety of activities which will be supported by this G_C_S KBBE & DBES project, the team will focalize the research mainly on the actual concepts/constructs [1], [3] as: Bio-Economy (within classic - Grigore Antipa, modern - Nicholas Georgescu-Roegen and contemporary approaches), Bioethics (within important subdomains specialization: rural, integrated rural, juridical, medical, societal attitude regarding animals), Ecosystems and Ecoeconomy (Lester R. Brown), sustainable development, environmental sustainability, green power, exergy, agro-food, seafood, genetic modified organisms, fork to farm - farm to fork, health and well being, food and drink chain - last but not least, sustainable survival - and all their possible conceptual and praxis reflexivity [2] within the actual development of the Computer Science, Informatics, Automatic Systems, Management, Complexity Science, Large Scale Systems.

The above mentioned focalization of the research may be just sustained because, there are the necessary information, concepts/constructs, knowledge, data to comprehend that the aims and realizations of the Generosity – Creativity – Solidarity Consortium are more consonant to the aims and realizations of the project focalizations, within all the BB samples, the broader issues of the fight against poverty and sustainable growth - as:

(C.C.S. KBBE & DBES) 2 The systemicity of the proposed project G_C_S KBBE & DBES as it is resulting between concept, objectives, work programme topics (WPT)
The entireness of the proposed project is proved, here, by the lexis-stated synthesis on the systemic elements: partners, work programme topics and the related contextual objects of the project.

2.1 The work programme topics WPT I-IV
The proposed project may be fulfill within one year (12 months) - as the respective four Work Package WP1-4:
WP1 (fulfillment for WPT I) FORESIGHT - lead by both the coordinator (partner 1), and the host entity of the project as an entireness (partner 11) - based mainly on research and technological development (RTD) - based on each partner contribution.
WP2 (fulfillment for WPT II) PROSPECTIVE INSIGHT - lead by both the host entity of the project as an entireness (partner 11), and by the coordinator
The systemicity of the proposed project resulting between concept, objectives, WPT, WP and Deliverables

The four Work Packages WP1-4 will transgress towards Deliverables:

Deliverable 1 (D 1): FORESIGHT booklets (13 partners / 13 folders as separate booklets)

These FORESIGHT booklets are intended as, mainly, a report type of delivery R.

D 2: PROSPECTIVE INSIGHT demo-drafts volumes (13 partners / 13 folders as separate demo-drafts volumes).

These PROSPECTIVE INSIGHT volumes are intended as, mainly, as a set, as a (virtual) demonstrator type of delivery D.

D 3: ORGANIZING reports-demo-(one)volume (13 partners / 13 folders as reports aggregated within a demo-(one)volume).

This ORGANIZING reports-demo-(one)volume booklets is intended as, mainly, a (virtual and real) demonstrator type of delivery D.

D 4: ACTING and ATTAINING reports-(one)volume (13 partners / 13 folders as reports aggregated within a (one)volume).

This ACTING and ATTAINING reports-(one)volume is intended as, mainly, a (virtual and real) prototype type of delivery P.

D 5: (e-)Reports (continuous appearing within the 1-13 partners sites and/or their current publications - during the 12 months efforts). These (e-)Reports are intended as, mainly, a report type of delivery R.

All D1-5 will be addressed to the general public - intended all categories of people from farm to fork, and from fork to farm, and so on.

2.2 On the GCS Consortium - entities / co-directors

This study must to (re)present the sentiment of gratitude from the co-authors to the entire team of the entities/co-directors of the International Consortium Generosity - Creativity - Solidarity - just pluri /inter /trans /co /cross-disciplinarily refocusing on the above mentioned open human inquiry within the creative, generous, solidarity processes - here, is an order only according to the data of replay with a previous completed Letter of Interest toward the initiator (1) of the first stage initiative of the Consortium - (1) Prof. dr. Nicolae Bulz – Executive President of Interdisciplinary Research Group of the structure of the Romanian Academy, Bucharest, Romania - by: (2) Dr. Larry Stapleton - Director of INSYTE: Centre for Information Systems and Technoculture, Waterford Institute of Technology, Waterford, Republic of Ireland; (3) Dr. George Gheina - Reader in Computing, Director of Postgraduate Studies, NITH Programme Manager, School of Information Systems, Computing and Mathematics, Brunel University, London, United Kingdom; (4) Dr. Jozef Bohdan Lewoc - Director of BPBiT Leader (Leading designer: the Design, Research and Translation Agency), Wroclaw, Poland; (5) Dr. Doreen DeTombe - Chair of International Research Society on Methodology of Societal Complexity, Amsterdam, The Netherlands; (6) Dr. Laszlo Karvalics - Chair of Department of Library and Information Science Faculty of Arts, Szeged University, Hungary; (7) Prof.dr. Petre Prisecuraru – Senior Researcher at World Economy Institute, NIER, Romanian Academy, Bucharest, Romania; (8) Dr. Mariaora Iordan – Deputy Director of Institute for Economic Forecasting, NIER, Romanian Academy, Bucharest, Romania; (9) Dr. Cristiana Glavce – Director of Institute of Anthropology “Francisc I. RAINER”, Romanian Academy, Bucharest, Romania; (10) Dr. Corina Sas – Lecture in Computing, Director of Human Computer Interaction Master Programme, Computing Department, Lancaster University, United Kingdom. (11) Prof.dr. Alexandru T. Bogdan - Director of the Center for Studies and Research on Agrosilvical Biodiversity „Acad. David DAVIDESCU”, NIER, Romanian Academy, Bucharest, Romania / now, the host entity; (12) Researcher Ionut Ifrim - member of the Institute of Juridical Research „Acad. Andrei RADULESCU”, Romanian Academy, Bucharest, Romania; (13) Prof.dr. Marcel Stoica – member of Interdisciplinary Research Group of the structure of the Romanian Academy, Bucharest, Romania - and Assist. Prof.dr. Catalin Ionita – Co-President of Interdisciplinary Research Group of the structure of the Romanian Academy, Bucharest, Romania.

3 On the state-of-art of the project

The state-of-the-art regarding the original concept / construct Generosity_Creativity_Solidarity Triad is presented as a realization of the Generosity – Creativity – Solidarity Consortium as a co-organizer/promoter of:
- the two editions of the Interdisciplinary, International and Academic Summer School (i.e. July 2009 and July 2010).

- the three (co-)authorship studies (published at the ISI level 2009/2010) on the main and correlated topics of just this study).

The state-of-the-art regarding the original concept / construct Knowledge Based Bio-Economy is well sustained by the actual scientific literature, and this paragraph of this study has not the possibility and it is not the case to sustain a specialized but general accepted knowledge.

The state-of-the-art regarding the original concept / construct Digital Business Ecosystems is well sustained by the actual scientific literature, and this paragraph of this study has not the possibility and it is not the case to sustain a specialized but general accepted knowledge. To the state-of-the-art regarding the proposed contribution within the area (and its subdivisions) as “Knowledge Based Bio-Economy / Fork to farm: Food (including seafood), health and well being / Environmental sustainability in the Worldwide and European food and drink chain” - is addressing, here, the original concept / construct G_C_S KBBE & DBES - within its issues.

From the scientific background of the Generosity – Creativity – Solidarity Consortium let be the following out spring:

The humankind did not and does not attain the required level of the local-global development praxis and cognitive internalization of the (hypothetical) reality to sustain large scale modeling & simulation to be a support-set of the decision making, regarding the local-global development (including the pro-market reforms and the poverty eradication). The technologically-mediated social space has both the potential to create new connections and the possibility to disemboby, and remove the physicality from the human relationships, typically desensitizing us towards each other and reducing the sense of the other as human. The concept of the Generosity in the Creative process highlights a critical tension in the social and cultural world. Are we more or less generous in the technologically mediated work space, and how do we retain the sense of the other, an-other towards whom I have the responsibility to relate and perhaps even care – an-other I value? How DO I experience this connection when the connection is mediated through data fragments, through a window I can close with a click? What does this DO to the generosity, but not to the self-transcendence? The G_C_S KBBE & DBES project seems to be a pioneering stance in that it specifically examines, formally, philosophically and scientifically, the role of the generosity in creative processes associated with the very technologies we now use routinely to frame (and decontextualise/recontextualise) human relations and the notions of community (vs. solidarity).

Our work facilitates the identification of the stages of the complex development for a real social system, and their creativity, partnership and generosity characteristics; that are a condition and the initial point to set out an appropriate guiding system in a contemporary society based on the Knowledge Society prospective. Amongst others, this systematic approach can invoke a policy, leadership, regulation, social- enterprise and socio-political debate.

It is evident that the social-networking and the virtual space, in which humans now interact, involve both (and simultaneously) the absence and presence of the generosity and exploitation. The community, at large, have, for many years, tried to engage in a debate around the trajectory of technology and some have noted how technological developments in the information space continue with a poorly informed reflection upon what this means for our society. At the time when the financial crisis, fed by greed, has brought our society to its economic knees, there was never a more urgent need to shine a value-based lens upon our technologically-enabled society. What a trajectory are we on? Are there any alternatives? What are the key dimensions of a constructive information society which promotes the human presence, generosity and well-being?

For many of the science, it is more and more problematic to manage the content of their permanently swelling background stores. The small group of researchers is not able to follow the astoundingly grown signal production with analyzing intelligence. The development of the cyber-environments and the cyber-infrastructure does not solve the problem. Science needs a real Copernican turn–about with the connection of (new) brains into the problem solving research machines.

We intend to accomplish several research projects/studies aimed to strengthen the hypotheses, to design, start and monitor – with a wide Worldwide and European cooperation – pilot programs in a dually focalized domain Knowledge Based Bio-Economy (as the representative of life sciences & social sciences) and Digital Business Ecosystems (as the representative of advanced technology & social sciences). With the utilization of the results of the pilot programs, the institutional, technological and other conditions of the world-wide extension will become possible to be planned. Europe’s initiative role can bring about the acquisition of competitive advantage through several transmissions, transforming simultaneously the generosity, creativity and solidarity aspects.

The best element within our World and e-World is the immense Diversity, practically limitless, thanks to
which nothing and nobody is irreplaceable. Nor is it useless.

The worst element within our World and e-World is the lack of a permanently updated Code of Responsibilities, somehow complementary to the Universal Declaration of the Human Rights. Such a Code may contribute to preventing, alleviating and even solutioning discontentment, troubles, dangers, risks and conflicting contexts.

Real equilibrium points can’t exist in the humankind evolution, but there are equilibrating forces that manage to ultimately keep conflicts under control. These forces need the strength and stamina of a large number of already aware individuals in order to decrease the danger of indifference. Indifference is malefic and destructive, it means disrespect to Creation.

A contemporary humankind meta-strategy based on the generosity could innovatively and beneficially be involved within the complex process of a better organizing diversity. It may also be implied in the attempt to take advantage of the challenges by offering everybody enough chances to create, to innovate, to share.

The generosity means the willingness to share our very best with those who can offer us nothing in exchange.

The creativity enables us to find those solutions that will always turn us into winners, or at least into survivors.

The solidarity represents the manifestation of our availability to support peers and causes we consider worth defending, helping and promoting. It is also a proactive involvement against loneliness, because human beings are meant to live within communities. This triad, the Generosity – Creativity – Solidarity, may and ought to become one of our driving forces, capable to aggregate the positive potential of the daring riders of the hardly predictable future. It may also enhance our chances to know better our own world, both its authentic values and the main causes of failures that have to be temporary if we are determined to survive. Thus, to increase the solidarity, creativity and generosity in the technology transfer in ICT, Bio-Economy and Digital Business, it seems necessary to gather data and to write papers on the negative behavior of technology providers, especially in the case-study country.

Another way of performing the task of solidarity, creativity and generosity will be to do the initial design of novel ICT and/or automation solutions, severely needed by the society and not provided duly by the technology providers.

Actual systems should undergo evaluation and the results should be verified and proliferated on prestigious events, first of all on performance evaluation and/or robustness evaluation.

The content, and the basic ideas, of the G_C_S KBBE & DBES project was and are indebted to five colleagues from our Generosity – Creativity – Solidarity Consortium - belonging to the partners no. 1; 2; 4; 10; 13 (see sub-par. 2.2).

4 The management of dissemination and exploitation of project results
The impact and dissemination is estimated as an original scientific effort toward Knowledge Society and Economy in the three Eastern European transition countries; the concept and its communities’ realities / research and on-line action / aim-carrier of Knowledge Transfer: – initialization, organization and dynamic elicitation within an open International Consortium: The entire project contains an original idea. It is to include between the contemporary ideas of the topic KBBE / Environmental sustainability in the Worldwide and European food and drink chain - the idea of innovative merging (theory and praxis) of the two subdomains: Knowledge Based Bio-Economy and Digital Business Ecosystems.

Each of the two subdomains has a wide bibliography, a large praxis - but there are not a common interest emerging from the major published records, long term experience, open results. Evidently that it is a momentary missing - and the research team of the proposed project G_C_S KBBE & DBES would gain the advance of this innovative merging of the two subdomains. More, the entire accumulate research praxis and results of the Generosity – Creativity – Solidarity Consortium is/are to be putted in act - contributing to all these with the operational involving of the original scientific findings regarding the potentiality of the Generosity – Creativity – Solidarity Triad just within the innovative context elicited by the merging of the two subdomains: Knowledge Based Bio-Economy and Digital Business Ecosystems - proposing an interdisciplinary research from the 13 partners / four Work Packages.

The project proposes to foresight, prospect and organize local research and (in)direct actions toward broader engagement to anticipate and clarify political, societal, economic, technologic and ethical issues.

The East European area has a recent sadly history (nearly fifty years of dictatorship and/or other non-democratic political forms). After the 1989 falling of the Communist regimes there was and still is a period of transition, within its unique type, sense and profoundness. Meantime, after the Cold War ending major associations of states: North Atlantic Treaty Organization and European Union have enlarged their
arena toward the East European peoples, to their heritage, challenge and perspectives.

These just above three types of phrases will survive over millennia – as, to evoke, the types of phrases onto the falling of Western Roman Empire and the increasing role of the Byzantine Empire, at the balance of the fifth century A.D.

But considering on the nearly two century after the 1989 falling of the Communist regimes, the types of phrases onto the East European transition (from a nearly hidden historical point to a desired political, societal, economic, technologic and ethical “point”) will not be so clear, crispy, and forever stated.

This track from a nearly hidden historical point to a desired “point” entitled Eastern World and Eastern European transition aggregated the systemic features (hypothetical real; model; ideal) comprising the Eastern World and European contemporary space-time as within an unique type, sense and profoundness. These are a part of the quasi-dimensions of the contemporary complexity. To/from/by this complexity, the Eastern World citizens and the Eastern Europeans must/can/will be responsible onto the acquired and self-organized complexity. The identification, representation and solving problems – constructing intelligent cycles of (re)adaptation(s). This collaborative project proposes a kind of strategy: To promote the links of the Eastern World and Eastern European countries with developed countries / To (re)search the way(s) toward Knowledge Society and Economy in a transition country; the concept and its communities’ realities / research and on-line action. This kind of strategy refers the concept of “gaps”, emerged within the analysis and synthesis related to the KBBE in the Worldwide and European food and drink chain - heritage, challenge, perspective. Focusing on gaps, there were, are, and will be adjacent outlooks related to these foresighting, prospective and organizational tasks. So, it is to focus the research and on-line action onto some major informational related gaps in Eastern European countries, particularly in Romania, Hungary and Poland during the second decade of transition after the Cold War falling, within the Knowledge Society and Economy attempt. The main focused gaps, (differentiating an initial knot of complex problems, desirable nexus of solutions and adaptation area), marked, here, as “-”, would be: I: Society--Economy informational gap; II: Information--Knowledge gap; III: Representational ability--resolutive capacity gap regarding the social problems; IV: Communication--connectedness gap within education-work helix; V: Political class--mass media--civil society communication gap; VI: Morality-intelligence-production triad and its gaps; VII: Gaps between communities within the natural and regional variety of population; VIII: Easter--Western

**Worldwide and European communities gap within actual communication-connectedness** – in spite of nearly two decades of free market arena, human rights evolutionary support, individual links on a broader area – on a real restored Worldwide and European unity within a complex managed openness.

The project proposes to comprehend these realities according with a common and specific responsibility onto the enlargement process of the European Union, and onto the broader globalization scene (into its benefice societal sense). It keenly refers the research case study of Romania, Hungary and Poland seen into their background – adding comparative approaches according to local and temporal schedules. Within the demanded common responsibility, the project proposes to organize a specific knowledge transfer stream from the developed country universities and other societal research nuclei to local host nucleus as a Consortium of different Romanian, Hungarian and Polish communities. The project is based on a long-term interdisciplinary experience within the host nucleus, supposing on a better comprehension on the above-mentioned gaps during the proposed knowledge transfer and the real contact with the visiting researchers.

**Acknowledgments.** This study as an addressing of the G_C_S KBBE & DBES issues was cofinanced from the European Social Fund through Sectorial Operational Programme Human Resources Development 2007-2013, project number POSDRU/89/1.5/S/63258 “Postdoctoral school for zootechnical biodiversity and food biotechnology based on the eco-economy and the bio-economy required by eco-sanogenesis”.

**References:**

