Developing Leadership for Climate Change: an integrated Learning Approach

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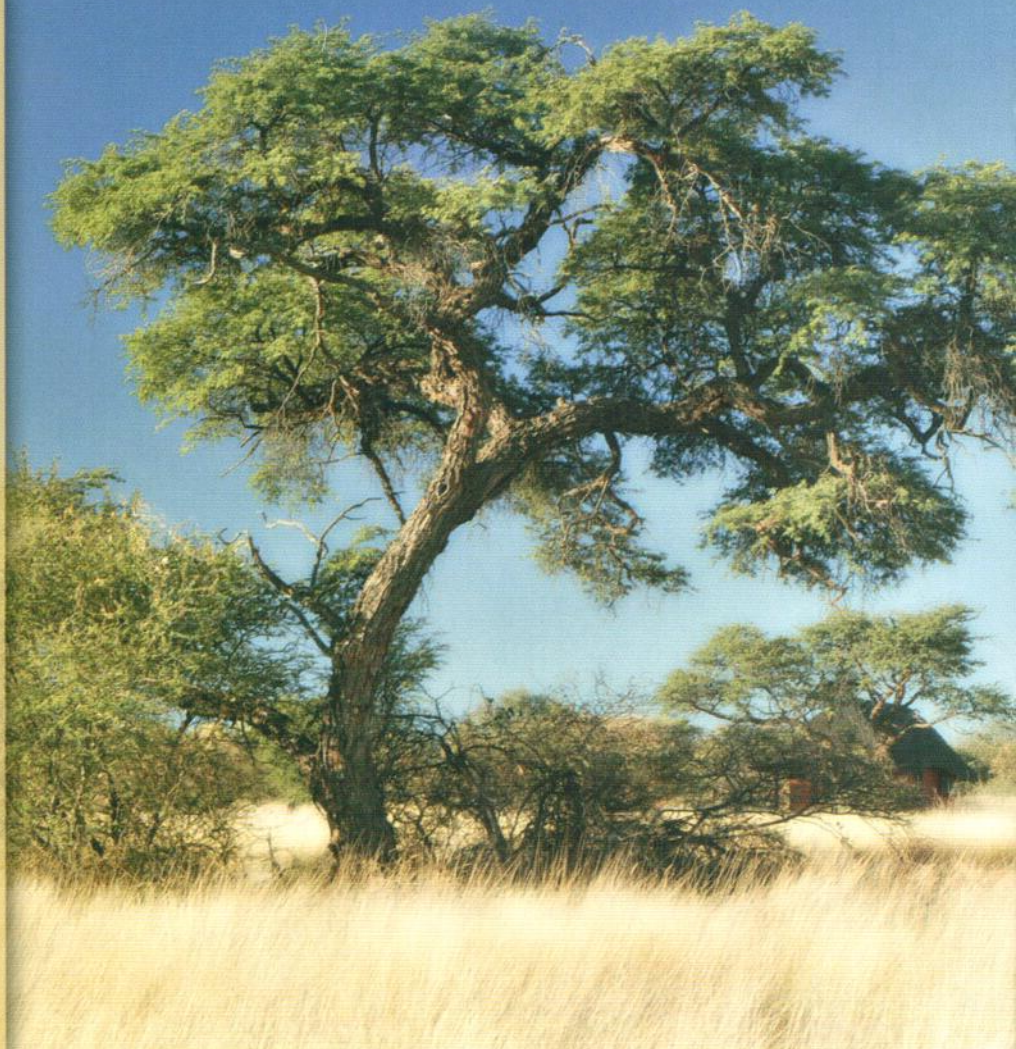

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DEVELOPING LEADERSHIP FOR CLIMATE CHANGE: AN INTEGRATED LEARNING APPROACH

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Abstract

There is an increasing recognition that climate change has become a major environmental threat in the world. Climate change is a very complex challenge that requires different capacities to deal with it in an adequate manner. We assume that the best way of approaching complexity is the empowerment of the actor/person concerned and decision makers. According to the principle of subsidiary, this is needed at all different regional levels, (local, regional, national, etc), working levels (farmers, managers, politicians, etc) and sectors (public, private, etc). Climate change adaptation cannot be handled by centralised decision making and without the creativity of the respective actors at different levels. We have developed an integrated learning approach based on our 20 years of experience working in different fields and levels of organisational development. This approach has shown potential of combining foundation competences on leadership with techniques of knowledge management and the state of the art on climate change. This is structured in a blended learning programme with different methods of action learning and systemic competence development. We offer a learning process on the job for practitioners to give an innovative answer the unexplored challenge of climate change.

THE CHALLENGE OF COMPLEXITY

In the last decade scientific efforts have been made to provide evidence on causes and effects of climate change, as well as predicting future climate change scenarios. However many organizations – especially in developing countries have not yet improved their understanding of the extent of the problem. Hence, the ways and means of dealing with the challenge remain unexplored.

Climate change can be seen as one huge example of complexity. We are confronted with dealing with challenges of:

- Many different subsystems with different variables. Taking water as an example of a subsystem; there is precipitation, water for domestic and agricultural use, floods, ground water level, and sea level. The same applies to the subsystems like "temperature", food production, society etc.;
- Feedback loops, interconnectedness, interdependences and interactions of different characters and strengths;
- Inadequate knowledge, gaps of understanding and overlapping information;
- Behavioural and socio-political dimensions of the system;
- High dynamics of changes (with both short and long term effects);
- High dynamics of changes short term as well as long term dynamics with opposite impact in different regions of the world; and
- Different and contradictory objectives and agendas of players involved.

Decision makers have to act and take responsibility in such a complex frame of climate change. It is crucial for individuals and organisations to establish supporting and learning systems (Klein, 2009). This should take into consideration three aspects simultaneously:

1. Hard skills: Knowing as much as possible about geo-dynamics, rules and frameworks. It is important to also know how and where to acquire the hard facts; however, paying respect to the 80 % principle. (The Pareto-Principle means that you will need 20 % of the resources to get 80 % of the results. For the last 20 % of the results you will need 80 % of the resources).
2. Soft skills: This includes own personal development in terms of personal vision, values, attitude and behavioural patterns (Moyo and Hagmann, 2000, Ngwenya and Hagmann, 2009). It is also important to gain skills on how to facilitate cooperation, teamwork and organisational development as well as the empowerment and emancipation to be able to manage change.
3. Knowledge generation and knowledge management: Knowing how to link experts from different backgrounds, professions and cultures. Enabling and managing participation, peer learning, feedback, thinking outside the box and the simulation of mental models and intuition.

Looking at the complexity of climate change and these three dimensions, it poses a huge challenge to anyone who is faced with providing leadership for climate change. This means strong visionary leaders who are able to facilitate and manage interaction between grass root level, national, regional and international level. They need to have more collective action and integration of different approaches, as well as techniques for awareness creation and understanding of cross sectoral cooperation.

AN INTEGRATED LEARNING APPROACH MANAGEMENT, MITIGATION AND ADAPTATION

The challenges of climate change affect everybody; hence, the responsibility of managing the issues lies in the hands of everybody. As indicated before, we have based on our long experiences of working with and supporting various organizations in different contexts developed an integrated learning approach in dealing with the issues of climate change at different levels of the service delivery continuum.

This paper documents the experience of the approach as designed for practitioners who are faced with the challenge of providing leadership for climate change in government, political level, private sector and / or civil society stakeholders. Our main principle is 'making change happen', which is grounded on the systemic competence development and the action learning concept that builds on the practitioners' real life experiences.

In this context, we have identified ten competence areas that are necessary for leaders to gain a level of proficiency that enables them to professionalize their engagement in the broader climate change management setting as well as in their organisations and improve their overall performance as leaders and managers. The competence areas are depicted in figure 1.

Figure 1: Competence Areas in Climate Change Management.

Each competence area deals with specific issues, for example, *"Facilitation for Change"* is regarded as a foundation competence that goes beyond the techniques of running meetings and managing group dynamics (Ngwenya and Hagmann, 2009).

It is nested within organizational development and change management values. It embraces a set of concepts and methods which are applied in successful facilitation processes which also include a high level of strategies and tactics to achieve the desired outputs, be it in workshops, events, organizational change processes, or teamwork and competence development programmes. Facilitation for change includes the art of questioning (Ngwenya *et al.*, 2009) and exploration of ideas and creativity within a group; process observation and monitoring, documentation and analysis as a foundation for continuous improvement of processes (Ngwenya, Unpublished). All the other nine competence areas are also designed to bring out that competency in a manner that is relevant, taking into consideration the expectations and / or needs of the participants, as well as what is required to make them more efficient and effective in their performance. These competence areas are tailored to the needs of the organisation or the intention of the client.

SYSTEMIC COMPETENCE DEVELOPMENT AND ACTION LEARNING ARE KEY METHODOLOGIES

The development of systemic competence around the ten key areas requires a very different approach than conventional training. It is not 'training' modular topics which are often not directly linked to the challenges faced on the job, and as a consequence, little is applied in the back home situation (Ngwenya, Unpublished). Instead, this is about engaging people in learning processes on how to perform their job better. This means enabling the participants in these processes to successively deepen their understanding, skills, and attitudes required to improve their performance. Hagmann et al. (2009a) argue that such a process is much more than qualifications or skills; it is the creative and entrepreneurial spirit and capability of doing business and finding innovative solutions to challenges. It requires space for the individuals to develop and the capacity to utilise their space effectively. Focusing on personal-, team-, organisational-development as well as technical issues, facilitation and communication (Figure 2 below) in this learning process we are working with the didactic of action learning.

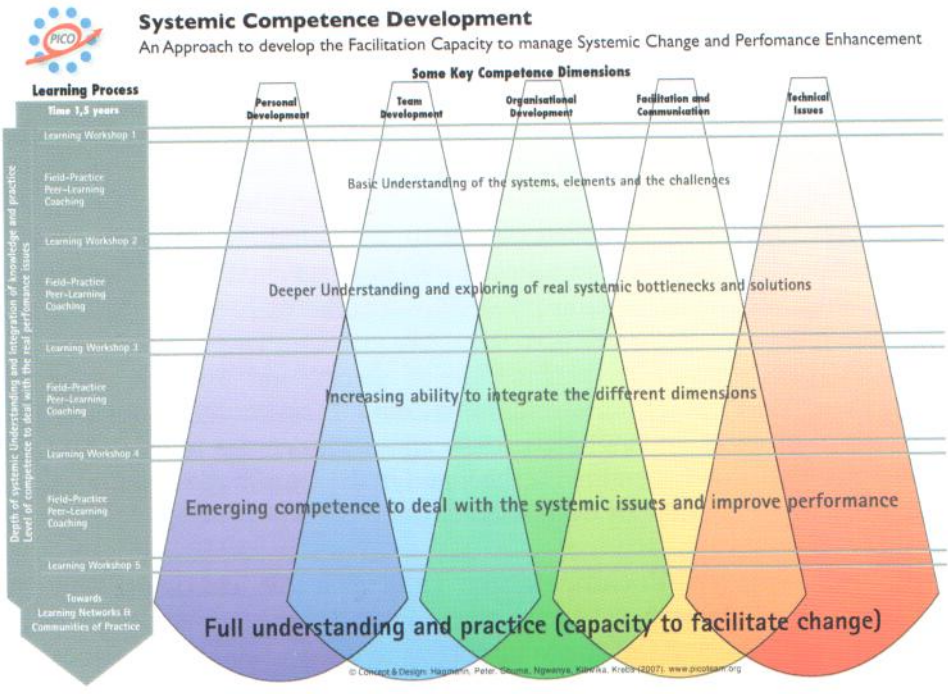

Figure 2: Systemic Competence Development (Source, Hagmann *et al.*, 2009a).

This means to implement short reflective learning loops, co-learning and co-generation of knowledge in the group, innovation processes, conceptualisation and systematic documentation. Practicing these techniques for a longer time, within the framework of the same members of the learning group at different levels of understanding, you will get used to this way of doing it – this way of (self-) management will be part of a new attitude and behaviour.

Reflective learning loops: One has an initial concept of how things can be done or be explained. One makes decisions and acts. One then reflects on how the initial concept and the decisions fit to the results, as well as monitoring progress made. Space is provided for individual mentoring as well as reflection in the learning groups, where people give each other feedback. With this kind of feedback, participants are able to adapt their concepts / decisions and act in a different, hopefully, better way.

Co-learning and co-generation of knowledge in the learning group: With the feedback culture embedded in the learning process, the participants openly share their experiences, ideas, and in the process challenge their preconceived perceptions on certain issues. The facilitators do not act as 'teachers' who know it all, but rather facilitate a process where ideas and solutions are generated by the participants themselves, building on their practical experiences. In this way, the knowledge is co-generated in what Hagmann (1999) call *'learning together for change'* mode. This also enhances strong relationships and networking between the facilitators and the participants, as well as among the participants.

Innovation processes: The combination of theory and practice as well as techniques of creativity and invention opens the space for innovative and experimental problem solving. New ideas and solutions are found outside the mainstream. This experimenting is embedded in the learning loops, the wisdom of the group and a continuous evaluation of the process.

Conceptualisation and documentation: To deepen this learning process and to make the experiences accessible to others (in the own company, to peers and other facing similar challenges) it is important to document the experiences and the lessons learned (both success and failures). It is also crucial to develop some concepts and approaches in the form of an individual project portfolio.

THE LEARNING PROGRAMME STRATEGY

The learning programme consists of an alternation of learning workshops, peer and self-learning, field practice, individual mentoring, personal project portfolio supported by an online platform and a community of practice.

Some examples of successfully developed and implemented integrated learning approaches are in the context of:

- **Agricultural and rural services:** Reforming Agricultural Extension Services in Zimbabwe (see Hagmann, 1999; Hagmann *et al.*, 1997, 1998, 1999); South Africa (see Ramaru *et al.*, 2009; Ngwenya and Hagmann, 2009); Dominican Republic (see Peter *et al.*, 2004); Cambodia, Mozambique through Participatory Extension Approach called PEA.

- **Agricultural research:** Strengthening Capacity for Agricultural Research and Development in Africa for Association for Strengthening Agricultural Research in East and Central Africa (ongoing programme in 3 countries); Integrated Natural Resource management (see Hagmann and Chuma, 2000,

2002; Campbell *et al.*, 2006a; Campbell *et al.*, 2006b); CGIAR (Consultative Group for International Agricultural Research) including the Multiple Use Water Service project of International Water Management Institute (see van Koppen *et al.*, 2006); and National Agricultural Research Institutions.

- **For institutions of higher education:** personal mastery and soft skills for lecturers in Makerere University, Uganda (see Kibwika, 2006: Hagmann *et al.*, 2009b); Personal mastery and soft skills for PhD-students in Wageningen University, Netherlands (see Almekinders *et al.*, 2009 and Hagmann et al., 2003) and

- **Different national and international level, private sector and non-governmental organisations**

CONCLUSION

Implementing such a complex process requires different levels of thinking and doing business. It requires thinking in terms of systems and lateral thinking. The approach involves the utilisation of a combination of tools, methods and approaches which are continuously adapted along the learning programme.

Grounded in facilitation skills and communication competences we practice the management of participation and partnership. Combining technical skills with the implementation of cooperative leadership leads to knowledge generation and knowledge utilisation to find innovative and optimised answers to the challenge of climate change.

References

Almekinders, C., Proost, J., & Hagmann, J. (2009). Preparing scientists for society: A PhD training programme at Wageningen University, the Netherlands. In C. Almekinder, L. Beukema, & C. Tromp. (Eds.). *Research in action – Theories and practices in social change.* (Mansholt Publ. No. 6, pp 85-106), Wageningen Academic publishers.

Campbell, B. M., Hagmann, J., Sayer, J., Stroud, A., Thomas, R., & Wollenberg, E. (2006a). What kind of research and development is needed for natural resource management? *Water International 31*, 343-360.

Campbell, B. M., Hagmann, J., Sayer, J., Stroud, A., Thomas, R., & Wollenberg, E. (2006b). *Navigating amidst complexity: Guide to implementing effective research and development to improve livelihoods and the environment.* Jakarta, Indonesia: Center for International Forestry Research.

Hagmann, J. (1999). *Learning Together for Change. Facilitating Innovation in Natural Resource Management through Learning Process Approaches in Rural Livelihoods in Zimbabwe.* (Kommunikation und Beratung No. 29, pp 310), Margraf Verlag, Weikersheim.

Hagmann, J., Chuma, E. & Murwira, K. (1997). Kuturaya; Participatory Research, Innovation and Extension. In L. van Veldhuizen, A. Waters-Bayer, R. Ramirez, D. Johnson, & J. Thompson. (Eds.). *Farmers´ research in practice: Lessons from the field* (pp 153-173)Lonon: IT publications.

Hagmann, J., Chuma, E., Murwira, K. & Connolly, M. (1998). *Learning together through Participatory Extension. A Guide to an approach developed in Zimbabwe.* Published by the Dept. of Agric., Technical and Extension Services, GTZ and ITDG Harare, Zimbabwe. pp 59. Retrieved February 21, 2011 from http://picoteam.org/publications/pdf/Learning%20Together%20trough%20Part.%20Extension-1998.pdf

Hagmann, J., Chuma, E., Murwira, K. & Connolly, M. (1999). *Putting Process into Practice: Operationalising Participatory Extension.* In: ODI Agricultural Research and Extension (AGREN) Network Paper No. 94. Retrieved February, 19, 2011 from http://www.odi.org.uk/agren/papers/agrenpaper_94.pdf

Hagmann, J., & Chuma, E. (2000). Tying up loose ends: integrating soft and hard methodologies in NRM research and extension. In: I. Guijt, J. Berdegue, & M. Loevinsohn. (Eds.). *Deepening the Basis of Rural Resource Management. Proceedings of a workshop* (PP 109-121). The Hague: ISNAR. Retrieved, February 7, 2011 from http://picoteam.org/publications/pdf/tying%20up%20loose%20ends.pdf

Hagmann, J., & Chuma, E. (2002). Enhancing the adaptive capacity of the resource users in natural resource management. *Agricultural Systems 73* (1), 23-39, Elsevier Publications.

Hagmann, J., Chuma, E., Murwira, K., Connolly, M., & Ficarelli, P. (2002). Success factors in integrated natural resource management R&D: lessons from practice. *Conservation Ecology* 5 (2): 29. Retrieved February 7, 2011 from http://www.consecol.org/vol5/iss2/art29

Hagmann, J., Almekinders, C., Bukenya, C., Guevara, F., Halemichael, A., Isubikalu, P., et al. (2003). *Developing 'soft skills' in higher education.* PLA Notes 48 (Dec): 21-25. International Institute for Environment and Development, IIED. Retrieved February, 7, 2011 from http://www.planotes.org/documents/plan_04804.pdf

Hagmann, J., Peter, H., Chuma, E., Ngwenya, H.J., Kibwika, P., & Krebs, K. (2009a). *Systemic competence development - An approach to develop the facilitation capacity to manage systemic change and performance enhancement.* Retrieved February 18, 2011 from http://www.picoteam.org/pdf1/SCDfinal.pdf

Hagmann, J. Kibwika, P., & Ekwamu, A., (2009b). Learning To Make Change - Developing Innovation and Change Competence in African Universities. In I. Scoones, & J. Thompson. (Eds.). *Farmer First Revisited: Innovation in agricultural research and development* (pp 238-246). Bourton-on-Dunsmore: Practical Action Publishing.

Koppen van, B., Moriarty, P. & Boelee, E. (Eds.) (2006). *Multiple Use Water Services to enhance the Millennium Development Goals.* IWMI Research Report 98. Retrieved February 7, 2011 from http://www.iwmi.cgiar.org/Publications/IWMI_Research_Reports/PDF/pub098/RR98.pdf

Kibwika, K. (2006). *Learning to make change: Developing innovation competence for recreating the African university of the 21st century.* Wageningen, Netherlands: Wageningen Academic Publishers.

Klein, G. (2009). Kooperative, zirkuläre Entscheidungsvorbereitung für Mittelfristige Planungsvorhaben. In R. Popp, & E. Schüll. (Hrsg.) *Zukunftsforschung und Zukunftsgestaltung.* Beiträge aus Wissenschaft und Praxis. (s. 293-303). Springer Verlag, Heidelberg.

Moyo, E. & Hagmann, J. (2000). Facilitating competency development to put learning process approaches into practice in rural extension. In *Human Resource in Agricultural and Rural Development (*pp 143-157*).* Rome Italy: FAO.

Ngwenya, H. J. (Unpublished). *Facilitation for Change: A less explored but yet effective competence for triggering local organisation and innovation in rural communities in South Africa.*

Ngwenya H., Hagmann, J., & Ramaru, J. (2009). Going to scale with facilitation for change: developing competence to facilitate community emancipation and innovation in South Africa. In P. Sanginga, A. Waters-Bayer, S. Kaaria, J. Njuki, & C. Wettasinha. (Eds.). *Innovation Africa: enriching farmers' livelihood* (pp 340-357). London, UK: Earthscan Publications Limited.

Ngwenya, H. J., & Hagmann, J. (2009). Facilitation for Change: Triggering emancipation and Innovation in rural communities in South Africa. In I. Scoones, J. Thompson, & R. Chambers. (Eds.): *Farmer First Revisited: innovation for agricultural research and development* (pp 220-237). Bourton-on-Dunsmore: Practical Action Publishing.

Peter, H., Krebs, K., & Hagmann, J. (2004, December). EPAM – *Building systemic competence for local development, GTZ Newsletter Services for Rural Development*, Nr. 12, 3-5. Retrieved February 7, 2011 fromhttp://www.gtz.de/de/dokumente/en-newsletter12-2004.pdf

Ramaru, J.M., Hagmann, J., Zacharia, M., & Netshivhodza, M.H. (2009). An action research journey with smallholder farmers in Limpopo Province, South Africa: experiences with soil fertility management. In C. Almekinder, L. Beukema, & C. Tromp. (Eds.). *Research in action – Theories and practices in social change.* (Mansholt Publ. No. 6, p 45-66). Wageningen, Netherlands: Wageningen academic publishers.