Does extension yield new scientific knowledge?

This paper is published after editing as:

Mulder, M. (2011). Does extension yield new scientific knowledge? *Journal of Agricultural Education and Extension*, 17, 4, 305-308.

It is pretty daring to write an Editorial for the Journal of Agricultural Education and Extension with the title that indicates doubts as to whether extension yields new scientific knowledge. In the Editorial of the previous issue I dealt with the question 'What is agricultural about agricultural education?' A similar question. Am I on a crusade to kill the JAEE? Or are these perennial questions that have been discussed earlier but did not come to a conclusion? In any case, in this contribution I will challenge extension scholars to step forward to discuss the academic added value of the field of Extension. For many this may be a debate that they finalized years ago, so I run the risk of fighting a battle at the back-front. Is it not correct that many chairs in the field of agricultural extension have come to an end and are not being replaced? Have extension services not been closed down or privatized in many countries? I think so, and I have many examples of this.

However, there are still many countries in which extension services exist. In India alone there are 100,000 extension professionals as Em. Prof. Anne van den Ban told me several times. And Burton Swanson has created a brand-new world-wide network of extension specialists. That is an excellent initiative and may support many colleagues in the field, and I am sure you as reader are appreciating this service. Myself, I want to follow its development, would like to see a LinkedIn group of these professionals to be a virtual participant of global exchange of information, see a Facebook network with lots pictures of extension practices around the globe, receive many tweets about lessons we can learn of our experiences, and am eager to learn whether the network will start with Yammer.

But do initiatives like these add to our scientific body of knowledge? I do not think so. But I should also directly say that this is not the purpose of these activities. They are being carried out to connect people in the field of extension. Can we learn from networks like these? Sure we can. By comparing our ideas, experiences, action routines and working strategies, methods and instruments with those of others, by looking into the implementation of extension practices and sharing actions and reactions of the various stakeholders, and by sharing knowledge about results of interventions, we can and do learn. The character of this learning in many cases will be developmental and improvement-oriented.

Does this kind of learning also create ideas for radical innovation or for transformation? It seems to me that the kind of learning by exchanging experiences in extension practices is limited in that respect and that it is a kind of first order learning which can serve as a sort of benchmark and a source of inspiration to do things better. This is certainly useful in itself; I do not want to argue about that.

But when it comes to a reconceptualization of practice, totally new interpretations of what happens, systems transformations, what do we need? In my opinion: more fundamental thinking, out-of-the-box, thinking in a free environment, loose from the pressure of everyday practice, the madness of every hype which often boils down to rebadging old but useful concepts, , linking perspectives from other disciplines and experimenting with different but promising new practices. I believe that the JAEE should be a platform for those radical, but evidence-based thoughts, theoretical reflections and research projects. And yes, it should also give far-sights of new approaches and practical advice for everyday extension practices for innovation.

So change is in the air. That is not surprising in fact if the JAEE wants to move along with the various trends in society. We can observe changes in the natural habitat of agricultural extension. The economy has changed during the last couple of years; it is clear that the current economic models of growth to together with exhaustion of natural resources and because of the mainstreaming of this notion more and more attention for a bio-based economy is emerging, in which solutions are being created for things like renewable energy and diminishing the ecological footprint of us all. There is also a shift of economic power at the global level. The emerging economies of China and India for instance are gradually taking over leadership in production, services and international business. The society shows more and more diversity because of massive migrations, which is happening more than ever before in the history of mankind. Together withthis a trend of individualization can be discerned. People are getting ever more independent and many politicians and governments stimulate this by withdrawing and stressing self-responsibility, self-management and selfcare. This also influences the regulation of health care and other public services; people need to take more care about their own health-care and help themselves by engaging in patient associations and finding information on the internet. They become more assertive because of this towards medical specialists. Because of the notion of self-responsibility, many – but not all – people choose a more healthy lifestyle. Biochemical research is helping here to study micro-biota in humans, their gene expressions and influence on health, and the role personalized nutrition can play in preventive health-care. Computerized (even online) selfprovisions are being developed for testing values of health-related parameters which can go to medical centres for real-time analysis, advice and, if needed, subsequent medication. This internet-supported technology in general, together with the trend of individualization, also has a strange effect of especially young people. I call this 'I-goism', which is a special kind of egoism. This manifests itself when groups of young people are together in social or professional settings. They tend to keep on going with their I-phones, I-pods and I-pads. When a message comes in, and that happens a lot, personal contacts are postponed for a while to immediately address the message on the latest gadget. I-communication tends to overrule face—to-face communication. It somehow also leads to a different kind of intelligence based on fragmented multi-tasking. Together with that it seems that the nature of intelligence is changing; what 'feels good' seems to become more important that 'what is correct'. This is also linked to the metaphysic, which is also visible in the popularity of the course on 'Intuitive Intelligence' taught at Wageningen University by my group. It is heavily related to notions of holistic or integral science. I defend the place of this course in the syllabus by

contending that pure rational practice has its limits. It is obvious that staff of the university expects that graduates in their professional practice use knowledge which has been taught in their educational programs, that they perform a kind of informed decision making. But there are situations in which tested academic knowledge is not sufficient or does not seem to work. In those cases professionals fall back on their intuition, which is surrounded by their scientific notions of reality. And I believe that intuition of professionals can be developed. This is not an easy process, but it can be done. It requires thorough self-analysis and reflection on action and action patterns, and careful coaching to help understanding the many thoughts in the mind about reactions on actions.

All these developments, ranging from economic change to individual behaviour and the creation of meaning, have their effects on the agri-food system and the use of green space. Agricultural production is facing further scale enlargement in many places of the world, which requires more entrepreneurship competence that ever before, but there is also a trend of diversification and multi-functionality. Increasing numbers of farmers are engaging in new lines of business, not only as a side-activity within their household, but as a deliberate and integrated expansion activity. New ways of farming, food processing or even product design, call for new ways of knowledge sharing. Was the dominant model the model of Research-Development-Dissemination, or knowledge transfer, this paradigm is abandoned a long time ago already because of the undesired side-effects of it. We now live in the era of cooperative knowledge co-construction, purchasing or trading knowledge on a commercial basis, consultancy instead of extension.

These developments imply that we have to shift our attention in our research and publication strategy to new fields. Gone are the days that studies on knowledge dissemination and the effects of certain extension practices add fundamental new insights in the support of the transformation and improvement of the supply of healthy and sufficient food for the growing global population. We need studies that go into topics like systems innovation in agriculture and capacity building, the success and failure factors in the field of natural and human resource management, the notion of social learning in rural transformations, system innovation and innovation systems, knowledge brokerage, monitoring and evaluation of systemic interventions, health promotion and behaviour change, entrepreneurship and entrepreneurial behaviour, and the role of intercultural communication in culturally diverse project groups. These and other more innovative themes will yield more creative views on the transformation of agriculture, food and rural development for the improvement of the quality of life.

My sincere wish and hope is that we will see more publications in the JAEE in these fields.