

**INTERNATIONAL HIGHER AGRICULTURAL
EDUCATION AFTER 2000
Conditions and Issues**

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INTRODUCTION

This year, Wageningen Agricultural University, the Netherlands celebrates the 25th anniversary of its International Postgraduate Programme. This programme encompasses 15 MSc-courses, enrolling more than 200 international students. In addition, WAU also offers an extensive PhD-programme to international students. The international postgraduate programme of WAU is developing rapidly and dynamically, both in scope and in size. Although these developments are labelled positively, there is need for concern and reflection as well. This has to do with serious questions, such as: what are the claims of society, on a global scale, with regard to postgraduate teaching and learning? Should international higher agricultural education develop according to market demands or is there a need for autonomous, institutional policy development? Should international postgraduate education be promoted through local institution building or through international student mobility? Are universities in the North sufficiently equipped to cope with the growing demand for international postgraduate programmes? What are the ramifications of these questions and their answers for institutional policy?

These and many other questions were discussed during an International Symposium on International PostGraduate Education in Agriculture and the Environment, held in Wageningen on January 29, 1997. As most of the issues and problems apply to practically all international institutions for higher agricultural learning in the North and West, it seemed to be worthwhile to publish the Proceedings of this Symposium for a wider audience.

In what follows we elaborate on a few of the essential questions that beset international higher agricultural education. At the end of this position paper we briefly introduce the other contributions to these Proceedings.

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CONDITIONS AND CLAIMS

Global restructuring has undoubtedly created new conditions for agriculture and rural areas in the North and West. New demographics are emerging in rural areas and new land holding structures are created, whereby a diminishing number of farms produce the bulk of the value of farm products. A new land-use paradigm is emerging, questioning the production imperative in the light of surplus and environmental implications. Institutions are becoming 'flatter' and governance is decentralized; 'just in time' production has been stimulated and horizontal networking of third sector institutions at the local level is growing rapidly. Labour market conditions are changing; women are participating more strongly in a diversified and pluri-active type of rural activities. Agrarian disengagement is becoming a serious social and emotional problem. The role of the state is declining or changing; 'remote' governance and a 'hands-off' approach are being driven by ideological and financial constraints (Van den Bor, et al, 1995).

The South and East are equally strongly confronted with rural change and diversification. The World Bank recently admitted that its policy of structural adjustment, macro-economic and top-down restructuring in the developing world has not resulted in tangible solutions for their rural economies. The Bank as well as other international donors, national governments and NGOs seem to realize now that rural development is regional and culture specific. The enhancement of regional and local rural economies has to be based on a bottom-up and participative approach, building on local expertise and a transparent incentive pattern (see e.g. the PhD-studies of Mongbo, 1995; Mahir, 1996; Millar, 1996).

The problems connected with agriculture in the Eastern and Central European countries are gigantic. Adaptation to the requirements of a market economy is particularly difficult. Opening state borders a large influx of competitive products, a decrease in real wages and other incentives have caused a drastic reduction in domestic demand for agricultural products. The problem now is how to sell, not how to produce, as Wieczorek (1996) rightly states. The very poor and increasingly obsolete infrastructure and the lack of access to cheap credit makes it almost impossible for the agricultural sector to change the production from bulk-oriented to quality-oriented.

These structural problems cannot be solved by adaptive and appropriate higher agricultural education alone. But higher agricultural education can certainly contribute to bringing these problems closer to a solution. As we have seen, most problems mentioned originate from changing international conditions. This means that higher agricultural education should take these international conditions into account. The question is what kind of new professional expertise graduates of (international) higher agricultural education need, in broad terms and in addition to more conventional disciplinary knowledge, to comply with these rapidly changing demands of a restructured rural domain and the support systems which services it. In addition to the analyses of Teichler (1991) and Neave (1991), Van den Bor et al (1995) mention the following key areas of expertise: new information technologies, international orientation, social dynamics, basic knowledge of processes of globalization and rural restructuring, integration of technical subjects and liberal arts, a comparative outlook, an emphatic orientation on the ethical and moral

implications of technical agricultural knowledge, and a deeper insight into the mechanism of university outreach.

Do we not ask too much from international higher agricultural education? Can our agricultural universities and colleges meet all these demands in our rapidly changing international society? Finding answers to these questions requires careful scrutiny and re-thinking of the mission of our system of international higher agricultural education.

AIMS AND BALANCES

Processes of globalization and rural restructuring demand critical re-orientation of international higher agricultural education. This reflection pertains to such issues as changing target groups and contents, institutional management and professionalization.

The clientele of institutions for higher agricultural education is changing rapidly. Demand categories are no longer restricted to 'regular' students in the 16-25 age cohort. New categories of international students knock at the gates of Western and Northern universities, such as students from Central- and Eastern European countries but also elderly students who will ask for tailor-made courses. This diversification of demand is, at least partly, induced by the fact that the content of education and training becomes obsolete with an ever-increasing speed. Hence, life-long and continuing learning is unavoidable. If diversification of target groups is the aim of international higher agricultural education, the balance will be dictated by financial and administrative possibilities. International education is costly and demands creativity in the yearly planning cycle. If institutions in the North and West want to diversify in this respect, and we think they should, it is of utmost importance to find financial sponsors and to promote efficiency and flexibility in the deployment of staff.

Changing social and manpower demand requires a drastic restructuring of traditional curricular content. Universities and colleges in the North and West will have to change from the traditional 'tropical' courses and programmes stemming from long past colonial times. Instead, new curricula must be designed together with international target groups. These curricula must offer ample opportunity for external input, in terms of both subject matter and staff. Reciprocity is the important word in this respect. Institutions in the North and West together with those in the South and East will have to establish mutual strategic alliances, providing opportunity for staff exchange and jointly produced curricula. Increasingly, the newest information and communication technology will play a vital role in this respect. Electronically produced 'textbooks' and databases will prove to be more economically viable than the production of conventional printed textbooks. Jointly organized international postgraduate programmes consisting of separate modules are developed already but need more support from institutional managers.

Revitalizing and restructuring international higher agricultural education presupposes focused management. International education demands specific management from Northern and Western institutions. Study programmes for international students and so-called 'regular' programmes for local students cannot be integrated as if there were no differences in student characteristics, didactic demands or other professional staff requirements. But if financial limitations dictate further integration of international programmes into 'regular' ones, it will not suffice to 'streamline' the international programmes. So-called regular programmes will have to be critically reviewed and adapted as well, if only because mixed student groups will put different demands on staff. Western and Northern institutions that deliberately aim to offer international programmes should strike a balance between their financial possibilities and managerial expertise and the very specific demands of international target groups. If they are not willing or able to adapt institutional policy to these specific demands, they will lose their international reputation and image.

Another issue which deserves special attention is the commoditization and commercialization of international higher agricultural education. Increasingly, the future of higher (agricultural) education is defined in market terms. We should find a 'market' for the 'products' of higher education. Our 'customers' should be approached by means of an appropriate 'acquisition strategy' and teachers and lecturers will be called 'account managers' before long. Wageningen Agricultural University generates 40% of its yearly budget by carrying out commercial research and teaching activities. These developments have potential positive and negative impacts. As soon as academic life becomes involved in commercial entrepreneurial activities, questions can be asked about the balance between the original idea of the "Bildungsuniversität" with its ideological undertones and the modern 'knowledge factory' that has to tune its aims and objectives to the wishes (and whims) of external sponsors (Barnett, 1990). Again, choices have to be made as to the most desirable future strategy.

ISSUES OF (RE-)LOCATION

Too long it has been taken for granted that Western and Northern universities and colleges were the best loci for international higher agricultural education. This was legitimized by the sophistication of the systems of higher education in the North and West but also, though candidly, by the specific institutional interests of these institutions. Knowledge is increasingly considered to be an economic asset which has to be marketed worldwide. This, however, is the language of economists. Advocates of these policies are not concerned primarily with the question: should possibilities for higher agricultural learning in the South and East be enforced through ongoing one-way student mobility to the North or West or through institutional strengthening in the South and East? Or, we would like to add, through a combination of the two options?

This discussion is almost as old as the system of international education itself. The present Minister for Development Cooperation of the Netherlands, Jan Pronk, has been one of the strongest advocates of building up strong systems of (higher) education in the South. However,

the Dutch system of international education has not disappeared. On the contrary, more and more international students find their way to Dutch universities and colleges (Van den Bor, 1997). Van der Wende (1996) recently analyzed the developments and trends in the provision of international curricula. She found that in all the OECD countries examined (Australia, Denmark, France, Germany, Japan and the Netherlands) there has been a large increase in the provision of international curricula over the past ten years. The motives behind this process of curricular internationalization were, generally speaking, commercial. The question remains to be answered whether this is the most efficient and cost-effective way to promote access and equity for students from the South and East.

PROFESSIONALIZATION OF STAFF

Building an 'international or intercultural classroom' has become a hot issue in discussions on the internationalization of higher agricultural education. There is growing concern about the need to culturally sensitize academic staff. But if one looks very carefully at what really happens in lecture rooms, however, one becomes easily disappointed. In a recent publication, Van den Bor (1997) questions whether the majority of teaching staff in the North and West is convinced of the necessity to receive additional intercultural training. And if staff is convinced, their working conditions are often so restricted that this type of professionalization does not feature prominently on their list of priorities.

Further it has to be realized that providing intercultural training to teaching staff who have never received basic didactic training does not make them good teachers in the intercultural classroom. Intercultural training should be based on and integrated into basic didactic skills.

Professionalization of staff for international higher agricultural education requires a broader array of competencies, however. Farkas-Teekens and Van der Wende (1995, Zie paragraaf 6.5) developed an inventory of specific lecturing skills for those active in intercultural teaching. This inventory is based on several clusters of demands, notably:

- general aspects of the lecture profile;
- aspects related to teaching in English;
- aspects related to dealing with cultural differences;
- demands related to didactics and educational innovation;
- specific demands related to subject matter mastery;
- knowledge of the international labour market;
- knowledge about characteristics of the educational system of the countries of origin of foreign students;
- use of media and new educational technologies; and
- additional optional demands.

Within each cluster of demands they differentiate between knowledge, skills and attitudes.

Professionalization of staff is the responsibility of institutional management. This brings us to a brief discussion of issues related to management and strategy.

INSTITUTIONAL MANAGEMENT AND STRATEGY

If Western and Northern institutions for higher agricultural education want to continue or even enforce their international activities after 2000, they will have to look critically at their specific institutional weaknesses. Most of these constraints can be traced back to poor strategic planning. The consequences of inadequate strategic planning may be rather serious. Van den Bor (1997) in his previously mentioned publication explored a number of these consequences, as follows.

First, a lack of integrative strategic policy-making will sooner or later result in overlooking important possibilities for international interinstitutional scientific cooperation or for commercially attractive activities. So far, many universities in the North and West have held the opinion that international contacts will automatically emerge and be maintained by individual staff members and/or departments. 'Bottom-up' internationalization is regarded as the most appropriate way for tangible international projects. Not seldom, this view leads to a *laissez-faire* policy. Far worse is that no or insufficient arrangements are made to create a much needed institutional infra-structure for internationalization, such as provisions for intercultural training, strategies to access donor-money, seed-money for project tendering, funding for mobility, provisions for technology input and a hospitable and professional climate for foreign guests and students. Possibilities for international scientific cooperation and commercial activities are presently both very expensive and sometimes highly inaccessible. It has become extremely difficult for individual staff members or departments to make proper choices, to find the way in donor land and to prioritize.

Second, lack of a central and common internationalization policy may result in a weak organization, in doing double work, in isolated activities, in short in special small kingdoms within the institution. Lack of central guidance and provision of conditions for intra-institutional cooperation and pooling of forces is absolutely necessary to face the rapidly growing international competition in academia.

Third, weak central planning has serious ramifications for professionalization of staff and management. Programmes for staff development in the areas of language proficiency, intercultural training and internationalization of curricula need central attention, support and planning. The development of professionalism in cutting edge areas, such as virtual mobility, interactive video lecturing, electronic textbook production and distance education will never be successful if not supported and conditioned at the central level.

Last, the ultimate consequences for the image and reputation of the institution (and its staff) should be envisaged. Lack of central planning will in the end affect quality of teaching, supervision of students and of curriculum development. International evaluation and comparison of quality

will become more serious and stringent now that international clientele and partners have become emancipated and rightfully demand quality. Our world changes into a global village. Northern and Western partners who fail to build up and carefully watch over their goodwill and reputation will lose a once solid image, globally!

These and other issues and conditions set the stage for our discussions on the future of international higher agricultural education. In the next and last section of this introductory chapter we will briefly introduce the plenary presentations of our distinguished speakers.

BRIEF INTRODUCTION OF PRESENTATIONS

As we have indicated above, international higher agricultural education is mortgaged with several problems at the policy level, the institutional level and at the level of actor- and target groups. Fortunately, international higher agricultural education can also take a pride in some successes and in the creation and evolution of international academic cooperation.

Frank Muchena from ETC East Africa Consultants in Nairobi, Kenya analyses the impact of the Wageningen MSc-programme on agricultural research, university training and the management of production systems in Kenya. He stresses the need for Wageningen Agricultural University to continue playing its role in the development and dissemination of knowledge, especially with a view to the selection of priority areas in agricultural research and to the 'feeding' of policy debates in the agricultural sector in the South. Re-training and follow-up of alumni is a *conditio sine qua non* in this respect, however.

Larry Zuidema from ISNAR and, formerly, from Cornell University, USA presents a very useful and detailed overview of the historical experiences in international agricultural education at Cornell. He stresses the need to constantly respond to changes taking place in the North and the South. He feels that we need to move away from programmes that singularly focus on traditional disciplines. His message is that we need to assist international students to learn how to apply knowledge in their own environments. New modes of teaching and research need to be explored through joint South-North activities. The ultimate goal should be that countries in the South and East are able to provide adequate postgraduate training for their own students.

Wout van den Bor and Frank de Jong from the Department of Agricultural Education of Wageningen Agricultural University develop a set of perspectives on international higher agricultural education for the next century. They juxtapose two completely contradictory ideal types: the knowledge multinational and the free global universitas. Future international agricultural consortia, such as taking shape now in Wageningen, will have to strike a balance between these two options. This generates important questions: what is the best balance? What are criteria for making choices? Who makes the choices and, especially, what is an appropriate strategy at the institutional

level. The authors develop concrete ideas for shaping such a strategy by developing a framework for strategic discussion and long-term development.

Niels Röling from the Department of Communication and Innovation Studies of Wageningen Agricultural University explores the present and future challenges to agricultural professionals. Starting with the Copernican Revolution he develops the notion of a highly useful and necessary academic relativism. He states that we are in the midst of discovering that our efforts to master and control our environment are turning against us. This sheds new light on what it means to be an agricultural professional in the future. The key to such professionalism is continuous learning. He ends his contribution by giving an illustrative example from the domain of soil fertility management.

The editors of these Proceedings sincerely hope that the plenary symposium discussions and presentations have contributed to the enhancement of more effective systems of truly reciprocal, long-term and participative international university cooperation in the realm of agriculture and rural development in its widest sense.

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