

**Feedback mechanisms in a North – South education and research partnership:
In-course evaluation and demand assessment in the Joint Postgraduate
Programme in Tropical Veterinary Epidemiology, Freie Universität Berlin –
Addis Ababa University**

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Abstract

Feedback mechanisms applied in the 2nd Master of Science Degree Course - - a combined class-room and field research programme - - of the Joint Postgraduate Programme (JPP) in Tropical Veterinary Epidemiology of the Faculties of Veterinary Medicine (FVM) of the Addis Ababa University (AAU), Ethiopia, and the Freie Universität Berlin (FUB) are described and selected results for the field research part are reported. The demand for veterinary epidemiologists in the extended Eastern African region is assessed by means of a questionnaire survey and its implications for the likely future input of MSc candidates into JPP are discussed.

Keywords: Postgraduate training, veterinary epidemiology, Ethiopia, feedback mechanisms

Introduction

Starting in 1996 the Joint Postgraduate Programme (JPP) in Tropical Veterinary Epidemiology of the Faculties of Veterinary Medicine (FVM) of the Addis Ababa University (AAU), Ethiopia, and the Freie Universität Berlin (FUB), Germany is presently finalising its 2nd Master of Science Degree Course as a combined class-room and field research programme (Getachew et al., 1996). Structure and set-up of the JPP is illustrated in Figure 1. This postgraduate training programme in tropical veterinary epidemiology which addresses animal health care delivery, education and research needs not only in Ethiopia but also in other countries in the East African region, has been brought to the attention of the scientific community as well as to the target groups in Eastern Africa as from 1994 (Münstermann, 1994). The unique nature of JPP lies in its particular long-term emphasis to establish a competitive postgraduate programme in veterinary epidemiology of regional impact and competence at the AAU (Schoenefeld et al., 1999). Aiming at the sustainability of the

programme at a recognised high level, education quality in terms of relevance, scope, extent and applicability therefore has to be assured. This paper presents the in-course evaluation methodology for the classroom part of the course as well as the feedback mechanisms from field research work.

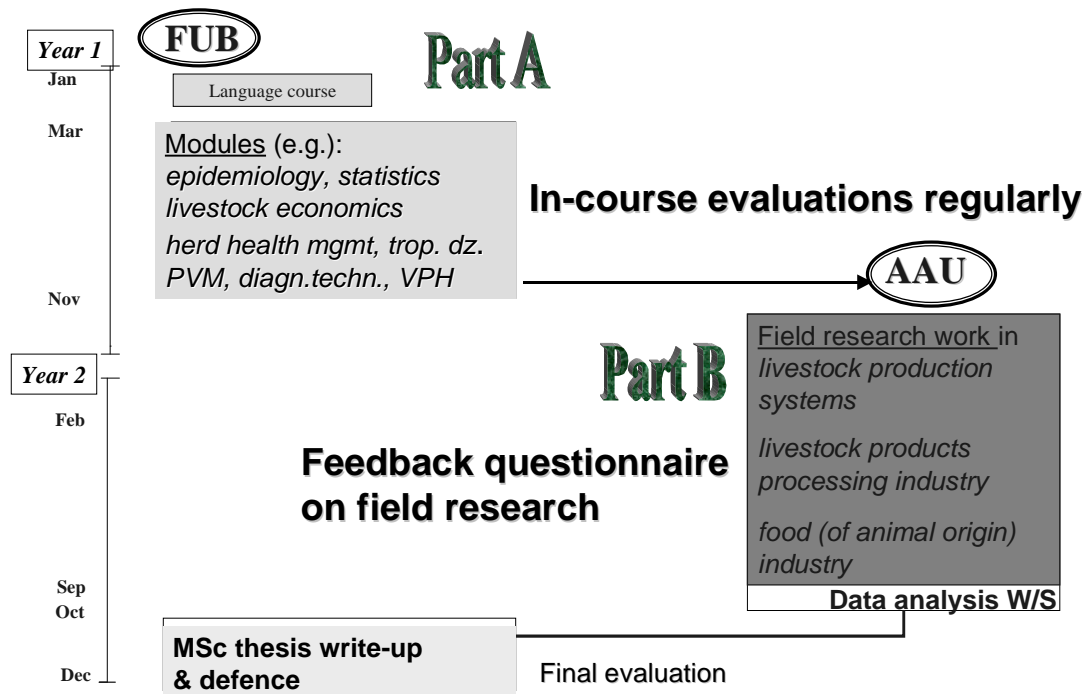


Fig. 1. Structure and set-up of the Joint Postgraduate Programme "Master of Science in Tropical Veterinary Epidemiology (MSc TVE).

Updated and first-hand information on the "graduate job market forces" in academic and training institutions as well as in animal health, production and extension services are further important elements to realistically assess postgraduate epidemiological training needs. For this, relevant institutions in the extended Eastern African region were included in a questionnaire survey and first results with particular emphasis on future manpower needs of countries in the region are presented.

Material and Methods

In-course evaluations

Regular in-course evaluations during the course work (Part A) by the participants are part of the active involvement of the student target group.

Formal feedback by means of student questionnaires is instituted after each thematic session or block of lectures. The brief questionnaire addresses lecture contents and structure, length

and duration of a topic in relation to professional needs (and expectations) of the participant, teaching methods applied and presentation of the topic, teaching materials used and quality of handouts, and the availability of the lecturer for discussion. A score following the German grading system (1 = excellent, 2 = good, 3 = satisfactory, 4 = pass, 5 = poor) is assigned to each thematic session or block of lectures allowing the calculation of mean scores. The methodology of feedback to the parties involved (lecturers and academic advisors) and concerned (project steering committee) is schematically displayed in Figure 2. From this presentation it is apparent that written and formal assessments are complemented by regular group discussions with the students as well as by individual discussions with the academic staff.

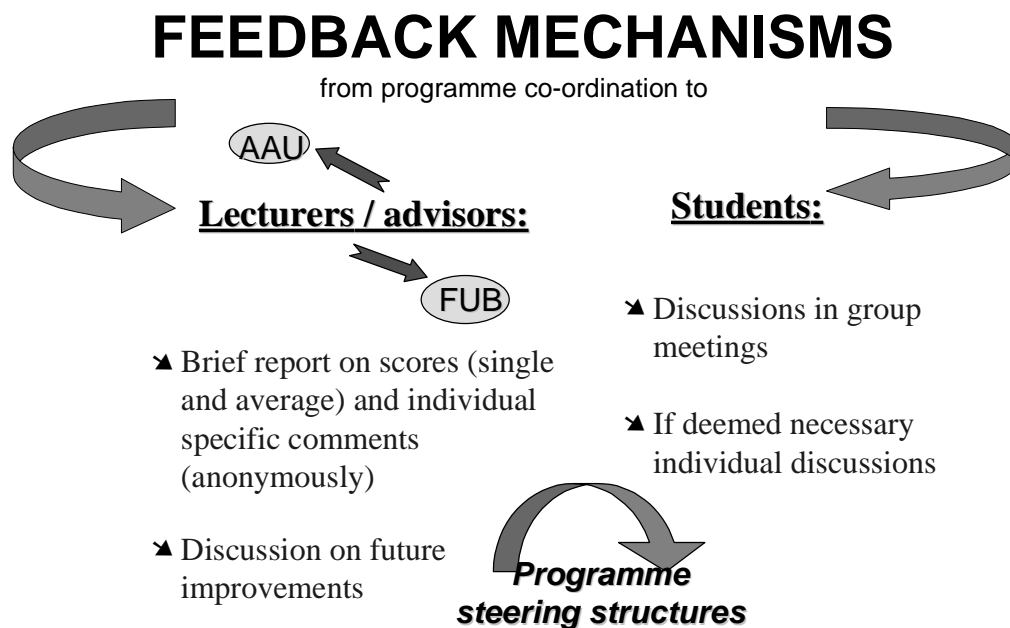


Fig. 2. Feedback mechanisms of regular evaluations during the course work (Part A) of the Joint Postgraduate Programme “Master of Science in Tropical Veterinary Epidemiology (MSc TVE).

In an effort to reach at a formal feedback from the field research work (Part B) carried out in Ethiopia (but also within the East African region) a questionnaire is administered to the MSc candidates upon their return to Berlin. The questionnaire consists of issues related to (i) the individual academic advisor, (ii) the academic programme administration performance, and (iii) the general facilities at the hosting faculty as well as miscellaneous issues. Questions addressed under (i) to assess the overall academic advisor performance include availability for consultation, willingness to let the student express his/her view and opinion, to let the student discuss his/her work with other researchers, to listen to student problems, helpfulness of advisor’s comments and suggestions, providing feedback, and meeting deadlines.

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Questions addressed under (ii) to assess the overall performance of the academic administration and co-ordination include efficiency in settling administrative issues, ability in conflict management, meeting deadlines, willingness to listen to students problems and response to their needs, management of research funds, support for smooth execution of research work, coverage of activities according to the academic calendar, and its „open door“ policy.

Questions addressed under (iii) to assess the general facilities at the hosting faculty and miscellaneous issues include the availability and usage of PCs, library, communication means such as fax and e-mail, transport for field work, support from collaborating institutes, as well as accommodation, health care, and social activities. A three-level score (“very satisfied”, “satisfied”, “not satisfied”) is suggested to choose from.

Demand assessment questionnaires

A questionnaire jointly developed by the two programme co-ordinators from Addis Ababa and Berlin was distributed in April 1999 through mail, and, when on duty missions, delivered by hand. The addressees were government services, universities, colleges, research institutions as well as regional / national animal health and disease control programmes. The topics addressed in the questionnaire included, besides demographics of the respondents and the institution, an assessment of future epidemiology positions and manpower demand in the organisation / institution as well as in the country, the present recognition of the JPP MSc Programme and a quantification of likely candidates for subsequent courses. The questionnaires returned by October 1999 entered the preliminary analysis presented in this paper.

Results

In-course evaluation

In-course evaluation results from Part A of the MSc course were regularly fed into the different feedback channels as presented in Figure 2. However, it was realised that the small variability in the mean scores still predominantly reflects in the early phases of the programme rather the student’s cultural attitude towards authorities than their critical expression of shortcomings; thus, a summary of quantified results at this point is not given

From the feedback questionnaire covering the time period of field research work at AAU, results for issues related to (i) the individual academic advisor are summarised in Table 1 whereas results from part (ii) and (iii) will be reported elsewhere. In choosing this presentation layout, the distribution of answers allows a better comprehension of the now more pronounced variability in answers among the respondents. From a student’s point of view a substantial proportion of academic advisors assigned apparently were not performing to the expectations, an important finding to be followed up.

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Table 1: Results for advisor related issues from feedback questionnaires (N=10) covering the field research work period at AAU / Ethiopia, 1999

Parameter	Very Satisfied	Satisfied	Not Satisfied
		*	
		*	
		*	
		*	
		*	
		*	
Availability for consultation during office hours	*	*	*
		*	
		*	*
Willingness to let you express your view and opinion during consultation	*	*	*
		*	*
	*	*	*
Willingness to let you discuss your work with other researchers	*	*	*
		*	
		*	
		*	
Helpfulness of comments and suggestions about your work	*	*	*
		*	
		*	
		*	
Ability in providing feedback	*	*	*
		*	
		*	
		*	
Meeting deadlines	*	*	*
		*	
		*	*
Willingness to listen to your problems, if any?	*	*	*
		*	*
		*	
		*	*
Overall performance as academic advisor	*	*	*

Demand assessment questionnaires

The overall response rate of 38.9% (21/54) with a rate of 39.1% (9/23) by ministries and government services, of 38.5% (5/13) by research institutions, and of 33.3% (6/18) by universities and colleges is considered reasonable, taking into account logistic and infrastructural constraints inherent to African public services. However, the fact that none of the regional disease control programmes and institutions did reply was unexpected. The country coverage of 63.2% (12/ 19 countries included), however, is gratifying.

The present epidemiology manpower and human resources capacity of the institutions addressed provides the start-off point for future planning.

58 veterinarians working in 17 of the 20 institutions responding consider themselves as “epidemiologists”. However, the number of professionals with formal training (degree level, short-term courses) in epidemiology totals only 38, of which 34 work as veterinary epidemiologists; the number of epidemiologists per institution ranges between one and seven. Of significance for curriculum planning in postgraduate training is the fact that the great majority of these (73.5%) in their daily work deal with disease control and surveillance, whereas only 26.5% are involved in teaching and research.

Training at MSc or equivalent level (MPhil, MPVM, etc.) 73.7% (28/38) of the epidemiologists presently employed in the institutions covered by the survey had undergone, at PhD level 15.8% (6/38), and at certificate level or short-term training 10.5% (4/38).

60% (12/20) of the organisations and institutions surveyed intend to create new epidemiology positions within the near future, mainly with assistance from international and bilateral donor agencies. However, five institutions also attempted to quantify their demands for epidemiologists due to the natural fluctuation in positions presently filled; a further total of 25 epidemiologists required over the next ten-year time horizon was identified.

When asked to quantitatively assess the demand of trained epidemiologists on a national scale it is striking, besides the apparently high numbers indicated, that more than two thirds of epidemiologists are expected to take over positions at the provincial (and even district) level (Table 2).

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Table 2. Future epidemiology manpower demand and likely candidates for the JPP MSc in Tropical Veterinary Epidemiology; questionnaire survey 1999

Country	<i>Future manpower demand</i>			<i>Likely no. of candidates to enrol in JPP programme</i>	
	Vet. Service Headquarter	<i>Province / District</i>	Teaching & Research	Country Total	
Kenya	8	60	12	80	5 (- 10)
Tanzania	3	10	9	22	2 (per course)
Sudan					22
Zambia		9	several	9	13
Zimbabwe		7		7	7
Malawi					2 (- 3)
Botswana					2
Swaziland	1	2		3	1
Lesotho					4
Mozambique			3	3	4
Congo (Brazzav.)	3	7	7	17	4
(Madagascar)					20)
Overall (quantifiable) total (in % of country total)	15 10.6	95 67.4	31 22.0	141 100	At least 66 (without Madagascar)

There seems to be a great interest and appreciation of the JPP of the Freie Universität Berlin and the Addis Ababa University / Ethiopia. With an intake of ten postgraduate students per MSc course and using a conservative approach towards the demand figures given by the respondents, i.e. assuming a 50% (33) true demand, at least three further courses could be executed, leaving alone a further number of potentially interested and qualified Ethiopian candidates.

Discussion and Conclusion

In-course evaluations during course work (Part A) constitute a valuable instrument in the North-South education partnership and, thus, facilitating improvements in the course curriculum and its implementation.

Formalised feedback mechanisms for research partnership - - in particular for field research work executed during Part B in Ethiopia and in the region - - are particularly necessary to strengthen the candidate's epidemiological competence in field research. This instrument in future will be extended to a performance assessment also of the counterpart FUB academic advisors. In doing so, the ongoing process of research partnership between the FUB and at the AAU is expected to gain further momentum.

Beyond that, in order to consolidate the progress already made, regional expertise, particular in the planning and design stages of field research, has to be reinforced more strongly by particular South-South partnership arrangements; details for this still have to be worked out.

First results from the demand assessment for trained veterinary epidemiologists at MSc level in the Eastern and Southern African region are encouraging. Thus, the challenge of further strengthening and consolidating the JPP in Tropical Veterinary Epidemiology as a programme of regional impact and competence at the Faculty of Veterinary Medicine of the Addis Ababa University has to be taken up.

Acknowledgement

We gratefully acknowledge the provision of project funds and stipends by the Project "Interuniversity Co-operation in Postgraduate Training and Research" of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

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