Promoting Range Management in South America through Students

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Around 81% of Latin America's 318 million cattle, 93% of its 110 million sheep, and 61% of its 33 million goats are raised in South America. It is safe to assume that most of these animals obtain at least 80 to 90% of their sustenance from rangelands. Yet, the importance of this natural resource is not fully recognized and it is receiving very little scientific and development attention. Consequently, the resource is being badly abused, many areas are being turned into man-made deserts, and animal productivity is declining. Worse yet, range management is practically unknown.

Being cognizant of this situation, the FAO Regional Office for Latin America and the Caribbean has taken action aimed at remedying the problem. A Round Table for the Promotion of Range Management in South America was convened in December 1985, in collaboration with the "Universidad Católica de Chile" in Santiago. Apart from the specific results of the Round Table as reported by Ragsdale (1986), one thing was clear, there is a need for a promotional campaign to upgrade the image of rangelands and range management. Little progress can be expected until this campaign has had its effects.

The question is, "How do you go about mounting an effective campaign promoting rangelands and range management with limited funds?". There are probably many answers to this question, but one is to create a cadre of informed animal production technicians who can influence livestock producers, national planners and policy makers, and financial institutions. And one of the best and fastest ways of creating such a cadre is in the classrooms. However, since range management is not taught in the universities, the FAO Regional Office once again took action and initiated arrangements for a group training course for university professors.

The idea was to provide training and training materials on the principles of range management and range improvement technologies, with the hopes that the professors would be motivated to include courses in their animal husbandry curricula.

A course entitled "Principles of Range Management"; was convened 11-22 May 1987 at Colonia, Uruguay, in collabora-

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Fig. 1. Discussion following a field practical. Most of the theoretical subjects covered in the classroom were demonstrated in the field.
tion with the "Ministerio de Agricultura y Pesca de Uruguay" and the "Centro de Investigaciones Agropecuarias 'Alberto Baerger' (Estación Experimental 'La Estanzuela')." The International Co-Director was Dr. Donald L. Huss and the National Co-Director was Ing. Agr. Milton Carámbula. FAO Consultants and Instructors were Ing. Agr. Abel E. Bernardón (Argentina) and Dr. Juan Gastó (Chile). Twelve other scientists from Argentina and Uruguay gave lectures and field exercises in specific subjects.

The course was attended by nine professors from selected universities in Bolivia, Brazil, Colombia, Chile, Ecuador, Paraguay, Perú, Uruguay, and Venezuela. There were also an additional nine extension and research specialists from Argentina and Uruguay.

A manual entitled "Principios de Manejo de Praderas Naturales"; which was jointly prepared and published by the FAO Regional Office and the "Instituto Nacional de Tecnología Agropecuaria" of Argentina, served as the textbook for the course. The Manual, which is likely the first of its kind to be written on range management in Spanish, will also have value as a text in undergraduate university courses.

The course was intensive and it centered on the principles and practices associated with the following definition of range management; "The science and art of planning and directing rangeland use in order to obtain maximum sustained economic livestock production compatible with the conservation and/or improvement of the related natural resources: vegetation, soil, water and wildlife." While this definition might be considered old-fashion compared with one in the SRM 1974 "A Glossary of Terms Used in Range Management", it is the definition of a kind of management that is needed in South America and it is one which can be sold to producers, planners, and policy makers.

One of the major causes of poor livestock performance in this area is that animal husbandry and forage management are neither properly planned nor directed. It was stressed during the course that in range management, both are properly planned and directed. Otherwise, it would not be possible to obtain maximum livestock production. It was further stressed that plant and animal management can never be separated in range management. This was designed to partially offset a poor image among many individuals and institutions that range management deals with plants and plant ecology only.

It was also emphasized that range management seeks sustained maximum animal production to meet the needs of the present without compromising the ability to meet those of the future. The managerial practices and livestock manipulations based on ecological and physiological principles which would lead to this goal were discussed in the classroom and illustrated in the field.

It is thought by many in Latin America that plowing and seeding is the only way that rangelands can be improved and if this is not technically feasible, the situation is hopeless. Most of the participants came to the course with this belief. Consequently, a considerable amount of time was spent on succession, range condition and range condition trend and the ways and means in which natural improvement can be inexpensively obtained. These subjects were new to them and it is felt that they are now aware that there are less costly and permanent alternatives to improvement other than plowing and seeding.

While the true success of the course can only be measured by the informed animal husbandman that it might eventually produce, a beginning has been made. The professors are being encouraged to followup with classes or courses in their respective universities. Only time will tell if they were sufficiently motivated to do so.

**Literature Cited**