

**SECTION V: THE WRAP-UP****COMMENTS ON THE WORKSHOP BY THE RESOURCE PERSONS****HUBERT ZANDSTRA**

There appears to exist quite an exciting potential to increase production in the region as the result of good, problem-oriented on-farm research. There are a number of possibilities and potentials for alternative technologies to increase yields and productivity.

Secondly, much of animal traction research can be conducted with farmers even though there are problems of design. Researchers should not be dismayed by the problems, but should initiate modest activities with farmer-cooperators in on-farm trials. A learning process is started by practicing on-farm research.

The rate at which animal traction research will develop in West Africa will depend on how effectively you can share your experiences with each other. There is no need for everyone to go through the same trial and error process. Share your experiences in the future. This will help you as a group to develop the required methodologies for effective on-farm research in animal traction and livestock production areas. There is a lot of value in continuing to have this kind of workshop in the future. What the workshop should be like is a personal opinion. The workshop should be very specific and stick to two or three narrowly defined topics. One might be on-farm field techniques for the comparison of alternative equipment. Other possible topics include: How can we measure feed availability accurately over the year in a manner which is low cost and uses minimal staff? How do we evaluate alternative animal health protection measures? There are costs associated with animal health and there may be cheaper, alternative ways of ensuring that animals remain healthy. What methods can be used to monitor animal traction farmers as part and parcel of an ongoing research program, which will allow an analysis of the problems and responses of the farmers. This kind of analysis should continually address some of the assumptions that researchers and designers of development projects have made. These assumptions can be evaluated as one develops a better data base.

The objectives we should stress are learning together and developing the methodologies that are needed. Much of the effort will have to come from you, the West African scientists involved in this area of animal traction related research. Many of these techniques depend on the availability of staff and the structure within which an individual works. On-farm work must be adjusted to those conditions. Often there are techniques that are transferable despite differences in personnel structure and financial capabilities.

I certainly owe a particular word of thanks to the organizers of this

project, Susan Poats and John Lichte, who labored beyond the call of duty to make my stay here highly productive.

### SUSAN POATS

On Monday morning we presented an overview of the week's activities. This overview was like a map showing where we wanted to go during the week. We hoped that we would be able to follow directions and stay on track. In some respects we have gotten to our destination. In other respects we may have decided some destinations were not appropriate. But I think, in general, we progressed through what we set out to do. I would like to talk about where we came from in the perspective of someone participating, but also watching others.

On the first day we came together, many of us not knowing each other. We were a long ways apart. We represented several countries, both African and non-African. We had a lot of different opinions, some of which were also far apart. But one of our objectives was to at least lay them all out on the table through presentations and exchanges.

The second day was the field trip. It served to bring the group closer together. Participants were placed in small groups to talk to people. You probably did more talking within the group than with others, but still the procedure brings the understanding of individuals closer together (and the parts in our puzzle of information begin to line up).

The third day began with the field trip reports. Part of that reporting experience began the day before, working in small groups to prepare the reports. Again, it served to bring us closer together in terms of concepts and terminology so we could communicate, even if opinions still differed.

On day four, we spent most of the day in different small groups. People from field trip groups were reorganized into five different groups. But we continued the process of exchange and relaying information. Our objectives became clearer as we were forced to identify problems, lay them out on paper and explain them to each other. The focusing continued.

On Friday we narrowed the gap still more. We reached more agreement about where we had been and where we were going. Taken all together, this process could be seen as resembling a "funnel", wide apart in the beginning and slowly narrowing our collective vision to focus on the task at hand and the subject of concern to all of us. The process has served as a tool, much as a microscope serves a scientist. It has helped us in defining our own objectives more precisely, and in developing and coming to a consensus on some methodologies which might be useful. But the process does not end there. Now the task at hand is to use the vision and clarity achieved at this point to take another look at where we might go and what we might achieve in the future. It is not possible to resolve all of the problems in five days. It is probably accurate to say that there are still many questions, and certainly things still hanging, unresolved. And there should be. We should not be able to solve everything here. We hope that our conceptual framework and methodology will help you to deal with these

remaining unresolved issues. The lists of problems and the solutions or strategies generated this week provide a focus for the future tasks we will have before us.

As one of the coordinators of the workshop, I feel quite content with what happened during the week. It has been very intriguing because when you set up something like this you can't tell where it will go in the end. You hope you will arrive where you wanted to be and work every day to make sure you keep it on track. I want to thank each of you for the work you did during the week in order to maintain this track and reach our goals.

#### JOHN LICHTZ

I would like to come back to what we did this morning. One of the things I think we want to take away from this workshop is that many of the topics or problems discussed here are closely interrelated. I think we found that we could not talk about on-farm feeding without also looking at on-farm management, and management of some of the various technologies we were talking about. I think we also found that preconditions, monitoring and evaluation should be looked at together. The preconditions determine some of the aspects of monitoring, and some of the elements from monitoring and evaluation are necessary to determine if the preconditions exist. The interaction between these various problems indicates that we cannot isolate animal traction problems and deal with them independently. We must consider these interactions to deal with the problem effectively, and this underlines the need for a systems approach.

#### SANDRA RUSSO

I found it heartening that the participants, who were from widely different backgrounds despite a common interest in animal traction, were able to come together and use a systems perspective to discuss specific problems.

#### VINCENT BARRETT

We have seen that the adoption of animal traction is a long-term process, often requiring 10 to 15 years. Animal traction programs need to be based on this type of long-term perspective. The full effects of animal traction can only be observed after a similar time period. We need this long-term perspective in considering animal traction, and particularly in the evaluation and design of animal traction projects.

We have also seen the importance of exchanging ideas and experiences during this workshop. The type of networking which we have begun here can make an important contribution to the effective development of animal traction by allowing projects to take advantage of the experience of others.

**PAUL STARKEY**

I came to the workshop already believing in the great importance of information exchange and intra-country and inter-country networks to improve communications and research progress in the field of animal traction. This workshop has thoroughly reinforced these beliefs, and provided ample evidence of the value and benefits that can come from networking with professional colleagues.

I also came to the workshop aware that systems of utilizing animal traction are very diverse and complex, with numerous interactions of a multitude of ecological, agricultural, social and economic factors. This networkshop has further reinforced the difficulties imposed on research and extension staff in working on animal traction in such diverse and complex systems. A particularly vivid example of this was seen on one of the field visits, where working cows (as opposed to oxen) were seen to be in dangerously poor physical condition. According to the farmer, his system of feeding and management was no different from that given to his other young animals, which were very healthy. Animal health problems were therefore suspected as a cause for the unthrifty appearance, but detailed veterinary investigations produced no evidence of pathological agents. Thus here was a classic example of a farmer with a serious problem, yet despite the considerable expertise and experience of the project, the visiting group and the extension workers, no obvious answers could be given to help that farmer. This reinforced very clearly both the complexity of animal traction, and the need to maintain a broad, open-minded, questioning, multidisciplinary, farming systems approach to apparent technical problems in particular, and to research and extension in general.

I have personally learned much from valuable in-depth discussions with colleagues from other countries during our field visits and in the detailed consideration of the preconditions for successful animal traction adoption. In addition I have benefitted from the presentations of others. The great stress placed by many participants on the need for appropriate monitoring and evaluation of any animal traction program seems to have been particularly appropriate.

I am very encouraged at various suggestions and proposals relating to future networking activities, and I see this networkshop as having been instrumental in initiating what I hope will be some very useful, and ongoing, information exchanges between individuals and projects.

**JIM OXLEY**

Through this structured workshop which was designed in part to acquaint us with Farming Systems Research and Extension (FSR/E), we have experienced the process of networking as well. Through the course of the week we have shared field and project experiences, each from our own point of view. We have had an excellent interaction between practitioners and conceptualizers of the farming systems approach. We were able to become better acquainted with each other and to meet people whose names are familiar in the literature. We shared published and unpublished information and thereby

increased the size of our libraries on the subjects of animal traction and FSR/E. The field trips gave us an opportunity to see farms, meet farmers and experience the production systems in this area of Togo. There is nothing like seeing first hand the farmers' problems and perspectives.

Not being a researcher or practitioner in animal traction, the workshop was an exciting and challenging learning experience for me. Draft power is an extremely important and unique use of animals, and the subject relates well to a farming systems perspective. We cannot introduce animal traction or evaluate it without considering the whole system in which it is used.

One of my interests is in research related to draft animals on farms. I am interested in what research is under way, the methods used and the types of research that should receive priority attention. We need to keep pooling our research knowledge and experience gained with animals on farms and on research stations. The sharing of research designs, data analyses, results and conclusions will be of assistance to other researchers, extension workers, farmers and governments. One of my roles with the FSSP is to develop some guidelines for research methodology related to on-farm and on-station trials that will be useful within the context of farming systems research and extension. One of the challenges as we leave this meeting is to continue to work on suitable measures, viable experimental designs and techniques related to on-farm research with animals. Another challenge for us and for those who could not attend the workshop is to maintain this kind of networking activity by keeping in contact with each other; by contacting those who are active in the field of animal traction; holding information exchanging sessions, or a workshop within your area, region or country; by helping develop the formal networks just established in West Africa; and by visiting one another's projects.

**WORKSHOP EVALUATION****WORKSHOP OBJECTIVES**

Participants generally agreed that the objectives were fairly well met. Several people would have liked more, particularly about on-farm experimentation related to animal traction and livestock.

**SPECIFIC PART OF THE WORKSHOP**

- a. The workshop overview was well received and Susan Poats and John Lichte were complimented for their presentations.
- b. Hubert Zandstra's presentation was considered good but too theoretical and not specific enough to animal traction. He was complimented for his strong contribution throughout the rest of the week.
- c. Participants liked both the style and the content of Paul Starkey's presentation. It received rave reviews.
- d. The conceptual typology was considered good and useful. Some people thought that it should be more detailed. Others found it too theoretical.
- e. Preparation for the field trip was considered good, considering the situation (changed from Wednesday to Tuesday with little notice).
- f. Reactions to the field visits were generally very positive, but there were a couple individuals who did not have a good experience. Several also complained that there were too many Togolese.
- g. Variation in the quality of field trip reports was recognized. Some French speakers thought these reports should have been critiqued by the group organizers.
- h. Reactions to the overview of both the methodology and the monitoring and evaluation topics were mixed. There were more positive comments than negative but some people found it confusing or were disturbed by the enumeration of many points with little structure.
- i. The country presentations were generally well-received. Several people commented that they should have been prepared in advance and written up for distribution.
- j. Paul Starkey's slide presentation went well. As one person said, "Paul's always interesting".
- k. Only three or four people saw Adama Faye's slides, but they found them interesting.
- l. The small group discussions and presentations on problems were much appreciated, especially by Francophones. Anglophones were also generally positive but commented more on the problems of using small groups and

experiential learning, i.e. slow getting started, results somewhat disorganized because of the lack of structure, the difficulty of guiding or managing the groups to a predictable outcome. (Many of the Anglophones were group leaders and in many cases this was the first time they had participated in an experiential workshop. They had a predetermined notion of what the outcome should be, but found it difficult to guide the group to that result). People commented that the methodology group was both confused and confusing.

m. The ILCA slide module was considered interesting, but vague and not well organized, too diverse, or not relevant.

n. The small group discussions and final presentations on potential solutions/strategies were considered good and useful. However, many people were disappointed that the results tended to be general strategies rather than detailed specific solutions. The quality of group results were considered somewhat irregular, and again people were particularly disappointed with the results of the methodology group.

o. Most participants did not comment on the discussion of the follow-up networkshop. Those who did (Anglophones) commented that it seemed disjointed, low energy, force-fed, and that people did not seem interested. This was likely a misinterpretation of what was happening. People believed that finding a host was the critical factor, and that topic, timing and location would depend greatly on who would volunteer to host the workshop. Since nothing had been negotiated with potential hosts, little could be decided at this time.

#### STRENGTHS OF THE WORKSHOP

Informal interaction, good flexible resource people and organization, exchange of ideas, small group experiences, field visits and good interaction and exchange of information.

#### WEAKNESSES OF THE WORKSHOP

The fact that some countries did not send representatives even though this may have been due to scheduling conflicts and the mail service; not enough Africans; abrupt schedule changes caused some confusion; certain presentations and discussions remained too oriented towards theoretical research; topics were too broad; too much emphasis on oxen and not enough on other draft animals; little emphasis on equipment; and too many Togolese who did not participate.

#### RECOMMENDATIONS FOR IMPROVING THE WORKSHOP

More emphasis on problem solving; focus on two or three topics; better balance between presentations and group activities; invite people with field experience relating to specific topic, focus on adaptive research, not theoretical research; focus slide presentations on topics of discussion; have a specialist intervene on each topic; prepare and distribute more materials in advance; and more emphasis on equipment.

(ENGLISH) TO WHAT EXTENT DO YOU FEEL YOU ARE NOW KNOWLEDGEABLE ABOUT FSR/E?

The workshop was a good introduction; big improvement; still learning; moderately knowledgeable; gained a huge knowledge about FSR/E but have difficulty defining it; "What is FSR/E?"

(FRENCH) WHAT PERSONAL BENEFIT DID YOU GAIN FROM THE WORKSHOP?

Making the acquaintance of other people working on animal traction; an exchange of experiences and ideas; a better knowledge of animal traction problems; appreciation of the need for adaptive research; reflection on methodology; better knowledge of the literature; and the results of the small group discussions.

WHAT FOLLOW-UP ACTIVITIES WOULD YOU LIKE TO SEE?

Maintain the contacts established during this workshop, continue exchanges of information and ideas; additional workshops and a committee to organize them; exchange visits; and long-term initiatives in FSR/E and livestock.

FINAL COMMENTS, PARTICULARLY ON THE ORGANIZATIONAL/LOGISTICAL ASPECTS OF THE NETWORKSHOP?

The organizers and resource people were flexible and did a good job under changing circumstances; translation from English to French was good; English to French was less good; glare on the flip charts made them difficult to see; the overhead was useful.

USEFULNESS OF THE DOCUMENTATION CENTER

Fifteen people had used the center, five had not, and four did not answer the question.

Time available allowed only a brief use of the documentation center. People had to choose between looking over the large number of documents available and trying to read one or two documents.



## **FUTURE NETWORKING ACTIVITIES**

### **POTENTIAL ACTIVITIES FOR FSSP SUPPORT**

Networking activities on livestock in West African farming systems which could be supported by FSSP in the future are: additional workshops; support of West African livestock researchers for study and networking visits to other countries; and reports on various topics relating to livestock research and extension.

### **THE 1986 NETWORKSHOP**

Consensus of this workshop's participants was that yearly workshops should be held. To ensure network continuity, the theme of animal traction in Farming Systems Research and Extension should be continued at least for the 1986 workshop.

For the 1986 workshop, more specific topics relating to animal traction will be discussed in detail. Topics that workshop participants expressed an interest in included: a more thorough discussion on animal feeding research on-station and on-farm; methodologies for training farmers including the possibility of developing a training manual; training for trainers (especially extension staff); on-farm livestock research and monitoring in general; implement design and production; and traditional animal health and husbandry.

A coordinating committee composed of representatives from six West African countries was selected to initiate the organization of the 1986 Workshop. Sierra Leone is the proposed location. Information on West African and African farming systems (e.g. animal feeding, on-farm livestock trials) will be solicited.

### **COORDINATING COMMITTEE**

Chair: Paul Starkey, Sierra Leone

Secretariat: Sandra Russo, The Gambia  
Solomon Owens, The Gambia

Members: Bai Kanu, Sierra Leone  
K. Apetofia, Togo  
Adama Faye, Senegal  
Yesso Philidor, Ivory Coast  
Abou Berthe, Mali

### **SITE OF THE 1986 NETWORKSHOP**

Workshop participants were impressed by the enthusiasm of the Sierra Leone Work Oxen Projects representatives for their research and extension work with farmers. An almost unanimous decision was made to hold the workshop in Sierra Leone sometime between March and May 1986, pending

official government approval for such activity.

#### SUPPORT OF WEST AFRICAN RESEARCHERS

All of the following are proposals which must be approved by USAID, FSSP and the governments or other organizations named.

1. A visit by Togolese researchers to the Sierra Leone Work Oxen Project's plowing competition in May, to be followed by a Sierra Leonean researcher's visit to Togo on a work/study visit of Togolese Animal Traction Projects.
2. Support for at least one West African livestock researcher to attend the ILCA conference on methodologies for on-farm research with livestock in June and to present a paper on his or her research.
3. The opportunity for a West African group (one Anglophone, one Francophone, one facilitator) to join the Asian Cropping Systems Network's livestock monitoring tour in August.
4. A meeting of the coordinating committee for the 1986 Networkshop on animal traction, together with at least one FSSP representative, to be held in The Gambia in November 1985, to finalize plans and agenda for the networkshop. A tour of animal traction programs in Senegal and The Gambia will be included.

#### REPORTS

In addition to these proceedings, a bibliography of documents specifically related to animal traction should be produced as part of FSSP's documentation effort. Reports on topics of interest relating to livestock in FSR/E should be commissioned over the coming year to serve as background papers at the 1986 networkshop.