



PD/A CRSP SIXTEENTH ANNUAL TECHNICAL REPORT

REGIONAL OUTREACH IN AFRICA

*Eighth Work Plan, Kenya Research 5 (KR5)
Progress Report*

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ABSTRACT

Regional outreach activities were undertaken under the Eighth Work Plan as a means of disseminating information developed through CRSP research; giving CRSP researchers opportunities to learn about fish culture practices, research priorities, and research activities in other parts of Africa; encouraging efforts to create linkages between research and extension activities in the region; and in general continuing the process of making contacts and regionalizing CRSP efforts in Africa. In an effort to disseminate information to extension personnel, CRSP researchers attended meetings of District Fishery Officers of Central Province and a meeting for Provincial Fisheries Officers (Kenya). During these meetings the PD/A CRSP was described, pond management recommendations were outlined, proposed on-farm trials were discussed, pond census forms were distributed, information was provided on sex-reversed tilapia, and the results of our first experiment at Sagana Fish Farm were presented. Students doing research at Sagana in connection with that experiment also presented short summaries of their research findings. Several regional meetings were attended by CRSP personnel during the reporting period. The first was the 5th Session of the Organization of African Unity's Scientific, Technical, and Research Commission (OAU/STRC) Inter-African Committee and Symposium on Oceanography, Sea and Inland Fisheries, Mombasa, Kenya, 4-8 May 1998, hosted by Fred Pertet, member of the OAU/STRC and Host Country Principal Investigator for the Africa Project. Karen Veverica and Bethuel Omolo also attended this meeting, which provided an excellent opportunity to publicize the CRSP and to present Sagana Fish Farm as an ideal aquaculture training site. Veverica and Omolo also attended the 8th annual East African Environmental Network (EAEN) conference, 29-30 May 1998 in Nairobi, where they presented an invited paper entitled "An overview of aquaculture practices in East Africa: Potential environmental impacts and prospects for sustainable livelihoods." CRSP Africa Project team members from Kenya and the US plan to attend a Fisheries Society of Africa (FISA) meeting scheduled to take place in Grahamstown, South Africa, 13-19 September 1998, and have submitted abstracts for five presentations. In addition, CRSP researchers contacted the conference organizers to inquire about and encourage the inclusion in the conference of a special discussion session on the status, constraints, and priorities of aquaculture in Africa. This has been accepted and Jim Bowman will serve as rapporteur for the session, to be entitled *Aquaculture in Africa—Quo Vadis*. These outreach efforts are helping to inform interested regional parties about the CRSP; to develop a better understanding of regional research needs among CRSP participants and others; and to encourage communication and the formation of linkages among regional organizations and individuals interested in aquaculture. It is anticipated that participation in the upcoming FISA conference will greatly increase the level of benefits realized under this activity.

INTRODUCTION

Regional outreach activities were planned under the Eighth Work Plan as a way to disseminate information derived from CRSP research; to give CRSP researchers opportunities to learn about fish culture practices, research priorities, and research activities in other parts of Africa; to encourage efforts to create linkages between research and extension activities in the region; and in general to continue the process of making contacts and regionalizing CRSP efforts in Africa. Plans for

carrying this out included conducting short courses for extension agents in Kenya and actively participating in regional meetings and conferences, including in particular meetings of the Fisheries Society of Africa.

EFFORTS TO FACILITATE EXTENSION AGENT SHORT COURSES

The initial plan was to participate in courses given at the Naivasha Training Center for fisheries officers and to contact

the Lake Basin Development Authority (LBDA) to offer short courses for extension agents. However, after submission of the Eighth Work Plan, the Naivasha Training Center was handed over to the Kenya Wildlife Service, and fisheries officers are no longer trained there. Also the LBDA in Kisumu has not pursued aquaculture activities during the last two years, so it could not be used for training. In an effort to disseminate information to extension personnel, meetings of District Fishery Officers of Central Province were attended, and a meeting was held for Provincial Fisheries Officers.

During the first meeting, held 25-26 November 1997, Karen Veverica presented an overview of pond management recommendations and presented the PD/A CRSP to attendees. The proposed on-farm trials were discussed and pond census forms were distributed.

For the second meeting, held 7-8 April 1998, Veverica presented information on sex-reversed tilapia and offered collaborating farmers all-male fingerlings to compare with mixed-sex fingerlings on their farms. Guidelines for record keeping and pond management were handed out. The results of the experiment on rice bran and fertilization (see "Relative contribution of supplemental feed and inorganic fertilizers in semi-intensive tilapia production" in this report) were presented. Each of the students doing research at Sagana (see "Training" in this report) presented a short summary of his or her research findings.

ATTENDANCE AT REGIONAL MEETINGS

The Aquaculture for Local Community Development program (ALCOM) has had uncertain funding so other regional meetings were attended. These included:

1. Fifth Session of the OAU/STRC Inter-African Committee and Symposium on Oceanography, Sea and Inland Fisheries, Mombasa, Kenya, 4-8 May 1998. Fred Pertet, member of the Scientific, Technical and Research Commission (STRC) of the Organization of African Unity (and Host Country Principal Investigator for the Africa Project) hosted this session. Representatives from Cameroon, Ghana, Kenya, Mauritania, Nigeria, Senegal, Tunisia, the FAO, and the Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL) attended.

Karen Veverica and Bethuel Omolo attended the meeting and set up a table with CRSP publications and descriptions of the PD/A CRSP program. This was an excellent opportunity to publicize the CRSP to attendees from several countries and to present Sagana Fish Culture Station as an ideal training site.

2. Karen Veverica and Bethuel Omolo attended the 8th Annual EAEN (East African Environmental Network) Conference, 29-30 May 1998, at the Louis Leakey Memorial Hall, National Museums of Kenya, Nairobi. They presented an invited paper entitled "An overview of aquaculture practices in East Africa: Potential environmental impacts and prospects for sustainable

livelihoods." Member countries in the EAEN are Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania, and Uganda. The EAEN is a regional non-profit NGO committed to sustainable development in East Africa. Papers are published in a proceedings volume.

PARTICIPATION IN FISHERIES SOCIETY OF AFRICA (FISA) MEETINGS

No FISA conferences have been held since the beginning of our collaboration in Kenya, so it has not been possible to carry out this part of the activity before now. However, a FISA meeting is now scheduled to take place in Grahamstown, South Africa, 13 to 19 September 1998. CRSP/Africa team members plan to attend this meeting, and have submitted abstracts for five presentations to be made at that conference, including:

- *A review of lime requirement determination methods for aquaculture ponds*, by J.R. Bowman
- *Use of grasses from pond levees to promote Oreochromis niloticus (Cichlidae) production: application rates, methods and resulting water quality*, by K.L. Veverica and E. Rurangwa
- *Semi-intensive Oreochromis niloticus (Cichlidae) and Clarias gariepinus (Clariidae) polyculture in ponds receiving rice bran and chemical fertiliser in Kenya*, by W.M. Gichuri, K.L. Veverica, J.G. Omondi, P.N. Mwau, P.I. Bilal, and K.N. Mavuti
- *Current status and problems of fisheries in Kenya*, by F. Pertet
- *Present status of the fish fauna and fisheries of Lake Baringo, Kenya*, by F. Pertet

In addition, the CRSP Africa Project team contacted the conference organizers in February to inquire about the possibility of including in the conference a special discussion session on the status, constraints, and priorities of aquaculture in Africa. This has been accepted and Jim Bowman will serve as rapporteur for the session, to be called *Aquaculture in Africa—Quo Vadis*. According to FISA organizers, the purpose of this session will be to look at what has been done in the past to promote aquaculture in Africa; to look at the successes and failures that have occurred; and to discuss how the sub-Saharan region might become an important player in aquaculture in the future.

ANTICIPATED BENEFITS

The results of these efforts are contributing towards informing interested parties in the region about the CRSP; developing a better understanding of research needs in the region among CRSP participants and others; and encouraging communication and the establishment of linkages among regional organizations and individuals interested in the development of aquaculture in Africa. We anticipate that participation in the upcoming FISA conference in South Africa will greatly increase the level of benefits realized under this activity.